

KENYA INSTITUTE OF CURRICULUM DEVELOPMENT



**REPORT ON NEEDS ASSESSMENT FOR
SCHOOL CURRICULUM IN KENYA**

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FOREWORD

Kenya effected the last curriculum reform in 1985, when there was a shift from the 7-4-2-3 System to the 8-4-4 system. The purpose of this move was to provide a curriculum that would help learners to gain practical skills and competences to enable them become self-reliant. The curriculum was reformed from one that geared the learners towards white collar jobs, to a more practical oriented curriculum that would enable granduants of the system to generate jobs. An evaluation of the curriculum in 1995 revealed that the curriculum had a heavy workload across the various subjects in primary and secondary education. Based on the Report on “Total Integration of Quality Education and training” of 1999, a needs assessment was undertaken. The national curriculum for primary,secondary education was then reviewed in 2002 , followed by Teacher Education Curriculum in 2004.

Over the years, education in Kenya has been guided by the prevailing national goals identified through the establishment of various Education Commissions and situational analyses of the educational needs of the country. Currently, the sector seeks to align education to the Constitution of Kenya and the Kenya Vision 2030 guided by national education policies and international agreements. These include the Sessional paper No 2 of 2015, National Education Sector Plan (NESP), Education for All (EFA), the Millennium Development Goals (MDGs) and Sustainable Development Goals. This needs assessment was carried out in order to ascertain the fundamental expectations of Kenyans as the basis for designing relevant and quality curricula for the levels of basic and tertiary education in tandem with the aspirations of the nation.

Specifically this needs assessment study provides the basis on which the Ministry of Education Science and Technology and policy-makers will make critical decisions to set the various learning areas as well as the relevant pathways. This will drive the education sector reforms that should lead the country to achieving the tenets of the Constitution of Kenya and the Kenya Vision 2030.

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DR. JWAN

DIRECTOR

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CHAPTER ONE:

BACKGROUND TO THE STUDY

1.1 Introduction

Global and national education authorities around the world, through different approaches, are seeking innovative curriculum solutions to improve the quality and relevance of student learning, and to enable their students to apply their learning to the challenges and opportunities they encounter throughout their lives. While knowledge and education are considered among the major factors contributing to the reduction of poverty, sustainable development and economic growth - it is the curriculum that is increasingly viewed as the foundation of educational reforms that are aimed at achieving high quality learning outcomes. Thus, the curriculum represents a conscious and systematic selection of knowledge, skills and values which shape the way teaching and learning processes are organized, by addressing questions related to what students should learn, why, when and how (UNESCO, 2012).

The curriculum is also understood as a political and social agreement that reflects a society's common vision while taking into account local needs, national expectations and global trends. In the last two decades, curriculum reforms have been driven by rapid technological and social changes; the need to address the new challenges of contemporary life; the emergence of a knowledge society that depends on lifelong learning; the growing emphasis on assessment of performance; and the prominence of issues related to equity, quality and inclusion among other factors. In this regard, contemporary curriculum reform and development processes increasingly involve public discussion and consultation with a wide range of stakeholders.

Over the years, education in Kenya is guided by the prevailing national goals identified through the establishment of various Education Commissions and situational analyses of the educational needs of the country. Currently, the sector seeks to align education to the Constitution of Kenya and the Kenya Vision 2030 guided by national education policies and international agreements. These include the Sessional paper No 2 of 2015, National Education Sector Plan (NESP), Education for All (EFA), the Millennium Development Goals (MDGs) and Sustainable Development Goals. This needs assessment was carried out in order to ascertain the fundamental expectations of Kenyans as the basis for designing relevant and quality curricula for the levels of basic and tertiary education in tandem with the aspirations of the nation.

1.2 Context of the study

The Kenya Institute of Curriculum Development (KICD) is the national curriculum development centre established through the [KICD Act No. 4 of 2013](#) of the laws of Kenya. The Institute's core function is to initiate and conduct research to inform curriculum policies, review and development. The Institute is charged with the development, evaluation and approval of curricular and curriculum support materials for all levels of education below the university. The Institute also undertakes organizing and conducting professional development programmes for teachers, teacher trainers, quality assurance and standards officers and other officers involved in education and training on curriculum programmes and materials. According to international standards, curricula should be reviewed every five years to ensure relevance by incorporating any upcoming trends and issues that require attention. The last review of the curriculum in Kenya was undertaken in 2002.

During the World Education Forum of Dakar 2000, in Senegal, 164 governments

pledged to achieve Education for All (EFA) and the six Millennium Development Goals (MDGS) by 2015. This resolution propelled provision of access to education in many countries with high levels of enrolment being registered at both primary and secondary levels. The number of youth exiting school into the world of work has increased yet scientific and technological progress is making most training obsolete, in no time (World Bank, 2014). Hence, education systems everywhere face serious challenges and dilemmas, in the task of preparing current and future citizens in a rapidly changing world.

The overarching goal for the post 2015 agenda is to ensure equitable and inclusive quality education for all by 2030. Both developed and developing countries are currently at varying levels, devising strategies, developing curriculum and education pathways that enable learners acquire the multi, flexible and diversified competencies for learning for life. In addition, sustainable development demands that every human being acquires the 21st Century skills which include the following:

Table 1.1: 21st Century skills

Learning & Innovation Skills	Information, Media & Technology Skills	Life & Career Skills - [Values & EQ]
<ul style="list-style-type: none"> • Critical Thinking & Problem Solving 	<ul style="list-style-type: none"> • Information Literacy 	<ul style="list-style-type: none"> • Flexibility & Adaptability
<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Media Literacy 	<ul style="list-style-type: none"> • Initiative & Self-Direction
<ul style="list-style-type: none"> • Creativity & Innovation 	<ul style="list-style-type: none"> • ICT (Information, Communications & technology) literacy 	<ul style="list-style-type: none"> • Social & Cross-Cultural Skills
<ul style="list-style-type: none"> • Communication 		<ul style="list-style-type: none"> • Productivity & Accountability
<ul style="list-style-type: none"> • Collaboration 		<ul style="list-style-type: none"> • Leadership & Responsibility

In the last two decades, investment in education in Sub-Saharan Africa has not translated into functional knowledge and skills that can transform individuals and economies in which they live (EFA Global Monitoring Report, 2012). There have been consistent wastage rates reflected in the fact that only 30% of the age cohorts complete junior secondary education while only 12% complete the full secondary cycle (World Bank, 2007). The African Economic Outlook (2012) recognizes the pivotal importance of education and appropriate skills as the prevailing solution to mitigating unemployment and vulnerable employment among the youth. It calls for a review, and reform of curricular to prepare youth for knowledge intensive economies. This can be achieved by making provisions for curricula that intricately balances opportunities to pursue skills acquisition in academics, technical and vocational skills education.

The East African Community (EAC) treaty emphasizes cooperation and integrated investments especially in education and research. It aims at preparing citizens to operate and collaborate effectively in a globalized economy (EAC, 2013). The states propose to develop harmonized programmes for the primary, secondary and tertiary education cycles. The EAC Partner States anticipate that a common framework will promote equal access to education opportunities, harmonized quality assurance and accreditation systems, whose benefits will include free movement of goods and services and people (EAC, 2014).

Kenya effected the last curriculum reform in 1985, when there was a shift from the 7-4-2-3 System to the 8-4-4 system. The purpose of this move was to provide a curriculum that would help learners to gain practical skills and competences to

enable them become self-reliant. The curriculum was reformed from one that geared the learners towards white collar jobs, to a more practical oriented curriculum that would enable grandaunts of the system to generate jobs. Emphasis was laid on practical subjects such as art and craft, woodwork, home science, agriculture and music. An evaluation of the curriculum in 1995 revealed that the curriculum had a heavy workload across the various subjects in primary and secondary education. Based on the Report on “Total Integration of Quality Education and training” of 1999, a needs assessment was undertaken. The findings of the study indicated that the subjects at primary level were too many, the content in each subject for primary and secondary was too much, and there was also repetition of content in various subjects. The national curriculum for primary and secondary education was then reviewed in 2002 to remove the overloads and unnecessary overlaps within and across subjects, and to mainstream emerging issues.

The revision of the curriculum entailed refocusing the goals of education, the primary and secondary education level objectives, and the subjects’ general and specific objectives. The rationalization of the primary curriculum resulted in some new learning areas. Music, Art and Craft were integrated into one study area called Creative Arts. This incorporated aspects of Drama. Home Science, Agriculture and Science were integrated into one study area called Science- which also includes aspects of technology. Geography, History and Civics (GHC) – a combined course was renamed Social Studies and included environmental education, civic education and aspects of Business Studies. The English syllabus adopted a thematic approach to teach various language skills. The themes were derived from things and situations that learners are likely to interact with. The emerging issues mainstreamed included HIV and AIDs, child labour, environmental conservation and gender issues, among others (KIE, 2002).

The rationalization of secondary education entailed removing the overloads by a reduction in the number of subjects and content in the different subjects. In all the subjects, the areas specialized content that was deemed to be job oriented was left out to be undertaken in higher education and training. Essential competencies earlier acquired through the Business Education subjects were organized to be taught in the new integrated Business Studies subject. These included foundational aspects of economics, accounting, commerce and office practice. The teaching of English and Kiswahili was to be undertaken using the integrated approach. A deliberate attempt was made to respond to the emerging issues which included; health, environmental and civic education, gender and the anticipated industrial transformation of the nation (KIE, 2002).

Summative evaluation of primary and secondary education in 2009 indicated that the current curriculum content relegates practical skills necessary for economic development to non-examinable subjects, thus, most of the learners exiting the education system at secondary level did not have adequate skills and competences to join the job market. Among the skills gaps identified were agricultural skills, entrepreneurial skills, vocational and technical skills, innovation and creativity and ICT skills, as learners opt not to take these subjects. Further, that the cognitive domain, was over emphasized at the expense of affective and psychomotor domains rendering teaching and learning to be exam oriented. It was also indicated that the curriculum did not facilitate adequate acquisition of pre-requisite values such as nationalism and patriotism.

Kenya Vision 2030 is the country's new development blueprint covering the period 2008 to 2030. It aims to transform Kenya into a newly industrializing, "middle-income country providing a high quality life to all its citizens by the year 2030". The Vision places great emphasis on the link between education and the labour market and the need to create entrepreneurial skills and competences. Specific to education, the Vision envisages a reform in secondary education and modernization of the primary teacher education programmes. This expectation has far reaching implications on all the other levels of education before and after secondary education to ensure smooth transition from one level to the next. As such there will be need to address issues related to quality, service delivery, curriculum, relevance, teacher development and management at all levels as well as trainers in the areas of technology and entrepreneurial skill development.

The Constitution of Kenya 2010 advocates for free and compulsory basic education. It also introduced the national and county governments, which gave rise to changes in the administrative and organizational structures of various offices and services. This had implications in education as this information needed to be incorporated in the curriculum to be tandem with the administration of both the county and national governments as well as other fundamental institutions. Effort was made as a mitigating measure, to include some of the information in Social Studies at primary level and history and government at secondary level. However, the wider changes across the subjects have not been effected to date.

The task force on "Re-alignment of education and training to the Constitution of Kenya" was commissioned in 2010 to advice on how education would be reformed to cater for the aspirations of the Kenya Vision 2030, and be realigned

to the Constitution of Kenya 2010. The task force report emphasized the need for the following:

1. Structuring of the curriculum within competence framework that identifies the knowledge, skills, values and attitudes to be incorporated at each level e.g. entrepreneurial skills;
2. Addressing local needs by including the study of local knowledge and culture;
3. Providing pathways to give equal opportunity to all learners to recognize their talent and achieve their full potential; and
4. Integrating ICT in the curriculum as a key driver of a knowledge-based economy.

Sessional Paper No. 2 of 2015, “Reforming Education and Training in Kenya”, recognizes that in order to realize the national development goals, relevant and quality education and training is required to meet the human development needs of a rapidly changing and a more diverse economy. The policy recommends reforming the education and training sector to provide for the development of individual potential in a holistic and integrated manner, while producing individuals who are intellectually, emotionally and physically balanced. It further recommends a competency based curriculum; establishment of a national learning assessment system; early identification and nurturing of talents; introduction of national values, national cohesion and integration in the curriculum, ;integration of ICT in the education system and introduction of learning pathways that ensure every learner graduates from the education system with competencies that empower them to exploit their full potential (MoEST, 2015). In this regard therefore, the curriculum reform seeks to shift the Kenyan curriculum from a subject-based curriculum to a competence based curriculum The needs

assessment study is a first step in informing the conceptualization of what the curricula for various levels should comprise in order to meet the needs and aspirations of learners and wider Kenyan community.

1.3 Statement of the problem

The fast paced growth of the global economy requires competitive youths with relevant work and life skills that match the growing economies. The recent global economic downturn has further signaled an urgent need to deal with youth unemployment and inequality effectively (OECD, 2012a). Reforms in education must of necessity be targeted towards providing broader curriculum areas based on skill-centered approaches, and appropriate knowledge from non-academic sources (World Bank, 2014). It further implies that the future of achievements in education and training are anchored on curricula that are progressively changing to guarantee growing opportunities for the youth. Curriculum plays an important role in how learners are taught, and there is a strong body of evidence that shows that putting a high-quality curriculum in the hands of teachers can have significant positive impacts on student achievement.

International standards set by International Bureau of Education (IBE) recommend that curricula should be reviewed every five years, thus recognizing the dynamism of development of society. The Kenyan curricula for primary and secondary were last reviewed in 2002. Since then there have been numerous developments both on the national and international level. These include the inauguration of the Constitution of Kenya, 2010, the Kenya Vision 2030, the East African Protocol and most recently the Sustainable Development Goals. All these instruments have implications on the different levels of education and necessitate

a more comprehensive alteration of the education sector. Thus, the urgent need for an education reform.

The Kenya Vision 2030 and Sessional Paper No. 2 of 2015, “Transforming education and training in Kenya”, have put much emphasis on Science Technology and Innovation. However, in the current system, innovative, vocational and technical skills which are considered to be important for meeting the demand for skilled labour and the country’s goal of industrialization are not well integrated in the curriculum. The curriculum review of 2002, greatly reduced the learning areas in order to reduce on the amount of content that learners had to cover in different subjects. The most affected were the practical oriented subjects in primary education, which were merged and rendered not examinable at national level. This made it convenient for teachers not to teach these subjects at the expense of learners being denied the opportunity to acquire skills in subjects like art and craft, music, physical education.

Primary education is intended to provide learners with foundational skills of literacy, numeracy and essential life skills, while secondary education is intended to develop transferable skills. Studies on global best practices show that at the primary school level, learners require shorter periods to acquire foundational skills. At Secondary school level, learners require more time to nurture talent and acquire requisite competencies. In essence, such structures reduce wastage and make it possible for a country to leverage its development on the wide array of relevant skills and competencies inculcated through a well thought out and inclusive curricula. The Kenyan system has a long period (8years) for foundational skills and a very short period for secondary school (4 years) which is

not sufficient for acquiring intended skills. This calls for a review of the education system to introduce a shorter Primary Cycle and a longer Secondary School Cycle.

The shift from a subject-based curriculum to a competence-based curriculum will provide the opportunity to set standards against which student learning can be assessed taking into consideration the individual learner's interests, abilities and talents. The reform also seeks to create different pathways to enable students have an opportunity to pursue different career pathways of their interest. The needs assessment study provides the basis on which the Ministry of Education Science and Technology and policy-makers will make critical decisions to set the various learning areas as well as the relevant pathways. This will drive the education sector reforms that should lead the country to achieving the tenets of the Constitution of Kenya and the Kenya Vision 2030.

1.4 Research Objectives

The specific objectives of the study were to:

1. Establish desired the **general needs** for curriculum reform
2. Determine desired **competencies** for all levels of learning
3. Determine the **talent** identification and nurturing strategies to be adopted at different levels of the curriculum
4. Establish desired **content/learning areas/pathways** for competency based curriculum to provide quality, relevant and accessible education
5. Identify **resources** suitable for competency based curriculum
6. Determine desired **pedagogical approaches** for competency based curriculum
7. Establish formative and summative **assessment** modes for competency based curriculum

1.5 Scope of the study

This study was carried out for the levels of education for which KICD is mandated to develop curriculum. These are early childhood development and education, primary education, secondary education, special needs education, non-formal education, adult and continuing education, teacher education and technical and vocational education and training.

1.6 Rationale for the study based on the Context

The hallmark of relevance of any curriculum to society is the promptness with which the curriculum adapts to changing societal needs. The current primary and secondary school curriculum was reviewed in 2002, followed in 2004 by a review of the primary teacher education curriculum, the special needs education curriculum in 2006 and the diploma teacher education curriculum in 2007. It is, therefore, not in tandem with the current needs and aspirations of the nation as articulated in various policy documents. The Ministry of Education acknowledges the need to reform the secondary school curriculum with the emphasis shifting from knowledge reproduction to knowledge production and, to make ICT central to it. The proposed curriculum reform has to be in tandem with the Constitution of Kenya, Kenya Vision 2030 and the East Africa Community Protocol.

The mandate to reform the curriculum lies with the Kenya Institute of Curriculum Development (KICD). This will include; reviewing of learning materials and orientating the serving teachers and other field education officers such as the quality assurance officers, curriculum support officers and Education Assessment Resource Centre (EARC) officers. The Institute needed to undertake this needs assessment study in order to ascertain the actual needs of the various stakeholders and to inform policy decision-making on the various aspects of the reform.

1.7 Summary

The demand for quality education is leading countries to adapt new curriculum content, pedagogical skills and educational structures that emphasize the importance of producing learners who can take initiative, and contribute to innovation in products and processes. Education should be seen as a basis for development or a means for improving life and this can be in technology, preventing disease, improving governance, agriculture and protecting the environment among others. It should enable people to understand local, regional and global contexts and shape their mindsets and actions in their daily life. Kenya's transformation into a newly industrialized country is hinged on the provision of a highly qualified human resource. The country, therefore, needs an education system that will foster innovation and facilitate the much needed social, economic and environmental development for sustainability.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1: Introduction

This chapter presents reviews of discussions of literature on curriculum issues that relate to the core aspects of the study. First, a brief on relevant theories in curriculum have been presented followed by a situational review of the study within the field of education and discipline of curriculum studies.

The core aspects of the study have been divided into themes or objectives that have guided the needs assessment survey. These include the general societal needs, competencies, values and attitudes, learning areas, nurturing of talents, resources, assessment and contemporary and emerging issues. These have generally been discussed across all levels of education; from ECD through primary, secondary and tertiary. Among the articles reviewed include journals, policy documents, books, grey areas such as circulars and other empirical studies.

2.2 Definition of Key Concepts

2.2.0. General overview

This section describes different understanding by scholars and other authors on meaning of key concepts that have been used in this study. These are not conclusive but it is an attempt to give meaning to the concept used repeatedly in the study. They are not in any order of priority but they represent the themes in the study.

2.2.1. Curriculum

Curriculum may be described as a social construct (Brady and Kennedy, 1999) that is grounded in the culture of the people. It is also considered extremely important that the content of a curriculum should support holistic student development and should transmit the local culture (UNESCO, 2000; Brady and Kennedy, 1999). It should also fulfill societal needs (Bugotu et al., 1973).

A curriculum must be broadened beyond traditional knowledge-based education to facilitate the development of students' ability to think and act creatively and morally (UNESCO, 2000; Downs Perry, 1994) and to successfully practice competencies (such as problem-solving, decision-making and negotiating) considered necessary for life in the 21st century (Dimmock & Walker, 1998; Tien, Ven and Chou, 2003). Furthermore, for a curriculum to do its work successfully, it must be accessible to all students (Brown, 2003) and should support economic and social development. In a broader sense, curriculum can be viewed as a roadmap for achieving socially agreed development and education goals that embeds society's vision, knowledge, skills and values needed to live in and change the society.

As a field of study and a discipline, curriculum has been expounded by Otunga, Odero and Barasa (*Eds*, 2011) as a dynamic field that continually develops through a process, in a given design and within a given social and Physical context.

All curriculum decisions are defined in a framework that establishes the subjects, the time frame and particular content, teaching learning strategies to be adopted and assessment criteria to be used. Countries around the world organize education along curriculum framework. This defines the perimeters within which the

curriculum must be developed. It has many components; among them are the underpinning principles and core values, general objectives, expected learning achievements, guidelines on Teaching and learning process and assessment (UNESCO, 2013). Further the paper opines that it is the framework that provides coherence to the guidelines and national standards that enable and support the development of the school curriculum. This is affirmed by the intentions of KICD to develop a curriculum framework after the engagement with the stakeholders during needs assessment.

The curriculum is designed for different levels of education systems. The process of curriculum development in Kenya though centralized involves many stakeholders and responds to a wide range of society requirements. The curriculum seeks to encompass the dynamics of the development of knowledge and various disciplines prevailing in the society is engaged in periods of profound changes that modify the needs of learners, both for their personal performances and in the labor market as well as for their citizenship (IBE No. 15, 2015).

2.2.2. Learning areas

Learning areas refer to content to be taught and learnt. The school curriculum defines learning areas as content to be taught and learned, by whom, when and where (UNESCO, 2015). The organization and sequencing of curriculum facilitates learning. Within the learning areas, content, teaching and learning experiences, assessment and resources are determined by the goals of education from which general and level objectives are derived.

2.2.3. Competencies

Competency is a set of defined behaviors that provide a structured guide enabling the identification, evaluation and development of the behaviors in an individual.

Some scholars consider 'Competence' to mean a combination of theoretical and practical knowledge, cognitive skills, values and behavior used to improve performance; or a description of skills, knowledge, attitudes and behaviors required for effective performance of a real-world task or activity (Weddel, 2006). Others define it as the ability to choose and use cohesive or integrated combination of knowledge, skills and attitudes with the aim to realize a task in a certain context (Kouwenhoven, 2003).

Further, competencies are outcomes that learners should have acquired by the end of their general education in order to succeed in academics, in self development, in acquiring employment and success in jobs, and inclusion in a knowledge society. Job competencies are not the same as job task. Competencies include all the related knowledge, skills, abilities, and attributes that form a person's job. This set of context-specific qualities is correlated with superior job performance and can be used as a standard against which to measure job performance as well as to develop, recruit, and hire employees.

In essence therefore, Competency-based curriculum is a system of curriculum derived from an analysis of a potential or actual role in modern society and that tries to certify student progress on the basis of validated or demonstrated performance in some or all aspects of that role (Edwards et.al, 2009). In other words, competencies encourage a mastery of the relevant content knowledge and of the associated skills; both cognitive and practical and includes also internalization by the learner of the associated values (UNESCO, 2015). Competency is related to capacity, that is, a person's ability to evaluate information received and make choices based on the same. It is a word used to denote a person's ability to acquire, retain and evaluate information (Drew, Hardman & Hosp, 2008).

2.2.4. Values and attitudes

The Needs Assessment survey not only defined competencies as abilities but also as values and attitudes to be acquired by the time learners leave an education cycle. Values are the principles and fundamental convictions which act as general guides to behavior, the standards by which particular actions are judged as good or desirable (Halstead, 2000). Other views indicate that values are the ideals that give significance to our lives, reflected through the priorities that we choose and that we act on consistently and repeatedly (Brian, 2004). With the emphasis on technology, innovation and science as a means of attaining the Vision 2030 goals there is a tendency to pay less attention to moral and ethical issues which need to be given equal measure of attention in development.

Value education include explicit and implicit school-based activity which promotes student understanding and knowledge of values, and which develops the skills and dispositions of students so they can enact particular values as individuals and as members of the wider community. The things, ideas beliefs and principles that are of worth to a person shape his or her values. People's values help to define who they are and help determine the choices they make.

Living values provide principles and tools for development of the whole person recognizing that the individual is comprised of the physical, intellectual, social emotional and spiritual dimension. Education is best enhanced by positive values and attitudes. Therefore it is important for the education system and the curriculum in particular to foster values and the teachers to understand and apply values even as they emphasize on a competency based education.

2.2.5 Pedagogy

Instructional strategies and techniques of carrying out instruction in the delivery of curriculum content are referred to as strategies. Pedagogy deals with the practice of teaching and learning. This is where the teachers bring in the ‘how’ of teaching using instructional designs to convey content to learners in order to achieve learning outcomes stated in the objectives.

For effective curriculum implementation, the teachers must have the capacity to interpret the curriculum through instructional strategies and techniques. These determine how much is learned by the learners. Often, teachers rely on the traditional approaches of teacher centred learning in their effort to cover the syllabi. However with the introduction of the 21st Century skills and the competence based curriculum, the instructional methods must change to more learner centred approaches. Osakwe (2009, in APHRC, 2010) explains the learners centred approaches where the teacher seeks to bring about the change in behavior of learners by imparting knowledge and skills in an interactive way. This is where the learner constructs meaning from the experiences received in their own perception.

2.2.6 Resources

These refer to any inputs that are use in the learning environment to effectively achieve the desired outcomes. These could be human, infrastructure, realia or financial resources. They are also referred to as teaching and learning curriculum support materials. Resources in education include both book and non book materials and any other learning environment that provides any other learning environment that provides a learning experience to a learner (KIE, 2010).

Resources in education play a very important role in facilitating learning (McAliney, 2009). For effective curriculum implementation, quality physical and human resources are required. Indeed, it is difficult to envisage learning without resources. Education resources include both book and non-book materials, and any other learning environment that provides a learning experience to a learner. Educational resources are critically important for ensuring wide access to quality education (UNESCO, 2002) and are therefore selected and used to stimulate interest and motivate learning.

2.2.7 Assessment

This refers to measuring learning outcomes. In education context it is the process of ascertaining whether students have attained curricula goals. Otunga, et. al (2011: 121) refers to assessment as evaluation, and goes on to define it as *‘all systematic actions that focus on determining whether the curriculum...is performing as designed...and establishing effects of the curriculum on its users’*.

Assessing learning outcomes has become of great concern among stakeholders in Kenya. The main concern being the lack of a holistic approach to learning since focus is greatly on performance in a few learning areas. It fails to capture the whole learning that has taken Place. Saltery (1989) defines education assessment as a term which includes all the processes and products that describe the nature and extent of children learning, its degree of correspondence with aims and objectives of teaching and its relationship with the environments which are designed to facilitate learning. Assessment is an important component in the teaching and learning process, since it's the basis of evaluating of the effectiveness of the implementation process of a curriculum. Teachers and learners use various modes of assessment to determine performance as well as

identify gaps. The results and feedback from assessment enables teachers, learners, institutions and governments to make decisions on curriculum.

2.2.8 Contemporary and Emerging issues

The cross-curricular issues are commonly areas which by their very nature, have a strong impact psychosocial behavior of learners. These are issues that touch a number of different aspects of the society and affect learners at all levels. These issues otherwise known as pertinent and emerging issues, encompasses core-social and human values which manifest themselves in more than one discipline: hence the term cross cutting. Issues that are considered pertinent and hence mainstreamed as study areas in the curriculum include Life Skills Education (LSE), HIV and AIDs Education, Gender Education, Drugs and substance Abuse (DSA) prevention, Child's Right Education, Child labour prevention, Integrity & Good Governance, Guidance and Counseling Service, Environmental Education and Health Education. Other issues that have been perceived to be pertinent in the recent past are; Peace Education, Values/Moral Education, Disaster Risk Reduction, Education for Sustainable Development (ESD) and National Values as enshrined in the Constitution, to mention but a few.

2.2.9 Talents

There is no one universal definition of talented learners. In the United States of America, The No Child Left Behind Act (Elementary and Secondary Education Act, 2002) define Gifted and Talented as children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities. In Australia Gifted and talented learners at School are defined as those who demonstrate the potential for a high level of performance in different

ability areas, when compared to others of similar age, background and experience such as intellectual; Creative; Artistic; Social; Physical; Spiritual (Department for Education and Children's Services, 1994).

In Korea, a gifted person is defined as one who possesses extraordinary innate abilities or visible talents requiring special education to nurture them. The purpose of gifted education is to promote self-actualization of individuals and have them contribute to development of society and nation by scouting for gifted and talented persons and carrying out education suitable for ability and aptitude in accordance with regulations so they can develop innate potential.

In Kenya, Koech (1999), Kochung', (2003) and Kang'ethe, (2004) defined gifted and talented children as those who at any educational level are identified as possessing demonstrated or potential abilities that give evidence of high performance capabilities in areas such as general intellectual ability, specific academic aptitude, creative and productive thinking, leadership ability, visual and performing arts and psychomotor abilities. According to Kinyua (2014) gifted and talented children as those with outstanding talents, who perform or show the potential of performing at remarkably high levels of accomplishment when compared with others of their age, experience or environment.

The Kenya government acknowledges the need for primary school curriculum to address individual talents of learners. The curriculum tends to cater for talent in traditional academic subjects, by recognizing academic achievement and excluding learners who are talented in sports and performing arts. The curriculum to be developed should be an inclusive curriculum to cater for the talented learners.

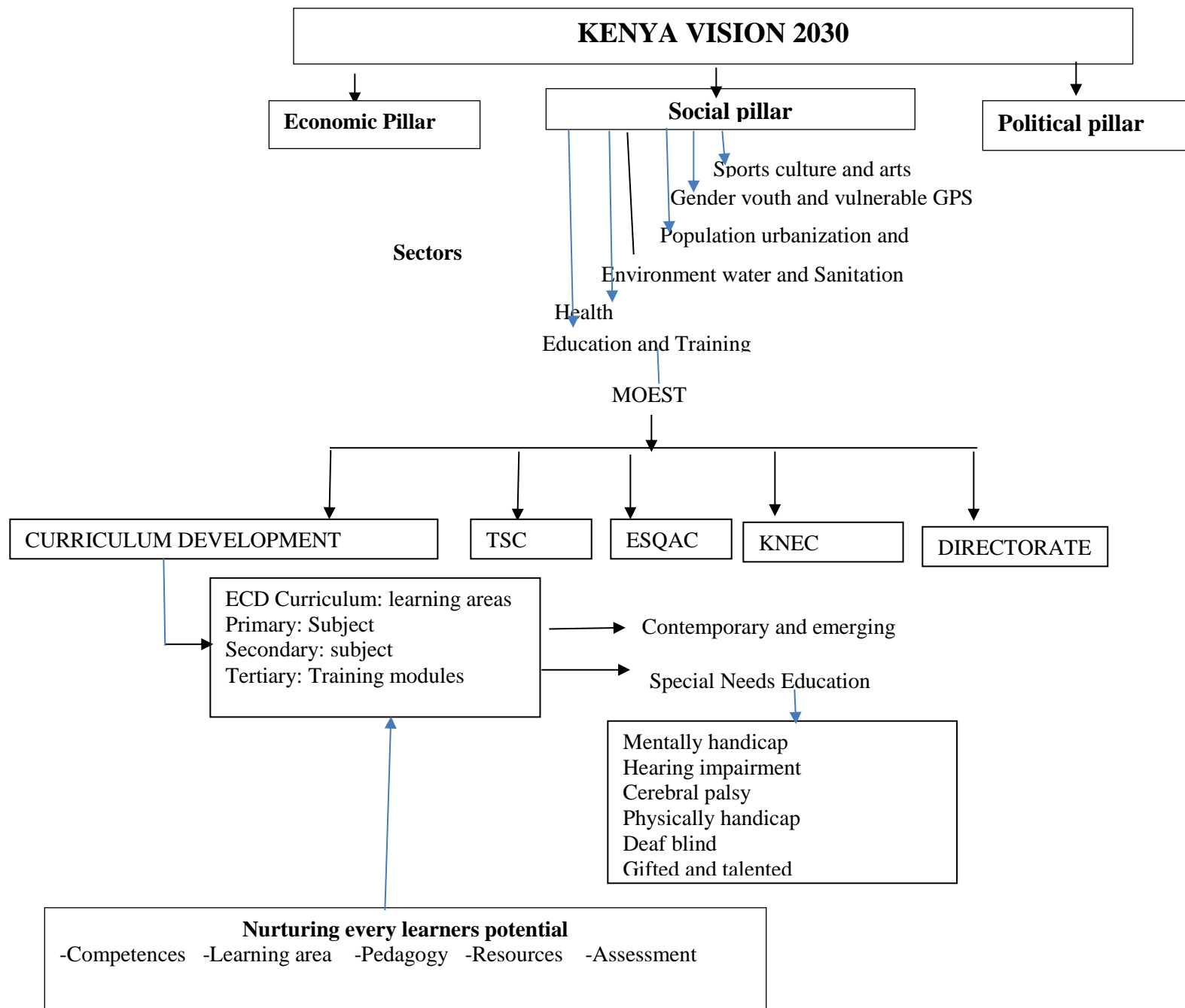
2.3 Situating the study within the Field of Education and Curriculum Discipline

The aspect of curriculum development can be traced to the national aspirations as envisaged in the Vision 2030. The goal of curriculum reforms is to achieve the vision of *‘Nurturing Every Learners Potential’*. This seeks to elicit competencies and values, learning areas, pedagogy, resources, assessment and development of talents as will be guided by the Curriculum Framework for Basic Education.

For every level of education, contemporary and emerging issues as well as special needs education permeate through as they essentially affect all learners irrespective of level of learning. At every level therefore curriculum is developed where learning areas indeed takes cognizance of the contemporary issues as well as learners with special needs.

Curriculum development is nested under the larger umbrella of the MOEST with the other arms of the Ministry, such as the TSC, education Directorates, ESQAC and KNEC. All these work together to fulfill aspirations of the Social Pillar of the Vision 2030 alongside other sectors. Situating the vision of the curriculum reforms to the Kenya Vision 2030 can be espoused illustrated as Follows

Figure2.1KenyaVision2030



2.4 Review of Relevant Theories

2.4.0 General overview

Curriculum theory is an academic discipline devoted to examining and shaping educational curricula. Within the broad field of curriculum studies, it includes both the historical analysis of curriculum and ways of viewing current educational curriculum and policy decisions. There are many different views of curriculum theory (Kliebard, 2004). Kliebard discusses four curriculum groups that he refers to as humanist (or mental disciplinarians), social efficiency, developmentalist (or child study), and social meliorists.

2.4.1. Curriculum theory

2.4.1.1 Humanists

A common criticism of broad field curriculum is that it lays more emphasis on mental discipline and education. "Mental disciplinarians" and Humanists believe in all students' abilities to develop mental reasoning and that education was not intended for social reform in itself but for the systematic development of reasoning power. Good reasoning power would lead to the betterment of society. Harris described the subjects to be taught as the "five windows" into the soul of the student: "grammar, literature and art, mathematics, geography, and history" and prescribed it in that order to be taught (Kliebard, 2004, p. 15). Some critics view this group as having too much emphasis on the "classics" as determined by the dominant groups in a society.

2.4.1.2 Social meliorism

This school of thought believes that education is a tool to reform society and create change of the better. The socialization goal was based on the power of the individual's intelligence, and the ability to improve on intelligence through education. An individual's future was not predetermined by gender, race, socio-economic status, heredity or any other factors. "The corruption and vice in the cities, the inequalities of race and gender, and the abuse of privilege and power could all be addressed by a curriculum that focused directly on those very issues, thereby raising a new generation equipped to deal effectively with those abuses" (Kliebard, 2004, p. 24). Some critics contend that this group has goals that are difficult to measure and a product that has slow results.

2.4.1.3 John Dewey's curriculum theory

Dewey felt that the curriculum should ultimately produce students who would be able to deal effectively with the modern world. Therefore, curriculum should not be presented as finished abstractions, but should include the child's preconceptions and should incorporate how the child views his or her own world. Dewey uses four instincts, or impulses, to describe how to characterize children's behavior. The four instincts according to Dewey are social, constructive, expressive, and artistic. Curriculum should build an orderly sense of the world where the child lives. Dewey hoped to use occupations to connect miniature versions of fundamental activities of life classroom activities. The way Dewey hoped to accomplish this goal was to combine subject areas and materials. By doing this, Dewey made connections between subjects and the child's life. Dewey is credited for the development of the progressive schools some of which are still in existence today.

2.4.1.4 Social efficiency

Theorists such as Ross, Bobbitt, Gilbreth, Taylor, and Thorndike are Social efficiency proponents who sought to design a curriculum that would optimize the "social utility" of each individual in a society. By using education as an efficiency tool, these theorists believed that society could be controlled. Students would be scientifically evaluated and educated towards their predicted role in society. This involved the introduction of vocational and junior high schools to address the curriculum designed around specific life activities that correlate with each student's societal future. The socially efficient curriculum would consist of minute parts or tasks that together formed a bigger concept. This educational view was somewhat derived with the efficiency of factories which could simultaneously produce able factory workers. Critics believe this model has too much emphasis on testing and separating students based on the results of that testing.

2.4.1.5 Developmentalism

Developmentalists focus attention to the development of children's emotional and behavioral qualities. One part of this view is using the characteristics of children and youth as the source of the curriculum. Some critics claim this model is at the expense of other relevant factors.

2.4.2. Curriculum Reform Theories

Since curriculum reform engages with redesigning the learning context, one of the curriculum reform theories is Instructional Design theory.

2.4.2.1. *Instructional – Design Theory*

This theory offers explicit guidance towards a new curriculum that explains how to help students learn and develop in the wake of emerging globalization. Learning is associated with cognitive, emotional, social, physical and spiritual development (Reigeluth, 1996). “Theory One” developed by Perkins, in *Smart Schools* (Perkins, 1992) describes the instructional design theory which offers guidance for fostering cognitive learning as follows: Clear information, in terms of goals, knowledge needed and performance expected; Thoughtful practice, in terms of opportunities for learners to engage in learning actively and reflectively; Informative feedback, in terms of clear and thorough counsel to learners, and; Strong intrinsic or extrinsic motivation.

Instructional design theory is design-oriented because it focuses on the means to attain given goals for learning or development. It offers guidelines about the methods to use in different situations in curriculum implementation. Values play an important role in the instructional design theory. They underlay both the goals the curriculum pursues and the methods it offers to attain the goals. This will articulated in this BECF which takes cognizance of the place of values as an anchor for the pillars of curriculum.

Importance of Instructional Design Theory in Curriculum

As Pogrow (1996) states, the history of educational reform is one of consistent failure of major reforms to survive and become institutionalized. Pogrow further asserts that the single biggest tool in promoting curriculum reform has been advocacy. To help educators to improve education, it is imperative that there be public or stakeholder participation. This should also be done in other areas of education policy, as well as systemic change in the educational system (Bathany, 1991; Reigeluth & Cartinkle, 1994). Systemic change emphasizes the need to give organizations considerable autonomy to manage themselves with the purview of corporate vision, rather than being directed from above (Ducker, 1989; Hammer & Champy, 1993). This allows corporations to respond much more quickly and appropriately to their customers and

clients' needs. The Institute aspires to engage stakeholders as well as parent participation in its advocacy for a competent based curriculum.

Globally, fundamental changes in the education systems have important implications for curriculum reform. Learners need to be able to think about and solve problems, work in teams, communicate through discussions, take initiatives and bring diverse perspectives to their learning. In addition, students/pupils need to learn more, yet they have little time available to learn it (Lee & Zemke, 1995). Learners also need to demonstrate an impact of the achievement of national goals of education. This is best explained by the theory expounded by John Hattie- *Visible Learning theory* (2012).

Visible Learning means an enhanced role for teachers as they become evaluators of their own teaching. According to John Hattie Visible Learning and Teaching occurs when teachers see learning through the eyes of students and help them become their own teachers. It refers to making student *learning* visible to teachers so that they can know whether they are having an impact on this learning that is an important component of becoming lifelong learners – something basic education wants students to value. The ‘learning’ part of visible learning is the need to think of teaching with *learning* in the forefront and with the idea that we should consider teaching primarily in terms of its *impact on student learning*.

When the *teaching is visible* the student knows what to do and how to do it. When the *learning is visible* the teacher knows if learning is occurring or not. Teaching and learning are *visible* when the learning goal is not only challenging but is *explicit*. Furthermore, both the teacher and the student work *together* to attain the goal, provide feedback, and ascertain whether the student has attained the goal. Evidence shows that the greatest effects on student learning come when not only the students become their own teachers (through self-monitoring, and self-assessment), but the teachers become learners of their own teaching. In successful classrooms, both the teaching and learning are visible. This way of learning is essential for criterion referenced assessment which seeks to make assessment part of learning, and is an essential component of the competence based curriculum.

2.5 Review of Relevant Policy Documents

2.5.0. General overview

Education is the key to well-being and prosperity as it is impossible to attain high levels of economic development and high standard of living without a highly educated workforce. This is why education is well structured and guided by various national and international policy guidelines. Policy documents reviewed include the Kenya Vision 2030, the Kenya Constitution, Sessional paper No. 2 of 2015, the Basic Education Act (2013), National Education Sector Plan (2015), Kenya Institute of Curriculum Development policy documents, Education for All goals as well as the Sustainable Development Goals, among others.

Review of policy documents is necessitated by the fact that it is a national priority to align the curriculum to address the aspirations of these policies as well as the East African Community protocol. The government is fully committed to achieving its national and international policies in education.

2.5.1 Societal needs

Every society has certain needs that must be fulfilled in order to succeed. Society influences curriculum development because curriculum needs to be relevant to the needs of the society. Consequently, as the needs of the society changes, curriculum also needs to change in order to reflect those changes and make it relevant (Treadaway, 2003).

The societal needs are clearly spelt out in the National Goals of Education. These goals of education are embedded in the Vision 2030 (Republic of Kenya, 2012) and include: Promote national unity and patriotism; Enhance social, economic, technological & industrial needs for national development; Promote individual development and self-fulfillment; Inculcate sound moral and religious values; Promote social equality and responsibility; Respect for Kenya's rich & varied cultures; Implant international consciousness & positive attitudes towards other nations and; Embrace positive attitudes towards good health and environmental protection (KIE, 2008).

During the National Conference on Education (2003), it was noted that there was need for the government to achieve Universal Primary Education (UPE) goal by 2015, with the overall goal

of attaining Education for All (EFA) by 2015. The attainment of UPE would ensure that all Kenyan children eligible for primary schooling had opportunity to enroll and remain in school to learn and acquire quality education. However, various challenges with respect to access, equity, quality and relevance, continued to constrain the provision of quality education and services. One of the recommendations made was that the MOEST, through KIE, should rationalize the curriculum for primary education to incorporate health and nutrition learning and to place increased emphasis on Physical Education and sports.

Over time, Policy documents have articulated the direction the country needs to take in order to propel its development agenda. According to the recommendations made in the Sessional paper No. 1 of 2005 on Policy Framework for Education, Training and Research, a breakthrough towards industrialization can only be achieved through application of technology. It was necessary to give prominence to technical education in all sub-sectors. The introduction of many practical and vocational subjects was meant to prepare students for the world of work.

The Kenya Vision 2030 places great emphasis on the link between education and the labour market, the need to create entrepreneurial skills and competences, and the need to strengthen partnerships with the private sector. The curriculum is supposed to develop these skills and competencies. However, The Task Force on the Re-Alignment of the Education Sector to the Constitution (2012) noted that the quality of education is not clearly spelt out so that the curriculum delivery can focus on development of specific expected competences to be assessed. The task force recommended structuring of the curriculum within a skills and competences framework that identifies the knowledge, skills and competences all learners will acquire, and which will provide both vertical and horizontal coherence.

The NESP (2015) makes it very clear that the curriculum is expected to empower the citizens with necessary knowledge and competencies to realize the national developmental goals. Further societal aspirations can only be realized through the implementation of a well designed dynamic and responsive or relevant curriculum (Republic of Kenya, 2015). Curriculum is developed based on the identified societal needs and the dynamism of the industry and the job market. Consequently the curriculum reform has been preceded by needs assessment because the stakeholders ideally should participate in this process.

Education should prepare workers for the 21st century by teaching skills necessary for industry and commerce. Kenya Vision 2030 aims at making Kenya a newly industrialized, middle income country providing high quality life for all its citizens by the year 2030. The Vision is based on three pillars namely; the economic pillar, the social pillar and the political pillar. The Vision 2030 places great emphasis on the link between education and the labour market, the need to create entrepreneurial skills and competences, and strong public and private sector partnerships. It articulates the development of a middle-income country in which all citizens will: have embraced entrepreneurship, be able to engage in lifelong learning, perform more non-routine tasks, be capable of more complex problem-solving, be able to take more decisions, understand more about what they are working on, require less supervision, assume more responsibility, and as vital tools towards these ends, have better reading, quantitative reasoning and expository skills. This has considerable importance for the kind of education and training system required to deliver the requisite skills, competencies and attitudes. As such there will be need to address issues related to quality, service delivery, curriculum, relevance, teacher development and management at all levels as well as trainers in the areas of technology and entrepreneurial skill development.

The Task Force on Re-alignment of the Education Sector (2012) was mandated to review and align the education, training and research sector in accordance with the Constitution. Among the issues raised in relation to the societal issues in the curriculum were that; there was too much focus on academics and university education, thus looking down upon any other post-secondary education. This had impacted negatively on middle level training which in essence produced the bulk of the human resource required to drive the country towards Vision 2030. The implication was that the primary, secondary and teacher education curricula did not address the dictates of Vision 2030, the Constitution and regional integration.

The content of the curriculum has increasingly been considered dated with regard to the skills and values needed to operate in the current world full of both uncertainties and opportunities. Furthermore, a relevant curriculum is required to instill positive values, mould character, moral and spiritual formation of the learners. Aligning the curriculum to address the aspirations of

Vision 2030, the Constitution and the East African Community treaty is a priority of the National government (Republic of Kenya, 2012). The content for Basic Education would therefore need to be designed with the view of equipping the learners with relevant knowledge that emphasizes on technology, innovation and entrepreneurship (GOK, 2007). In addition, the learners would have an opportunity to develop their full capacities in order to live and work in dignity, enhance the quality of their lives, make informed decisions and continue with learning as a lifelong engagement.

2.5.2 Competencies

Over the years, the Kenyan curriculum has been objective based with limited flexibility in terms of content packaging and autonomy for the teacher and learners. Apart from Kenya, the other East African Community (EAC) member countries have adopted competence based curriculum and assessment. The Basic education Act (2013) stipulates policy and guidelines on curricula and points out that among other activities undertaken by KICD on curricula developed, is to secure the competencies and learning outcomes for the relevant structures and levels under the National Qualifications Framework. Additionally, the Sessional paper No.2 of 2015 has clarified the strategy on the policy on curriculum and assessment by stating that KICD is expected to develop a repertoire of skills and competencies necessary to inform a globally competitive economy. The curriculum policy (2015) points need to have the curriculum spelling out expected competencies at every level. Further, the curriculum should be designed to equip learners with relevant knowledge skills, competencies and values to enable them develop their full potential. This echoes what is also contained in NESP of 2015 which affirms that curriculum developed will be competence based. This will ensure that at each level, desired outcomes are achieved and learners can progress with diverse interests and abilities.

Although these competencies should be addressed in the curriculum, they have implications on the policy makers and the implementers. The school managers need necessary skills and competences to monitor standards and quality of curriculum delivery as well as quality of teaching in their schools. Further teacher trainers at all levels of teacher training education need the necessary skills and competences to impart on their teacher trainees. Additionally, Quality

Assurance and Standards officers should have the required skills and competences to add value to the standards and quality of education in the learning institutions.

The Task force (2012) recommended core curriculum competencies to be used. These are presented in levels from pre primary to senior secondary and starts with very basic competencies. As learners move from basic to upper primary the foundational competencies get enhanced and firmed up in secondary level. The Task Force recommended some core competencies that should be acquired by learners and include: Communication skills, Manipulation skills, Social skills, Environmental awareness, Numeracy, Writing, enquiry skills, ICT, talent potentials, Observation skills, Entrepreneurial skills, Ethical skills, Investigative skills among others.

2.5.3 Values and attitudes

Article 10 of the Constitution (GoK, 2010) contains the national values and principles of governance to be upheld by all Kenyans. Education and Training provides the best medium of inculcating these values. The values include Patriotism, national unity, sharing and devolution of power, the rule of law, democracy and participation of the people; Human dignity, equity, social justice, inclusiveness, equality, human rights, nondiscrimination and protection of the marginalized; Good governance, integrity, transparency and accountability; and Sustainable development. In addition, article 11 of the Constitution recognizes culture as the foundation of the nation and as the cumulative civilization of the Kenyan people and nation. Education and training therefore is expected to: Promote all forms of national and cultural expressions through literature, the arts, traditional celebrations, science, communication, information, mass media, publications, libraries and other cultural heritage; Recognize the role of science and indigenous technologies in the development of the nation; and Promote the intellectual property rights of the people of Kenya. The aspirations of the Constitution therefore should be embedded in the curriculum and taught to all learners across the levels.

In addition, the Vision 2030 adds that the journey towards widespread prosperity involves building a just and cohesive society that enjoys equitable development in a clean and secure environment. Some of the related major issues that need to be addressed within education have to

do with living together in a cohesive society, having healthy individuals and education that supports personal growth and development.

2.5.4 Learning areas

Currently, there are eight (8) learning or activity areas in ECD, Primary level has 12 subjects while Secondary level has 32 subjects. Technical subjects are offered in limited number of secondary schools only, hence only a few students are exposed to technical subjects while in secondary school.

The Sessional paper no. 2 of 2015 expounds on the need to teach foreign language in our system of education for global competitiveness. This may imply secondary education to cover more foreign languages and give opportunities to primary schools to also teach foreign languages. Aspects of education for sustainable development were also some of the key recommendations made in this policy. Among other things that the curriculum should develop are the 21st Century skills, and learners who maintain, improve and sustain the environment.

When the Constitution of Kenya was promulgated, the onus was on KICD to ensure that the curriculum was in line with the spirit of the Constitution even before the curriculum reforms. This necessitated amendment of some parts of the curriculum where deliberate effort was made to respond to the needs of the Constitution, while making the subjects relevant and meaningful. The reforms therefore will further address appropriate areas in the Constitution. Other areas to be developed should enable learners to acquire relevant skills, knowledge and attitudes.

Although current curriculum boasts of a wide spectrum of subjects, and learning areas for ECD, often the curriculum has been seen to lack flexibility, not cater for regional disparities and lacking in pathways to direct learners at the secondary levels. According to the Curriculum Policy (2015), the curriculum has no emphasis on accelerated or flexible modes of learning; neither does it permit entry and re-entry at different levels. The learners are not able to make informed choices as they decide on career paths and areas of interest. The Sessional paper No. 2 of 2015 clearly states that the curriculum will provide knowledge skills and values, and competencies to enable learners to move seamlessly from the education system to either further

education or to technical/vocational areas. The curriculum is also expected to apportion a certain percentage of the content to meet regional needs (Republic of Kenya, 2015).

Vision 2030 lays importance on certain learning areas. Agriculture is seen as a major contributor to the country's GDP. It further echoes the importance of mainstreaming Science, Technology and Innovation in the school curriculum (Gok, 2007).

2.5.5. Assessment

For learning process to be complete, assessment must take place, whether it is school based or at the end of the cycle. Those that are school based are diagnostic and for placement, while the national end of cycle exams are for transition to the next level. Assessment can either be formative or summative. The summative assessment is usually carried out by KNEC, while other National assessments assess the attainment levels of certain competencies. Summative assessments are based on utilization of a single metric to assess basic knowledge and skills levels acquired by students. Used this way, it is an instrument of accountability. This mode of assessment is preferred since teachers are able to check in a linear manner the level of assimilation of information, facts and concepts passed to learners. On the other hand, formative approach supports the learning process. The teacher is able to understand how students are leaning, to identify problems the students may face in the learning process and to use feedback to ensure that all have the opportunity to learn (UNESCO; IBE, 2015)

Among the shortcoming of the assessment mode in Kenya as outlined by the Taskforce report (2012) and the Sessional Paper No.2 of 2015 is too much emphasis on examination based certification at the end of each cycle, lack of open opportunities for learner to pursue further education and lack of harmony with the educational structures of East African countries. In addition, teachers are not adequately trained in test development and evaluation procedures.

Due to the importance attached to the examinations and too much competition, assessment is no longer seen as part and parcel of the teaching learning process but as a gateway to determine who can proceed to the next level of education. The policies recommend that in the reformed curriculum, competencies and skills will be assessed and that the introduction of standardized

assessment testing across the basic education cycle will address this need (Republic of Kenya, 2015). Further forms of assessment have been proposed for every level in the Taskforce Report (2012). They include observations, pupil profiling in core learning areas and social development as well as standardized assessment. Quality assessment therefore, will ensure competencies in the curriculum are attained. This is because assessments measure learner competencies and evaluates the learning that has taken place.

2.5.6. Resources

According to the Taskforce Report (2012) the implementation of Free Primary Education, though well intended had a broad curriculum requiring many textbooks and involved a many other infrastructure and resources. Most schools lacked basic requirement such as teaching and learning materials, tuition equipment and physical facilities. Teachers especially for the practical and vocational subjects were also inadequate.

As Textbooks play a crucial role in the education process, the government allocates 60% of the tuition vote on textbooks annually since 2003 when this began. It is expected that currently, there should be 1:1 pupil textbook ratio in order to cater for instructional materials for learners. However this is not the situation and learners are still sharing textbooks in a ratio of 1:4 or more in some schools (Buhere, 2015).

2.5.7. Contemporary and Emerging issues

The various contemporary and emerging issues have been identified from different policy documents such as the Constitution, Vision 2030, Education for Sustainable development (ESD), Child Act (2001), Millennium Development Goals (MDG), Sustainable Development Goals (SDG), and NESP (2015) among others. Each of these policy documents emphasizes different aspects of the cross cutting issues and education has been identified as the wheel to nurture them among learners across all levels. These policies documents articulate that learners across all levels irrespective of their age are faced with contemporary lifestyles and challenges that necessitate decision making competencies. In particular, the Sessional paper no 2 of 2015, emphasizes that learners have issues ranging from sexuality, drug and substance abuse, media influence in these times of technological advancement, and political and social scenarios that

influence their lives (Republic of Kenya,2015). Although the curriculum has Life skills Education Curriculum as well as curriculum support materials, cross cutting issues remain a critical aspect of education, more so because emerging issues are not taught in most schools (KICD, 2014).

The Education Sector Policy on HIV and AIDs (MOEST, 2013) and the Policy on Gender (MoE, 2007) state that these contemporary issues should be mainstreamed into the existing curriculum. Teachers should be given capacity to do this so that they in turn can help learners to benefit from and cope with many contemporary and future challenges. The Sessional Paper No.1 of 2005 has paid attention to effective teacher development and utilization, while Vision 2030 lays emphasis on quality education and training. These can only be actualized through effective capacity building of teachers.

The Constitution gives more details on contemporary and emerging issues and the direction education should take. This is stipulated in several Chapters such as two and six which deal with principles of governance, leadership and integrity; chapter four deals with bills of rights which include child rights; part two deals with environment; part three deals with specific application of rights like children rights and persons with disabilities; chapter five part two deals with environment and natural resources; while chapter twelve deals with national security (GoK 2010). All these are cross curricular issues that need to be in cooperated in the current curriculum reforms across all levels of education, lest it is rightly declared unconstitutional. Other cross cutting issues like technology, health issue and drug abuse are also emphasized in the Vision 2030.

Although guidance and counseling is not a crosscutting area, education needs to address personal development and mentor, mould and nurture the learners. This is appreciating that some learners across all levels come from difficult social economic contexts. With the emphasis of parental and community engagement in education in the education policies, the curriculum reforms will engage all stakeholders including parents and members of the public.

The MoEST's purpose for requiring the Task Force to consider the issue of Mentoring and Molding in the ToRs demonstrates the importance of an individual's right to dignified growth and development, free association and free speech. This is facilitated by the education system, which prepares individuals to participate effectively in society in an informed and acceptable way on the basis of values aimed at national cohesion and unity.

2.5.8. Talents

According to the curriculum policy (2015), the curriculum as it is does not give linkage of talents to development of careers, further education or training. There is need to address the aspects of identifying, nurturing and developing talents among learners. Kenya Vision 2030 calls for curriculum that develop learners' entrepreneurial skills, competencies and talents. Additionally, Sessional paper no. 2 of 2015 expounds on the need to develop and nurture talents for global competitiveness while the Taskforce Report mentions identification and advancement of talents among core curriculum competencies.

2.5.9. Special Needs Education

2.5.9.1 Policies in SNE

Special Needs Education (SNE) is a special component of education in this country. In the Sessional Paper No. 1 of 2005 on a Policy Frame Work for Education, Training and Research, and the Kenya Education Sector Support Programme 2005-2010, the Government noted that the special education schools and units would continue to cater for the education of learners with special needs in the four traditional areas namely; Mental handicaps, Physical handicaps, Visual impairments and Hearing impairments. This apparently left out other areas of special needs such as Mental handicapped and Cerebral palsy.

The Sessional Paper No.2 of 2015 shows that access and participation of learners with special needs is relatively low in Kenya. Their needs are not specifically addressed thus disadvantaging them. The situation is made worse by emphasis on academic performance and examinations. The learning environment is unfavourable and yet often they are expected to compete for grades as it is for regular students. Even if learners have moderate learning difficulties, integrating or including them in regular schools may be good for their socialization but not conducive if they

are made to compete on an equal platform. Those with severe needs are excluded from school due to inability of regular schools to meet their physical and educational needs.

The absence of reliable data on children with special needs across all levels of education constraints effective service delivery and planning for special needs education (Republic of Kenya, 2015). Further the EARCs have inadequate specialized equipment and human resource, there is inadequate infrastructure and facilities, and additional costs for learners with disabilities hinder progress in the special needs areas.

The special needs teacher education sector may be lacking sufficient andragogy to train special needs teachers who are already in service. The MOEST has proposed to develop standards based on acceptable principles that will ensure optimal delivery of competency based special needs education. The shortage of specialized teacher needs to be addressed.

Constitution of Kenya 2010 in a number of articles has addressed issues that relate to educational of these learners. Article 43 (1) (f) states, “Every person has the right to education. This includes persons with special needs and even those in marginalized areas. Article 53(1) (b) states that every child has the right to free and compulsory basic education. This implies that even those children with special educational needs have a right to an interrupted 12 years of a seamless transition of quality education. Article 54(1) says that persons with disabilities are entitled to access educational institutions and facilities that are compatible with the interests of the person, use the appropriate language and access materials and devices to overcome constraints arising from the disability. The Ministry in charge of Education therefore has a task of ensuring that the curriculum is made suitable for all categories of learners with special needs.

The SNE Policy Framework (2009) in one of the guiding principles states that, education should be based on learner friendly curriculum and responsive learning systems and material. Studies have shown that learners learn better in barrier free and child friendly environment. The implication here is that any educational programme for learners with special needs must be based on the child’s best interest. Persons with Disability Act 2003 section 18 states that “No person or learning institution shall deny admission to a person with disability to any course of study by

reason only of such disability to acquire substantial learning in that course. This requires that learning institutions take into account the special needs of persons with disabilities in respect to entry requirements pass marks, curriculum, examinations, auxiliary services, class schedules physical educational requirements and other similar considerations.

2.5.9.2. *Learning areas in SNE*

Special Education prepares those who are most likely to be dependants to become self-reliant. In view of this, it is necessary to develop subjects for learners with special needs that would enhance their holistic development. For example, besides offering academic subjects only to learners with special educational needs there is need to introduce subjects such as social skills, Braille skills for those who are blind and activities of daily living skills.

Council for exceptional children (2009) Says those learners with special educational needs should be taught additional skills that help them mitigate the effect of disability. Hatlem (1996) observes that learners with Visual Impairment should be taught Braille, Social skills, Activities of daily living assistive technology, orientation, and mobility. Subjects offered to learners with special needs should have flexibility. In addition to being taught core subjects that develop literacy, numeracy and values, learners with special needs should be allowed to study subjects of their interest without conforming to prescribed subject groups. Article 55 (a) of the constitution states that, "The state shall take measures including affirmative action programmes, to ensure that the youth access relevant education and training". Wolff; et al. (2002) say that teaching academic subjects alone is not adequate to help children with special needs. The ideal situation would be for learners with special educational needs to study all the topics in the regular curriculum. However, those topics that are not achievable due to the learners' prevailing educational needs, they could be removed, replaced, or modified to suit the learner. This process of modification is referred to as curriculum adaptation Kochung Report (2003).

2.5.9.3 *Assessment for SNE*

Assessment being an integral part of curriculum implementation is equally important for learners with special educational needs; however there is need for flexibility in the modes of assessment as well as seeking best practices for assessing learners with special needs. Kochung Report (2003) says that examinations for learners with special needs should be presented in accessible formats and that time allowed should be commensurate with the nature and extent individual

needs. The Taskforce on Special Needs observed that in both the national and classroom assessment, there is lack of capacity to assess learners with special needs. Mean score type of grading is not friendly and responsive to needs of learners with special needs attempts have been made to have adapted exams depending on the category and severity of the special need.

2.6 Review of Curriculum in other Contexts

2.6.0. General overview

The process of curriculum development is initiated by a needs assessment which basically looks at the situation of '*what is*' and '*what should be*'. This calls for systematic investigation to collect data and establish the need for curriculum reforms. Results of the needs assessment supported by related literature are used to develop appropriate curriculum designs and delineate the expected competencies. (Otunga et al, 2011). This section therefore presents related literature reviewed on curriculum in other contexts, other than the policy document or other researches done in the curriculum.

2.6.1 Societal needs

For a curriculum to be relevant, it must meet societal needs. Education is recognized as a key means to ends of greater economic and social equality, eradicating poverty and of national, economic, social and political development (IBE, 2015). This paper further argues that when education in a country lacks relevance and quality, it creates a shortage of human resource with appropriate mix of skills. This constraints holistic and inclusive development, sustainable growth and global competitiveness. It further perpetuates social inequalities and exclusion, leading to "social and political instability", hence is a threat to peace and security of any society (ibid).

The curriculum is critically important in any society as it engages in a collective way the knowledge, skills and values that need to be learned by all. If sustainable ways of living e.g. one important aspect the curriculum should reflect that while the curriculum conceptualizes the Sustainable Development Goals (SDGs) ensuring inclusiveness and providing equity n quality education is curriculum has an essential role of providing quality learning for all learners and

support education that is relevant to holistic development. In so doing, the curriculum seeks to meet provisions of the fourth SDGs.

Lovat and Smith (1995) argue that there is always an underlying social and politico-economic philosophy which impacts upon education and the curriculum. Brady and Kennedy, (1999) extend this argument by maintaining that curriculum is not an entity apart from society, it is firmly embedded in it and thus is a social construct. But it is also a personal construct, as curriculum represents a selection of societal ideas, skills, values and practices. Thus, the curriculum is constructed by people, for people and as such should be relevant and all encompassing so as to address all the needs of the society. National development is multifaceted and goes beyond economic and material progress knowledge technology; equity and social justice are elements of national development.

The rapid development and proliferation of ICT and of related digital technologies are driven towards a knowledge economy; it demands often higher levels of education in workers across all sectors. Since personal development is one of the education goals, there should be links between education and the individual. Access to education is pivotal to life's chances and self-fulfillment (Musuota, 1994). Additionally, Brown (2003) argues that to enable a society to progress, education must be widely available to individuals.

Education is much more than a mechanical process, as it deals with human lives, destinations, hopes and dreams (Disla, 2002). Thus careful thought needs to go into the selection of curriculum content. The needs of the society must be taken into consideration. The societal needs include the preservation of culture, industrial and economic needs, Creativity needs, as well as moral and ethical needs. Some of the countries that Kenya has benchmarked with in education are South Korea and Malaysia. In these countries, teaching of moral education is taken seriously among the core subjects right from pre-school through all the levels of education. These countries also emphasize on the promotion of nationalism and patriotism through teaching of history of the country in South Korea and Local studies in Malaysia (KIE, Bench Marking Report, 2010).

The Kenya Education Commission of 1964 (The Ominde Commission) was formed to introduce changes that would reflect the nation's sovereignty. The commission focused on patriotism, identity and unity, which were critical issues at the time. The committee also laid emphasis on an education that would foster social equality, preserve Kenya's cultural heritage and reduce poverty. Consequently, the content of History and Geography subjects were changed to reflect national cohesion. One of the recommendations was that Kenya adopts a unified national curriculum approach. This committee also laid emphasis on an education that was to promote unity and patriotism.

Although the curriculum should be seen as a vital element for improving education, quality and relevance of education to holistic, inclusive and sustainable development goals, it is a key means for improving quality and equity in education this effective learning and ensuring consistent alignment of learning with social aspiration and development goals.

2.6.2 Competencies

Competency based education identifies specific competencies and skills that must be mastered by a pupil and are regularly measured against set standards so as to assess the effectiveness of the teaching (Farrant, 2004). All competencies should be both demonstratable and evaluatable (Ross, 2000). Competency based training emphasizes on outcomes and skills rather than processes of learning and the time taken to reach a prescribed standard of competency (Evan, Haughey & Murphy, 2008). It emphasizes what the learners should know and be able to do. Rather than education being focused on what the teacher thinks learners should know (teacher-focused) it looks at learning from the point of view of the learner performance (learner-focused) making as clear as possible what should be achieved and standards for measuring that achievement (Republic of Kenya, 2011). It is a shift of the curriculum away from the idea of knowledge to one of skills and abilities where content is less important than standards of achievements. In a competency based curriculum, knowledge is closely linked with understanding rather than being identified in its own right. The shift to competency based approach to curriculum and learning is an integrated and holistic understanding of what it is that we want our young people to learn, be able to do and to become.

Global trends in curriculum designs are moving towards competence based approaches. Different countries have different ways of developing competencies in their curriculum. In South Korea and Malaysia, curriculum designs are a blend of both objectives and competencies based approaches. The designs are both thematic and these themes are packaged in modular forms and cut across all subjects. In the European Union (EU) countries, competencies are a combination of knowledge, skills and attitudes appropriate to the context. For them 'key competences are those which all individuals need for personal fulfillment and development, active citizenship, social inclusion and employment' (European parliament, 2006: in IBE 10). Further it set out 8 key competences for lifelong learning namely: mother tongue, foreign language mathematical sciences and technology, digital competence, learning to learn, social and civic initiative and entrepreneurship, cultural awareness and expression.

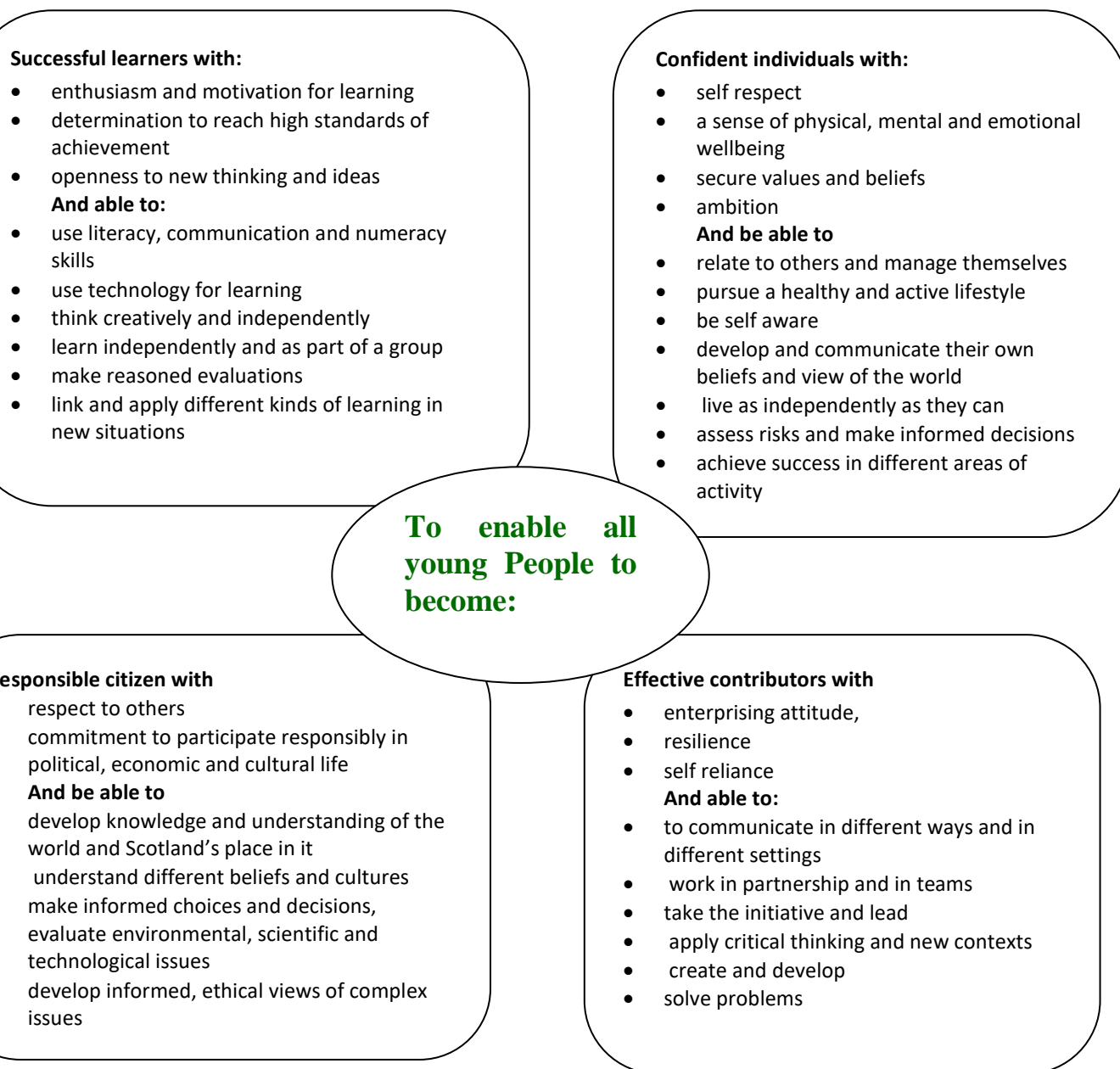
According to Scottish Government (2009), all children and young people are entitled to opportunities for developing skills for learning, life and work. The skills are relevant from the early year's right through to the senior phase of learning and beyond. Curriculum for Excellence is designed to transform education in Scotland, leading to better outcomes for all children and young people. It does this by providing them with the knowledge, skills and attributes they need to thrive in a modern society and economy laying the foundation for the development of skills throughout an individual's life. Providing individuals with skills helps each individual to fulfill their social and intellectual potential and benefits the wider Scottish economy. The skills should be developed across all curriculum areas, in interdisciplinary studies and in all the contexts and settings where young people are learning. Scotland focuses on a number of overlapping clusters of skills:

- Personal and learning skills that enable individuals to become effective lifelong learners
- Literacy and numeracy
- The five core and essential skills of communication, numeracy, problem solving, information technology and working with others
- Vocational skills that is specific to a particular occupation or sector

The development of skills in Scotland is essential to learning and education to help young people to become successful learners, confident individuals, responsible citizens and effective contributors. The skills and attributes which learners develop should provide them with a sound

basis for their development as lifelong learners in their adult, social and working lives, enabling them to reach their full potential. Every child and young person is entitled to support to enable them to gain as much as possible from the opportunities to develop their skills which Curriculum for Excellence can provide. Timely provision of support to meet individuals' needs will enable children and young people to effectively engage with opportunities for skills development.

Figure 2.2: Developmental Skills for Learning



Source; Scottish government (2009)

2.6.3. Global views on values and attitudes in education

The values included in the Australian curriculum include: cooperation, freedom, happiness, honesty, tolerance, unity, peace, respect, responsibility, simplicity, humility and love. In Singapore, the concept of a national ideology had an objective of preserving their Asian identity in an era of globalization where they would be exposed to external influences. They outlined the essential tasks in developing the National Ideology, namely: to find common values which all can share; to preserve the heritage of the different communities; and to ensure that each community also appreciates and is sensitive to the traditions of others.

The Singaporean education had a basis for developing values that were mainstreamed into the curriculum. This promoted Singapore identity with key common values that all racial groups and faiths would subscribe to and live by. Outside of these Shared Values, each community would practice its own values as long as they are not in conflict with the recognized values inculcated through the curriculum.

America has also implemented values and character education especially in the state of Georgia. Values are considered to be important to a child's character formation. This fact is particularly appropriate in the preschools and early school years. As students progress through schools, it is important that their education provide instructional opportunities, which help them develop their beliefs about what is right and good. The State Board of Education believes that there is a core list of values and character education concepts that should be taught in their schools such as these;

Table 2.1 Character Curriculum

<ul style="list-style-type: none"> • accomplishment • cheerfulness • citizenship • cleanliness • commitment • compassion • cooperation • courage • courtesy • creativity • democracy • dependability • diligence • equality 	<ul style="list-style-type: none"> • fairness • frugality • generosity • honesty • honor • kindness • knowledge • loyalty • moderation • patience • patriotism • perseverance • productivity • punctuality 	<ul style="list-style-type: none"> • respect for authority • respect for others • respect for the Creator • respect for environment • respect for health • school pride • self-control • self-respect • sportsmanship • trustworthiness • truthfulness • tolerance • virtue
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In the Kenyan context, the guiding principles have been developed from the *Values Education Study (2003)*. They recognize that in *all* contexts schools promote, foster and transmit values to all students and that education is as much about building character as it is about equipping students with specific skills. They also recognize that schools are not value-free or value-neutral zones of social and educational engagement. Although the curriculum in Kenya has addressed values like nationalism, patriotism, integrity and mutual respect, through integration and mainstreaming and education is structured to promote positive attitudes towards good health and environmental protection (KIE, 2006), much more needs to be done to inculcate this in learners and not teach for achievement of a mean score only.

The three countries in the East African region have developed a competence based curriculum. In Rwanda, the process began in 2014, and currently (2016), they are implementing it in phases starting in the early grade learning as well as Form One (Republic of Rwanda, 2015). Just like Kenya, Rwanda is building a knowledge based economy driven by science and technology. Its curriculum framework translates the country's education vision into learning experiences and

assessment. In view of the East African harmonized Curriculum Framework, it is imperative that Kenya as a partner state adopts the agreement made among the partners in the East African Protocol and revert to a competence based curriculum.

Principles guiding the competence base curriculum framework in Rwanda include; learner centred approaches, teaching and learning that emphasizes on competencies rather than knowledge domain, flexible inclusive learning that has emphasis on talents, integration of ICT and interconnectedness with cross cutting Issues such as sexuality, genocide studies, financial literacy, and peace and values education among others (Republic of Rwanda, 2015).

Identifying specific basic competencies such as literacy and numeracy, and generic competencies such as critical thinking, creativity and innovation, among others, depends on specific contexts. When Kenya adopts the competence based curriculum, there will be need to establish both basic and generic competencies depending on the views sought from the stakeholders.

2.6.4. Learning areas

The curriculum in Kenya in the last century has been designed around the philosophy of subject matter content. The main tenets of this subject matter philosophy underlie 19th Century doctrines of classical psychology. According to the doctrines, the mind is compartmentalized into specific faculties which can be trained to accomplish a given task. The end task is passing examinations which are taken after drills and learning through rote memorization. The learning environment is characterized by competition and detailed mastery of facts of the subject matter.

Subjects in the curriculum vary from one country to the other. For instance the education system in Japan runs from grade 1 to grade 16. Education is compulsory during the elementary and middle level schools which comprises of the first 9 years of the education system. Transition rate from middle to high school is at 98% (MOFA Japan, 2014). The graduation to high school and the university is based on examination performance. The middle and high school curriculum is offered in single institutions for continuity purposes.

The Australia system of basic education comprises of foundational curriculum in the first two stages. The compulsory subjects in stage three are mathematics, English, science and foreign language. The parent may choose to allow or deny their learners the opportunity to study religious studies and sex education since they are not part of the national curriculum.

South African curriculum offers a broad range of subject in the basic education system. The subject choices differ from school to school but every learner must study English language out of the 11 languages offered in the school curriculum. (Exchange, 2012). The languages offered in the curriculum are based on the eleven national (formal) languages allowed in South Africa.

In Ghana, Children join education system at age 6 years (for grade 1 to 6). The stage transits to junior secondary school which comprises grade 7 to 9 and whose admission is open to any learner who completes grade 6 without the requirement of an examination. Junior secondary schools are therefore in the same compound with the primary schools. Senior secondary consist of 3 years starting from grade 10 to 12. The subjects done at this level include a set of core subjects and a number of clusters of elective subjects (Keteku, 2008).

South Korea has a national basic common basic curriculum with electives. For early grade learners, concentration is on mother tongue, Mathematics, Disciplined Life, Intelligent Life, Pleasant Life and ‘We Are the First Graders’. The emphasis here is on discovering oneself and transition from home to school.

Similarly, Malaysia has a national common curriculum for primary level. Although Primary curriculum has 14 subjects, only four are compulsory, which is Local Studies, Physical Education, Citizenship and Moral education. The rest are either additional or optional. These subjects include foreign languages for primary school level. It is clear that subjects in primary schools in these countries are very distinct, unlike in Kenya where some subjects are integrated, for example creative arts representing Music Art and Craft. These distinctions facilitate development of talents in these areas. This gets hindered by subjects’ combination.

Often in many countries, the curriculum is too overloaded, overcrowded, “congested” and outdated. In some cases, there has been reduction of the basics curriculum to a very small number that people can focus on. The International Commission on Education for the Twenty-

First Century, proposed to UNESCO an integrated vision of education based on the four pillars of “learning to know, to do, to be, and to live together.” Some advocate for the “4Cs (Critical thinking, communication, collaboration and creativity) or the 7Cs (the 4Cs plus “computer, character and culture”. Some speak of becoming “good capable and world-improving people”. Others would say it is having people becoming “effective thinkers, effective actors, effective relators and effective accomplishees” (UNESCO, 2012). The aspect of the 21st Century skills is one which the curriculum cannot ignore in the development of its curriculum framework.

UNESCO (2000) regards ‘learning to do’ or to ‘act creatively’ as the second of its four pillars of education needed to support society in the 21st Century. Amadio, Opertti and Tedesco (2014) regarded curriculum in a wide context of having the most important values being acquired at school and the most fundamental learning experiences required to ensure new generations are prepared for life in the aspired society. Additionally, Brown (2003) opines that edifying young people through fostering imagination and creativity, and a prime tool for doing this may be an arts education that includes Art and Music. Jensen (1998) observed that a strong Arts curriculum is at the creative core of academic excellence and lays the foundations for positive, measurable and lasting academic and social benefits through building creativity, concentration, problem solving abilities and self-discipline. In China, it is now creative students who are labeled as “good students” rather than students who gain high scores through the traditional rote learning. By learning and practicing art, the human brain actually rewires itself to make more and stronger connections (ibid). Music, on the other hand, is a tool that primes the brain’s neural pathways, enhances a wide range of academic and social skills. Creative Arts and other creative practical subjects such as Home Economics and Industrial Arts therefore need to be in the curriculum.

According to studies done by UNESCO, the early grades learning in recent past had to do with “learning to play and live with others”. The primary school supplements the skills learnt at ECD with an addition of the 3 Rs (reading, writing and arithmetic). The Vision 2030 urge for more infusion of content on Science, Technology, and Innovation (STI) into the primary curriculum to develop prerequisite skills in the learners for further training in STI. Further, the primary education curriculum should mainstream technological innovation and entrepreneurial skills in

order to realign the Kenyan curriculum to the dictates and aspirations of Vision 2030 (KIE, 2010; GoK, 2007).

In addition to what is covered in primary school, secondary complemented this with the addition of Mathematics, Languages, Sciences and humanities. However, additions that are incorporated in order to seek relevance and add skills with the future in mind have widened the scope of content in the school curriculum. It congests the curriculum making it overloaded or overcrowded. The year 2002 saw a national revision and rationalization of the curriculum after a need assessment was carried out (KIE, 1999) and the recommendations from various education commissions. Among the issues that were addressed included overloads and overlaps, revision of objectives to ensure that they were achievable and ensuring that emerging issues were well articulated in the curriculum.

2.6.5. Assessment

There are new trends in assessment the world over as governments endeavor to reform education in order to meet their needs. These trends cover both alternative and authentic assessment. Alternative assessments focus on the active construction of meaning rather than the passive regurgitation of isolated facts. These place more emphasis on thinking skills, collaborative skills and provide opportunities for multiple correct answers. Authentic assessment on the other hand, focuses on knowledge, thinking and skills. It aims at solving problems and accomplishing tasks. These give a teacher a clearer picture of what the learners are able to do with the knowledge acquired over a long period of time. Tests in this area are prepared with the success of the learners in mind as opposed to the success of a few as in the case with norm referenced assessment.

Countries have continually benchmarked with the best in the field of education in order to improve performance. The Japanese Government resolved to reform their education in order to catch up with the west through continued and aggressive research. Singapore has the best education indicators in the world in Mathematics and Science as measured in the Trends in International Mathematics and Science Survey (TIMSS). The Kenya Vision 2030 takes cognizance of the achievements of a number of countries in education as well in the economic

indicators and makes mention of the rapid progress over a short time of South Korea, Malaysia, Finland, Ireland, China and Chile. PISA studies carried out in America and Europe have continued to inform policy on education and consequently testing.

Although the quality of education of Kenyan schools appears to be better than most of the Sub-Saharan Africa; there is need to balance between quality and quantity, since this affects assessment modes. The results from the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) III survey in 2010 reveal that Kenyan learners, in standard six generally perform well in both reading and mathematics tests compared to their counterparts in 15 countries in Sub-Saharan Africa. For instance, Kenya is ranked 4th after Seychelles, Mauritius and South Africa on standard 6 pupil's reading competency level 8 and second after Mauritius on standard six pupils' mathematics competency level 8.

Educational psychologist Benjamin Bloom categorized what and how we learn in three domains namely cognitive, psychomotor and affective. Although the curriculum in Kenya underscores the need for holistic development of the learners as suggested by Bloom's approach, the KIE (2010) indicated that learning in Kenya mainly focuses on the cognitive domain or the aspect knowledge only. Attitudes a central component of competencies are never assessed. The emphasis has been on certification at the expense of learning. This often only fulfils a function of selection and as a regulation of opportunities for those who move ahead in the education system (UNESCO, 2015). It becomes an indicator of the institution one moves to in the next level of learning and the career path that is pursued.

Although the MoEST in Kenya lays a lot of emphasis on school based continuous assessment, there is a lot of pressure on curriculum implementers to perform highly in national exams. This results to teachers' focusing on revision and drills for exams thus compromising the learning process.

Unlike Kenya, South Korea and Malaysia puts a lot of emphasis on school based assessment. In South Korea for example, there are no National assessments, though selected sample schools are assessed at grade 3 and Form 1 to ensure standards of teaching and learning are maintained (KICE, 2008). This means that transition from one level to another in basic education is

seamless. Although the Malaysian education system has national examinations at the end of every level, the results, unlike Kenya, do not determine transition to the next level. At the end of Level 4, the assessment determines the career path of learners (MoEST, 2001).

The summative assessment at the end of both the primary and secondary school levels cuts off learners from proceeding to the next level of education. The competitiveness of the examinations leads to a situation where the focus of assessment is shifted from informing learning and improvement in performance. This is also cited in Sessional Paper No 2 of 2015 on Reforming Education and Training Sector in Kenya and underscores the importance of developing the whole person and emphasizes the need for a balanced curriculum.

According to Kellagan and Greaney (2001) regular, reliable and timely assessment is key to improving learning achievement and should therefore be a fundamental component of an effective teaching and learning process.

In an established competence based curriculum framework, the purpose of evaluation is spelt out and goes beyond selection and certification. Since there is emphasis on the formative aspect of assessment, the purpose includes monitoring progress and providing feedback. In the case of Rwanda, assessment focuses both on knowledge and understanding, aptitude and practical tests, attitudes and values (behavior) and generic competencies guided by specific indicators (Republic of Rwanda, 2015).

Assessment of competencies is criterion referenced, as compared to assessment of an objective based curriculum. Huitt, (1996) in his article ‘Measurement and Evaluation’ differentiates between criterion and norm referenced assessment based on purpose, content, item characteristics and score interpretations. Whereas criterion referenced assessment focuses on determining whether each learner has achieved specific skills or concepts, norm referenced assessment focuses on ranking learners with respect to the achievement of others in broad areas of knowledge.

2.6.6. Pedagogy

For teaching to be effective it has to be systematic and stimulating. Teachers need to acquire skills as they teach in order to make it motivating. Perrot (1984) in Otunga, et al (2011) identifies several factors such as set induction, stimulus variation, explanation, questioning and reinforcement as presentation skills of interaction. Others are use of examples, question and answers and explanations. Instructional approaches also are discussed as simulation, presentation, discussion and problem solving.

2.6.7 Resources

According to Otunga, et al (2011), there are two types of instructional resources; human and non-human resources. The human resource includes the teacher or any other person interacting with the learners, while the non human is either print or non print resources. Print resources include course books, reference and supplementary materials as well as class readers, journals, newspapers, workbooks, fiction, periodicals, study guides, magazines among many others. Further Schonwetter (2008, in Otunga, et al, 2011) has given other forms of resources that exist. These include, but not limited to multi-media presentations, teaching websites and repositories, government sites, conference sites, trade sites and teaching and learning objects. Generally it is the teacher who decides on the resource to be used to enhance teaching and learning alongside the teaching method to compliment delivery of content and achievement of objectives. All this will depend on content and purpose of instruction, language level and class size, resource availability and adequacy (ibid).

2.7 Review of Relevant Previous Research

2.7.0 General overview

Educational changes at the national level at the initiation or implementation stages must plan and consider how people will react to change. There is need to consider how the process will be affected by the existing circumstances. Sekui,(2004, in Wedell, 2009) observed that in Japan, an educational change that involved new curriculum made teachers worry because of the required new practices in classroom management styles and secondly the implementers may lack confidence on the new styles they are expected to adopt. There is therefore need for

comprehensive rationale for the anticipated curriculum reforms. This section presents review of relevant previous curriculum research that relates to the themes of this study.

2.7.1 Societal needs

Various studies have indicated existence of gaps in the curriculum as pertains to the societal needs. The Bessey Committee of 1972 pointed out that the curriculum did not achieve the national objectives because of the narrowness of scope and over emphasis on rote learning (Republic of Kenya, 1972). The study established that the curricula neglected practical and creative activities especially in agriculture and basic manual skills. The curriculum was also found to be unresponsive to Kenya's cultural heritage and the entire environment in which children as well as young people grew. By 1977 in Kenya, secondary school graduates surpassed the white collar jobs that were available aggravating the problem of unemployment in the country. The Report of the National Committee on Educational Objectives and Policies (Gachathi report of 1976) guided curriculum improvement during this period. The Gachathi Report (Republic of Kenya, 1976) raised the issue of unemployment in relation to 7-4-2-3 education system. In view of this, the committee proposed that the secondary school education curriculum should be redefined to make it practical with more emphasis placed on the teaching of sciences, agriculture and vocational subjects. The 7-4-2-3 system of education lacked the capacity and flexibility to respond to the changing aspirations of individual Kenyans and the labour market needs. Consequently, there was an urgent need to change the curriculum to focus on the acquisition of relevant and practical knowledge and skills that would lead to quality employment. The rationale was that the existing system was too short and not rigorous enough to give graduates enough practical education to fit in the world of work.

The year 2002 saw a national revision and rationalization of the curriculum. The revision entailed refocusing the goals of education, the level objectives, subject general objectives and the specific objectives. The findings of the Summative Evaluation (KIE,2010) for the primary level stated that literacy, numeracy and communication skills had been achieved to a large extent but there were gaps in the achievement of objectives on appreciation of values and the use of leisure time; the curriculum content addressed nationalism, patriotism and national unity but social context impeded the embracing of these values; the implementation of the primary education

curriculum content laid little emphasis on inculcation of practical skills necessary for economic development; the primary school education did not adequately equip the learners with the competencies to meet the demands of a knowledge based economy as per aspirations of Vision 2030 (KIE, 2010).

The summative evaluation of the secondary school curriculum made it apparent that the revised curriculum had gaps that needed to be addressed if education was to have the desired impact on the socio-economic and technological development of the country and specifically achievement contemporary needs of the of Vision 2030. The key recommendation was re-alignment of the curriculum to meet the societal needs and viewing the curriculum as an outcome of a process reflecting a political and societal agreement about the what, why and how of education for the desired society of the future.

2.7.2 Competencies

Ford (2014) opines that Competence Based Education (CBE) and training is not a new concept. Ford traces development of CBE to the theory of behaviorism whose proponent is the psychologist Skinner, because it reflects instructional designs informed by the field of Psychology, and measuring what learners are able to ‘do’ and at what level (standards- based performance). The emphasis is outcomes versus process.

Until recently, CBE programmes were a ‘niche’, for adult learning and vocational education aimed at the job market. Calls for more effective and demonstrable outcomes have attracted interests in development of major competence based initiatives (Ford, 2014). In CBE, students are assisted and not taught. It draws what the competence is, how it will be achieved, the activities and content, and how it will be assessed. Ewell (2013) in Ford (2014) refers to it as curriculum mapping. It clearly establishes and communicates the linkages between learning, assessments and specific competences.

A study carried out in Korea by IBE-UNESCO(2012),revealed that a CBE is not in conflict with the existing curriculum and that specific subjects continue to provide a critical path in promoting acquisition of key competencies such as communication and efficient management. The study

further shows that competency skills recommended for Elementary level were; problem-solving skills, communication skills and cooperation skills. A survey conducted in Ghana by COTVET (2009), it was affirmed that Competency Based Training is an industry and demand driven education and training programme, its products have a high demand on the job market.

Rychen and Salganik (2001) carried out a study which revealed that a creative person should have divergent thinking, problem solving skills, originality, and ability to see or create new values. Considering the convergence on the need to nurture creativity in the curriculum and the literature encountered, constructs of problem solving, divergent thinking, research and innovation will find their place in the content of the proposed curriculum.

The Primary school education curriculum should have a prime interest in developing various competencies within individuals. It should realistically make room for learning to embody the opportunities to “know,” “show” and “do.” It is through such engagements that learners are fashioned in their competencies, social behaviours and other aptitudes as required, but not limited to their environments (Nanzhao, 2000).

2.7.3 Learning areas

A study carried out by KICD (2014) found out that ECD and lower primary curriculum is expected to equip learners with language, arithmetic and reading skills. According to the study, ECD and lower primary levels act as a springboard for the upper levels. A study by Herman (2011) who investigated the role of vocational oriented education with that of national educational institutions in 18 countries and found that the students who come from vocational stream acquire the skills better than the others who do not have the vocational orientation. The vocational streams of students have better chances to get employment as well as higher salary because of the skill set they possess.

The teaching and learning of Mathematics, Sciences and Languages is important to the assimilation and acquisition of the 21st century skills. Since, the country’s Blue- print for economic development flags the teaching of Mathematics, Languages and Sciences as being vital to the country’s development. Studies have also shown that countries like Singapore and Malaysia with high technological development have put great emphasis on

mathematics and sciences as a foundational requirement for their technological advancement (Government of Malaysia, 2012). Similar studies carried out in Singapore indicate the emphasis on the 21st Century which include creative and critical thinking, communication and collaboration, and social and cultural skills. These are core values that the Singapore education system sets to cultivate in all its students (Soland et al. (2013) and Voogt& Roblin (2012) pointed out that in Japan, as in Singapore, the competencies and pedagogical moves associated with 21st Century competencies are seen as a central means of using education to ensure sustained economic prosperity in the years to come. These 21st Century aspirations have been articulated in a [New Growth Strategy](#) (2010) announced by the Japanese government as well as in “The Future Vision on Career Education and Vocational Education at School,” by the Ministry of Education, Culture, Sports, Science and Technology (2011). Further, the 21st century competencies in the Japanese classrooms were not dissimilar from Singapore: problem solving, communication, collaboration and use of Information Communications Technologies (ICT).

2.7.4. Resources

Efforts made to provide resources through the Free Primary Education (FPE) program have had a positive impact on the availability of resources in primary schools. Although studies (KIE,1999) indicate that teaching and learning materials such as textbooks and other reference materials are available, concerns were raised about the quality of the recommended materials.

As Ngware, Wamukuru and Odebero (2006) observe, quality and adequacy of resources such as physical facilities have a direct bearing on quality as they determine how effectively the curriculum is implemented. These scholars have argued that quality education cannot be achieved and sustained if the resources and facilities are not available in sufficient quality and quantity. Apart from textbooks, AHPRC (2010) have observed that teaching aids significantly contribute to learner achievement. Developing and using appropriate teaching resources have been proven to improve learners’ achievement. It require teachers who are creative, proactive and who appreciate the power of resources in enhancing performance.

According to Twoli, Maundu, Muindi, Kiio, and Kithinji (2007), Oluoch, (1990) and Beswick, (1975), the expanding scope of knowledge in many areas of education, necessitates the teacher to be aware of the diverse types of teaching resources available for use, as well as those that can be prepared using locally available materials. Twoli et al., (2007), recommend that the teacher should carefully prepare a wide spectrum of learning materials, and effectively use them during the teaching-learning process. Apart from teachers, field officers and head teachers have a part to play in helping teachers to use teaching and learning resources. KICD (2014) study on educational resources indicated the need to sensitize head teachers and education field officers on the key role that teaching and learning resources plays in the teaching learning process. This will help the school administration to encourage and support teachers in their quest to develop teaching and learning resources.

2.7.5 Pedagogy

The instructional strategies adopted by teachers determine what will be learnt by the learners. An assertion made by AHPRC (2010) in classroom observation study for mathematics implies that pedagogical content knowledge was a major factor that influences how much content is learnt. Additionally, Osakwe (2009) in the AHPRC study (ibid) identify some variables for quality classroom instruction that include attitude of the teacher, knowledge base, mastery of subject and social cultural context. Effective communication by the teacher enables this context to be well utilized to facilitate learning. Individual attention to learners is therefore important too in enhancing learning. Darling –Hammond (1990) opines that policies on teaching affect the teachers directly and hence if pedagogy has to change as a matter of policy, the policy too has to pay attention to the knowledge base of the teachers. Wanzere (2002) suggests that there is need to enhance the competence of the Kenyan teachers in the light of rapid, intensive and fundamental nature of present day technological, economic, cultural, societal and political changes.

2.7.6 Talents

The National Youth Situation Analysis Report of 2009 indicates that majority of Kenya's population comprises of youth aged between 15 - 29 years. The report further noted that the

youth have talents but have no opportunities to exploit or market them. The report recommended the need for resource centres where the youth could spend time to gain useful skills and develop their talents such as sports, music and art. In response to this challenge the Kenya Government through the Ministry of Youth Affairs and Sports established a pilot National Youth Talent Academy in March 2010 to provide the youth with an opportunity to identify and nurture their talents.

Every society has its specially gifted persons who need to be given opportunities to develop and exploit them to their full potential. These people need to be identified early in life so that their talents can be nurtured for the benefit of themselves and the society (Kinyua, 2014).

There is no one universal definition of gifted and talented learners. In the United States of America, The No Child Left Behind Act (Elementary and Secondary Education Act, 2002) define Gifted and Talented as children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities.

In Australia Gifted and talented learners at School are defined as those who demonstrate or show the potential for a high level of performance in different ability areas, when compared to others of similar age, background and experience such as intellectual; Creative; Artistic; Social; Physical; Spiritual (Department for Education and Children's Services, 1994).

In Korea, Article 2 of the education Act defines a gifted person as one who possesses extraordinary innate abilities or visible talents requiring special education to nurture them'. The Act gives the purpose of gifted education as: 'to promote self-actualization of individuals and have them contribute to development of society and nation by scouting for gifted and talented persons and carrying out education suitable for ability and aptitude in accordance with regulations so they can develop innate potential.

In addition, the gifted education is aimed at helping gifted and talented persons to acquire expertise, creativity, leadership, morality and self-directed learning attitude in accordance with

other legislative provisions which say that all members of a nation shall have right to education according to ability and aptitude to promote self-actualization and contribute to development of society and nation.’

The Gifted Education Programme was first implemented in Singapore in 1984 amid some public concern. It was initiated by the Ministry of Education (MOE) in line with its policy under the New Education System to allow each student to learn at his/her own pace. The MOE had a commitment to ensure that the potential of each pupil is recognized, nurtured and developed. It was recognized that there are pupils who are intellectually gifted and that there should be provisions to meet their needs.

In Kenya, Koech (1999), Kochung’, (2003) and Kang’ethe, (2004) defined gifted and talented children as those who at any educational level are identified as possessing demonstrated or potential abilities that give evidence of high performance capabilities in areas such as general intellectual ability, specific academic aptitude, creative and productive thinking, leadership ability, visual and performing arts and psychomotor abilities, while Kinyua (2014) define gifted and talented children as those with outstanding talents, who perform or show the potential of performing at remarkably high levels of accomplishment when compared with others of their age, experience or environment. The Presidential Working Party on Education and Training for the Next Decade and Beyond (Kamunge Report, 1988) noted that every society Kenya included, has its specially gifted children who need special education to develop their special intellectual, creative, artistic or other talents to the maximum level possible. Accordingly, the committee recommended that such children be identified early and special programmes developed to enable them to realize their full potential in order to enable them to contribute to the society. Special educational programmes for such children should be developed in the interest of national development. The committee proposed the establishment of “Centres of Excellence” as pacemakers for advanced knowledge and technology in order to meet the needs of the society.

According to Kang’ethe and Mugo (2010), from 1964-2005 several gaps existed which showed inconsistency in the implementation of educational policies and programmes. They also noted that children who are Gifted and Talented are not mentioned in most of the Education Policy

documents in Kenya. According to them there has been no clear commitment and political strategy targeting gifted and talented persons. During the National Conference on Gifted and Talented Young Persons in Kenya (2010) it was noted that Kenyatta University and Kenya Institute of Special Education (KISE) train teachers for learners who are gifted and talented yet there are no programmes for learners who are gifted and talented in Kenya.

Identification methods of learners who are Gifted and talented

No single method of identification is appropriate for all types of gifted students. Multiple criteria should be used which should include gathering as much information about the learners as possible. Teachers are required to identify learners who are gifted in the whole process of learning. The identification process should be continuous. Schools should also evaluate their systems to ensure that they accommodate learners who are gifted and talented. Progress of the identified learners should be monitored to ensure that, the programme is meeting their educational needs (Kinyua, 2010).

The five key principles of identification according to Richert (1991) are: Defensibility:- procedures should be devised to identify learners in all domains of giftedness and fields of talent; Advocacy:- teachers should use assessments to promote learners' interests and should not expect learners to perform equally well on all measures ; Equity:- there should be equitable procedures for identifying groups who may be disadvantaged by the mainstream identification procedures; Comprehensiveness:- there should be the appropriate use of multiple sources of data; and Pragmatism:- identification needs to be consistent with the level of resources available (Richert, 1991). Unfortunately without a common definition or understanding of learners who are gifted and talented, it becomes difficult to design their education and what it should entail and even methods of nurturing the talents.

2.7.7 Assessment

An analysis of the assessment system in Kenya reveal that the high stake end of cycle assessment, namely KCPE/KCSE which asses over 1.3M children annually compromise the role of formative assist (Mugo & Asiago, 2015). Despite being national examinations, they do not

improve learning as they act as sieves to determine certification and movement to higher levels. This encourages basic learning at the expense of deep and underlying issues in the content or the learning areas which produces extended analysis and application of the acquired knowledge.

The current system of assessment measures a narrow range of competences. Numeracy and literacy assessments are attempted by the national examinations which are not necessarily by the government such as UWEZO. At a time when the teaching of the 21st Century skills or competencies is coming to the fore, measurement of competencies and other soft skills is important (Mugo & Asiago, 2015). These are currently not catered for by assessments in Kenya schools.

The taskforce report (2012) pointed out that teachers are poorly prepared to develop tests and evaluate learning. Formative assessment which should assess continuous learning do not play a major role improving learning but of preparing learners on handling the national exams. A worrying trend is that schools find it easier to buy commercial exams from which teaching is done. These are prepared by entrepreneurs and not necessarily persons in education. The problem may be rooted also in how the training of teachers was conducted.

With the competence based curriculum, there is need to conduct assessment for learning; meaning that teachers can utilize assessments as analytical tools to improve students' learning (Mugo & Asiago 2015); it's a part of teaching and learning process and not an after process activity. Maclellan (2001: 307-318 in Mugo & Asiago 2015) observes that *'assessment for learning must be contextualized and represent meaningful tenets of human achievement with skills and competencies that are used in real world context'*

These assessments dwell on cognitive domain at the expenses of other learner attributes and competencies. Teachers with less cognitive potential are greatly disadvantaged. Hence teachers dwell in these low levels of the bloom taxonomy in the teaching because experience and routine has proved that this is all the national exams require; factual knowledge and repetition.

2.7.8. Contemporary and Emerging issues

On mainstreaming of emerging issues in the school curricula, KICD (2014) conducted an assessment across primary and secondary schools and found out that emerging issues were not mainstreamed in all subjects, and not all teachers had knowledge on mainstreaming possibly because of insufficient training in this area. Owino (2013) observed that as a non examinable subject, Life skills education becomes relatively inconspicuous and also negative attitude from both teachers and learners down plays the role of implementing the cross cutting programmes in the curriculum.

The KICD study confirmed that the attitude of teachers and learners impeded the teaching and learning of emerging issues. Teachers lacked commitment and passion as there was more emphasis laid on subjects that were nationally examined. Among other challenges cited in the teaching of emerging issues were inadequate teaching and learning resources, inadequate time, too much content and areas to cover under emerging issues and teachers lacked mastery in handling emerging issues. It was worse for schools with special needs as there are no sign words for emerging issues and school administrators were not supportive (ibid).

A study done by UNICEF (2006) on Life Skills Education in Swaziland revealed that teachers did not deem the subject as important since it was not in the curriculum. The MOE study tour report to Zimbabwe and Malawi indicate the need to enhance the capacity of teachers to enable them mainstream the emerging issues into the curriculum as stipulated in the Education Sector Policy on HIV and AIDs.

2.8 Rationale of the Study Based on Literature Review

Apart from the theoretical base, the study is anchored on policy documents and other literature in different contexts. In view of recommendations for major curriculum reforms, the need to undertake curriculum reforms is clear and justifiable; more so because of the need to align it with the current trends, the Constitution and goals and aspirations of the national blue print of the Kenya Vision 2030. As early as 2007, the Kenya Vision 2030 stated that;

“There is, therefore a need to re-orient education to focus on the changing economic and technological trends, in line with the national aspirations as expressed in the Vision 2030” (GoK, 2007; pg 82)

The needs assessment survey for the curriculum reforms has been necessitated by gaps identified in the literature including the policy documents. They have all shown the need for the desired reforms in the curriculum but have not stipulated how the competence based curriculum for Kenya should be designed. Some have suggested that the development of competence curriculum cannot be done without sufficient data to contextualize it in education for this country. In essence there has been no research done in this area, a gap which this study seeks to address.

This has been summed up by the Sessional Paper No.2 of 2015 and the National Education Sector Plan (NESP) of 2015 which stipulates that according to National Curriculum Policy Framework, the framework would be reformed using the stipulated curriculum development process; and hence the needs assessment survey, which initiates the process of curriculum development.

Since no research of this magnitude has been done in Kenyan for curriculum reforms, this study will stand out as a baseline that will tease out at this initial period the variables for monitoring and evaluation of the competence based curriculum as well as the final evaluation of the cycle.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

In this Chapter, the philosophical paradigm that underpinned this study is explained, the research approach is given, and then Sampling, data generation techniques, data analysis process, trustworthiness and ethical considerations are presented.

3.2. Research Paradigm

A research paradigm is the philosophical worldview that underpins the research process. It refers to the sets of abstract views about knowledge and the process of creating that knowledge, which provide a foundation for the entire design and what the researcher makes of the findings (Denzin and Lincoln, 2005). It is a researcher (s) belief about the nature of knowledge and how that knowledge is produced and understood (Lichtman, 2014). Broadly, there are three main research paradigms that influence the methodological choices of researchers: the realist-positivist/post positivist, the relativist-interpretivist, and the pragmatist (Richards, 2003; Jwan and Ong'ondo, 2011).

Very briefly, the realist – positivist paradigm (which is more consistent with the physical sciences) holds that knowledge is fixed, universal and standard. That knowledge can be generated objectively, must be measurable and is standard in all contexts. The relativist – interpretivist/constructivist perspective (more commonly used in the Social Sciences and Humanities), on the other hand; holds that there always exist multiple viewpoints on any *Social Science* related subject under inquiry (Johnson, 2008). This paradigm posits further that knowledge is socially constructed, so “the focus of research is on an understanding of this construction and the *multiple perspectives* it implies... An understanding of this develops interpretively as research proceeds” (Richards, 2003:38).

The third paradigm (pragmatist) informs the view that research is guided by the value for the knowledge being sought and not the distinctive worldviews about the world as being real or relative. Therefore, research could (and ought to) draw from both

paradigms as long as this is necessary to get a complete understanding of the subject under investigation (Hammersley, 2013; Onwegbuzie, 2012; Schwandt, 2015).

This study adopted the pragmatist research paradigm which draws its tenets from the other paradigms explained above. The subject of this study – Needs assessment for curriculum reform in Kenya - invites both perspectives since it is expected that there are indeed aspects of the Curriculum that would inevitably be universal and standard across the entire republic; while, it is also expected that the curriculum ought to take care of the unique interests of learners at certain levels, regions and with varied interests.

3.3. Research Approach

This study took a mixed approach. This approach uses both quantitative and qualitative methods. Quantitative research is a formal, objective, systematic process in which standardised (usually structured) instruments are used to generate numerical data from participants who are representative of the target population. This study used this approach to describe variables and examine the relationships amongst these variables (Dornyei, 2007; Creswell, 2009). Qualitative research on the other hand explores perspectives, attitudes, behaviors and experiences (Dawson, 2009) and focuses on meaning and understanding. Data is generated using non – structured or semi structured instruments that allow for interaction of the researcher(s) and the respondents in a flexible manner that could generate in-depth data from purposively sampled participants in a naturalistic setting (Denzin and Lincoln, 2005; Lichtman, 2013; Yin, 2014; Jwan and Ong’ondo, 2011).

There are broadly two research designs within the Mixed Approach – Sequential or Concurrent and the weighting of the Quantitative and Qualitative approaches also varies (Creswell, 2009). In this study, the Concurrent Mixed Approach design was used where both the Quantitative and the Qualitative phases took place at the same

time and they were weighted equally as illustrated in **Figure 3.1** below. Creswell (2009) posits that it is more manageable to collect both quantitative and qualitative data at roughly the same time, rather than to revisit the field multiple times for data collection (p.206).

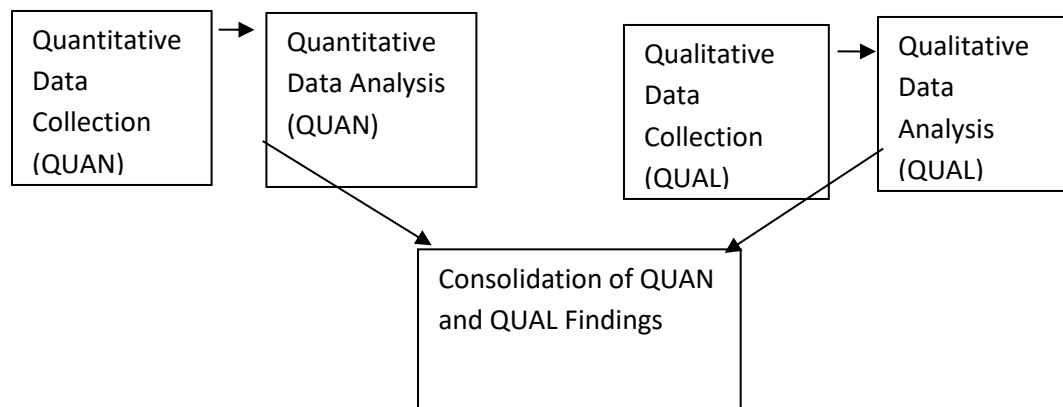


Figure 3.1: Concurrent Mixed Approach Design

The Mixed approach has several advantages which were relevant to this study. Creswell and Clark (2007, pp. 9-10), lists several grounds for use of mixed research. These are:

1. It provides strengths that offset the weaknesses of both quantitative and qualitative research. Quantitative research is weak in understanding the context or setting in which people talk, voices of the participants are not directly heard and researchers' are in the background. Qualitative research makes up for these weaknesses. On the other hand qualitative research is seen as deficient because of the personal interpretations made by the researcher and generalization of findings to a larger group.
2. It provides comprehensive evidence as researchers are given permission to use all the tools of data collection available.
3. It helps answer questions that cannot be answered by qualitative or quantitative approaches alone.
4. It encourages researchers to collaborate across the sometimes adversarial relationship between quantitative and qualitative researchers in social, behavioural and human sciences.

5. It is “practical” in the sense that the researcher is free to use all methods possible to address a research problem. Researchers are able to solve problems using both numbers and words and combining inductive and deductive thinking.

The research methods that were used to generate both the quantitative and qualitative data as well as the data generation techniques are discussed in the subsequent subsections.

3.4. Research Methods

The term *research method* is defined in this project as the specific strategy adopted by the researchers particularly with regard to the choice of research site, length of time and extent of interaction with the participants. Arguably, the main research methods (both qualitative and quantitative) are Survey, Experimental Research, Case study, Ethnography, Phenomenological, Content Analysis; among others. In this study, given the magnitude and the limited time that was available, one research method was used - the survey - but applied differently in the two approaches, as explained further below.

3.4.1. The Quantitative Survey Method

A survey is one of the most commonly used research methods used in the quantitative approach (Gay et al, 2009; Johnson and Christensen, 2008). This is because the survey allows for generation of relatively much from a large number of participants over a relatively short period of time. Consequently, it is the most widely used method in educational research and is useful in needs assessment and establishing views, experiences and attitudes of populations (Cohen et al, 2007).

In this study the needs of learners, teachers and head teachers at ECDE, Primary and Secondary Schools; and Colleges were assessed in terms of the reforms they desire on the Kenyan Curriculum at their levels. As stated in Chapter One, the Survey sought to establish the general needs for curriculum reform, the desired competencies, learning areas, talent nurturing and development strategies,

pedagogical approaches, learning resources, assessment and contemporary/ emerging issues.

3.4.2. The Qualitative Survey Method

Survey is a method of research traditionally associated with the quantitative approach. This is because, like the name suggests, it is a method that is normally used by researchers seeking general trends, manifestations, attitudes, or relationships (Creswell, 2011). As such, survey (as explained in the previous sub-section) usually utilises principles such as representativeness of the target population and probability sampling as a way of ensuring objectivity, reliability and generalisability in the quantitative sense. Accordingly, surveys have tended to use structured questionnaires as the main data generation instrument, among other structured tools such as observation and interview schedules (Bryman, 2008; Kothari, 2005).

In QUAL, what we call the qualitative survey has gained momentum in the last few decades largely because of the increasing use of the mixed approach but also due to the increased access of the internet as a research platform, which has made it possible to generate qualitative data from large sets of participants within a relatively short time (Hall, 2001, and Driver and Urga, 2004; Kane, 2000). The intention of the researcher doing a qualitative survey would still be able to know general trends, attitudes, practices, etc., but by generating qualitative data in the form of interviews, focused group discussions, memoranda , emails, Facebook and other social media platforms pictures, audio and video recordings.

In this study, the *Survey* aspect was in terms of the spread of participants in all Counties in the Country – Kenya and the fact that the data were generated from a very large number of diverse participants (learners, parents, workers and key informants) over a relatively short period of time. The survey was enhanced through data generated from memoranda, and the social media. Nevertheless, the *Qualitative* tenets of the study were still observed. That is, the researchers still used data

generation techniques (see the subsection on data generation techniques) that elicited in-depth data that captured the voices of participants (Given, 2005; Stake, 2014).

Arguably, the qualitative survey limits the richness of the data and therefore the extent of potential interpretation because researchers sacrifice depth for breadth, given the nature of a survey (Stake, 2014). Nevertheless, if designed carefully, it could yield sufficiently in-depth data generated from different sources through multiple platforms in a flexible way (Lichtman, 2013). Therefore, this method provided a powerful tool for amelioration of the common criticism that Qualitative researchers work with very thin samples. Given the potential implications of this study, this method was necessary to make it possible to capture views from the diverse contexts (Creswell, 2012; Yin, 2014).

In the next sub-section, the specific data generation techniques used to generate data within the two approaches are explained.

3.5 Sampling

Sampling is the process of choosing actual data sources from a larger set of possibilities. Sampling consists of two related elements, the population and the sample. The population can be defined as the full set of possible data sources while sample is selecting specific data sources from that population (Morgan, 2008). In the subsequent section the research population, Sampling Technique and Sampling procedures are explained.

3.5.1. Target Population

The institutions targeted comprised of all Early Childhood Development and Educational (ECDE) centres, Primary schools, Special Needs Education (SNE) institutions, Secondary schools, and Teachers Training Colleges (TTC's); various Education Field officers and other stakeholders. Within the institutions, the study will target all head teachers, Principals of teacher training colleges, teachers, and

learners in secondary/Primary schools and trainees in Teachers Training Colleges (TTC's). The target population size was 71, 384 (Ministry of Education, 2011). **Table 3.1** illustrates the target population structure while **Table 3.2.** indicates other organizations that were targeted, especially as participants in the Key Informant Interviews.

Table 3.1: The Target Population Structure

REGION	COUNTY	ECDE	PRY	SEC	ABE	TTC	TOTAL
Central	<ul style="list-style-type: none"> — Kiambu — Murang'a — Nyandarua — Nyeri — Kirinyaga — Laikipia 	4,543	3,187	1,063	109	12	
Coast	<ul style="list-style-type: none"> — Mombasa — Kwale — Taita Taveta — Lamu — Kilifi — Tana River 	2,882	1,697	280	143	6	
Eastern	<ul style="list-style-type: none"> — Machakos — Makueni — Kitui — Meru — Tharaka — Embu 	6,656	5,032	1,279	437	6	
Nairobi	<ul style="list-style-type: none"> — Nairobi 	1,553	1,241	337	127	14	
N. Eastern	<ul style="list-style-type: none"> — Garissa — Wajir — Mandera — Marsabit — Isiolo 	468	404	57	71	1	
Nyanza	<ul style="list-style-type: none"> — Kisumu — Siaya — Homa bay — Migori — Kisii — Nyamira 	5,500	4,821	1,231	201	12	
R. Valley	<ul style="list-style-type: none"> — Nakuru — Narok — Kericho — Bomet — Elgeyo Marakwet — Nandi — Uasin Gichu — Turkana — West Pokot — Trans Nzoia — Samburu — Kajiado 	11,565	7,176	1,554	439	18	
Western	<ul style="list-style-type: none"> — Kakamega — Vihiga — Bungoma — Busia 	4,145	2,639	694	89	8	
Total		37,312	26,197	6,495	1612	77	71,693

Source: MOEST (2011)

Key:

ECDE – Early Childhood Development and Education Centres;

PRY- Primary Schools, SEC- Secondary Schools,

ABE – Adult Basic Education

NFE- Non Formal Education Centres,

Table 3.2: Other Targetted Organizations

Organization	Units per category	No. of participants
Faith Based Organizations	2 faith-based organizations per county	2
Field Officers	1) Quality Assurance and Standards Officers: 1 per county 2) 1 TAC Tutor per county 3) 1 EARC per county 4) 1 DICECE officer per county 5) 5 National Quality Assurance Officers (MOEST Directors)	9
Other Organizations	1) KNEC 2) KISE 3) CEMASTE A 4) Universities (Private and Public) 5) KEMI 6) KIPPRA 7) TSC 8) KNUT and KUPPET 9) FKE 10) Kenyan Diaspora and Embassies	45 (5 per category)

3.5.2. Sampling Technique

The study employed a multistage multi-stage sampling technique (Mugenda and Mugenda, 2009), which involved random selection of the quantitative respondents and Purposive sampling of the qualitative respondents. The target population size of ECDE, Primary Schools, Secondary schools , TTC's, and ABET was computed at **71,693** educational institutions in Kenya, as stated above (MoE. 2011). In the Quantitative phase, the statistical procedure for sample size determination was applied, the researchers compute the sample size at **1504** institutions (Survey System, 2012). This represents the sample size at 5% level of significance, with an error of **2.5%**. The details of the sample design are set forth in Figure 2 and Table 3.3.

Table 3.3.: Sample Size Determination

$\text{Sample size} = \frac{Z^2 \times p \times (1-p)}{c^2}$		$\frac{(1.96)^2 \times (0.5) \times (1 - 0.5)}{0.025^2} = 1537$
<p>Where : Z = Z value (e.g. 1.96 for 95% confidence level) p = percentage picking a choice, expressed as decimal (.5 used for sample size needed) C = confidence interval, expressed as decimal (e.g., .04 = ± 4)</p>		
<p>Correction for Finite Population</p> <div style="background-color: #f0f0f0; padding: 10px; margin: 10px 0;"> $\text{new SS} = \frac{\text{SS} \times (ss-1)}{1 + \text{pop}}$ </div> <p>Where: pop = population</p>		$= \frac{(1.96)^2 \times (0.5) \times (1 - 0.5)}{(0.025)^2}$ $= 1504$
<p>NEW SAMPLE SIZE</p>		<p>1504 Educational Institutions</p>

3.5.3. Sampling Procedure for the Quantitative Phase

The Sampling was done through the following stages

1. The country is divided into eight geographic regions, as used by the Ministry of Education and each region is sub-divided into counties
2. From each county, districts were selected as per the proportionate size of the region, randomly (and purposively for marginalized areas).
3. From the selected districts, educational institutions were selected proportionately at random, as stipulated in the sample design (Table 3.3)
4. For the quantitative phase, from the selected educational institutions teachers were selected at random in primary and secondary schools. The same proportional selection technique will be applied for other institutions and field officers.

3.5.4. Sampling for the Qualitative Phase

Sampling was done using purposive techniques leading to identification of several participants, institutions and key informants. A total of **2431** participants took part in the study. The participants included primary school pupils, secondary and college students, parents, teachers, heads of school, workers in the informal sector and industry, Education field officers and various stakeholders. The list of participants is presented in **Table 3.2** below.

Table 3.4. List of participants in the Qualitative Phase

REGION	ECDE	PRY	SEC	ABE	TTC	FLD/OF	INF/S	IND	KEY	TOTAL
Aberdares	132	92	31	5	4	10	06	07	20	307
Mombasa	83	49	8	5	2	09	05	07	19	187
Northern	193	146	37	13	2	11	04	04	21	431
Metropolitan	45	36	10	4	4	14	06	09	24	152
Garissa	14	12	5	4	1	06	05	03	08	58
Lake	159	140	36	6	4	09	05	04	21	384
Mau	335	208	45	13	5	12	05	06	18	647
Nzoia	120	77	20	5	2	12	04	06	19	265
Total	778	545	134	32	18	84	42	46	150	2431

77The Qualitative data were generated using questionnaires and observation shedules. These were administered mainly to teachers in ECDE centres, primary and secondary schools and also tutors in colleges. The Qualitative data were generated using In-depth interviews of pupil/student leaders, parents, head teachers,workers in the industry/informal sector and key informants. Focused group discussions were used to generated data from learners at all these levels except ECDE. In addition memoranda were sought and received from individuals and institutions from across the country. In total, about 250 memoranda were received. Further qualitative data came from opinions in the print and social media.

3.5.7. Pilot Study

Before actual generation of the data, a piloting of the tools was undertaken in in ten counties in various regions across the country. These counties were randomly sampled. The questionnaires and interview guides were tested for appropriateness of question items in terms of language, content, clarity, time taken to administer as well as general administration logistics. In addition, the pilot study was used to determine whether: (i) the instruments would generate the type of data anticipated and; (ii) the type of data desired could be meaningfully analysed in relation to the stated evaluation objectives. After the analysis of data collected from the pilot study, ambiguities and unnecessary content in the questionnaires and interview guides were addressed.

In pilot testing of tools, one can be able to correct errors of omission or commission as well as provide information about deficiencies and suggestions for improvement (Gay et al, 2009). It ensures common understanding and identifies any challenges a similar large number of respondents are likely to have and also provide a realistic sense of how long each tool will take to administer.

3.6. Data generation process

KICD in collaboration with Ministry of Education, State Autonomous Government Agencies such as Kenya Educational Management Institute, Teachers Service Commission, Kenya Institute of Special Education, Universities and CEMASTEAs carried out the needs assessment over a period of two weeks from 13th January to 30th January, 2016. Generally, the reception by the respondents was quite warm. They welcomed and appreciated the fact that their views were being sought on what needed to be reformed in the Kenyan Curriculum for Schools and Colleges.

23 teams were dispatched to visit different regions of the country – specifically to schools, Colleges, Churches, the industry, non- formal sectors. In total 120 participated in the research process and covered basically all the Kenyan Counties (See the Table below). In addition, a call was made for memoranda from all Kenyans in the Media and a total of **79** were received. Twenty five (25) teams, each

comprising four officers will be dispatched to the counties. Each team will cover 84 learning institutions. A total of 2100 learning institutions will be visited countrywide. A total number of 7 instruments will be administered. County Education offices will be the entry points into the selected districts. One-on-one interview sessions with Faith based leaders, TTC principals be conducted. Their information will be captured using digital voice recorders. Questionnaires for education officers and DQASOs will be administered to the officers at the District Education Headquarters. Within the schools, the head teachers will facilitate access to the teachers, learners, parents and SMC members.

Once the organization of the selected respondents is complete, respective data collection instruments will be administered. Using the observation schedule, available physical facilities will be observed to establish their adequacy and appropriateness. All the established and accepted educational research ethical standards will be adhered to during the administration of data collection tools.

3.7. Data Analysis

Data Analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. In this study quantitative data were analysed statistically while qualitative data were analysed thematically, as explained below.

3.7.1 Quantitative data analysis

The data from questionnaires were analysed by use of the Statistical Package for Social Sciences (SPSS) software Version 17.0. This software provided general statistical information about the participants investigated and assisted in making inferences about the population (McNeill & Chapman, 2005).

3.7.2 Qualitative data analysis

The process of Qualitative data analysis involved six steps (Creswell, 2003; Jwan & Ong'ondo, 2011). The first step involved only transcribing all the interviews and Focused Group Discussions (FGDs). During the transcription period, all the audio recorded interviews were turned into text material and labeled; they later became the primary data for subsequent analysis. The data were filed appropriately according to levels of education. Data already in script form – mainly from memoranda and print newspapers were also filed appropriately.

The second step was to do a workshop for all the officers involved in the data analysis process using pilot data as dummies. This went on for about a week until the team were confirmed to be consistent in coding process. The team was then divided so that data for different levels (ECDE, Primary, Secondary, Tertiary and Special Needs Education) were analysed separately but using the pre-determined themes consistent with the research objectives.

Then, each team were involved in first reading the transcripts relevant to their levels to obtain a general sense of the information and to reflect on the data's overall meaning. The third step was coding, which took place in three stages: open, axial and selective described in Creswell (2007) and Braun and Clarke (2006).

3.8. Trustworthiness of the Study

This involves explaining the steps that were taken to ensure that the entire research process was done in a trustworthy manner. This is further important to assure the readers that the findings of this study can be trusted to inform policy and practice for curriculum reform. In this section, the steps that were taken to ensure validity and reliability of the quantitative research process are explained. Then, the steps taken to ensure trustworthiness of the qualitative phase is also discussed.

3.8.1 *Validity of the Study*

Validity is the degree to which a tool measures what it is supposed to measure in order to interpret the scores appropriately. The techniques to used in validating this study were include content validity and construct validity.

The content validity is the degree to which a tool measures an intended content area. The items must be relevant to the measurement of the intended content. It therefore compares content of the tools to the variables being measured. The usual procedure in assessing the content validity of a measure is to use professionals or experts in the particular field. The instrument was given to two groups of experts; one group was requested to assess what concept the instrument is trying to measure. The other group was asked to determine whether the set of items or checklist accurately represents the concept under study. Apart from being tested in schools, the tools wwere therefore given to a panel of experts and stakeholders for review prior to data collection. They commented on the wording of questions and statements and length of the instruments.

Construct validity is the degree to which a test measures an intended construct, and not an intervening or unrelated variable. It is done to see whether the presumed construct is what is being tested. The instrument must reflect the intended construct. It asks what the tool is measuring and whether the scores have a useful purpose and positive consequences when they are used in practice (Creswell, 2009; Mugenda & Mugenda, 2012). Construct validity was done by comparing the items in the tools with theoretical expectations and hypothesized behaviour to see how well they fit. Clear definition of constructs were operationalized and provided so that the study centers on the correct interpretation of the concepts. Use of mixed method approach also addressed the construct validity of the study.

3.8.2 *Reliability of the study*

This is extent to which a tool will consistently measure what it purports to measure (Gay et al, 2009). The reliability coefficient was established by using the split half reliability technique which involved the administration of ‘two’ similar tests. Two

‘halves’ of the same test were administered on the same sample. The data obtained were correlated using the Spearman Brown Prediction formula of $Np_{xy} / 1 + (N-1)p_{xy}$, where p_{xy} is the predicted reliability coefficient for the total test.

At random, scored items were divided into two groups or alternatively, all the odd-numbered items were grouped together and all the even-numbered items together. Each subject’s total score was computed and the scores from the two groups of items were correlated. Data with a high split-half reliability was considered to have a high correlation coefficient. The higher the correlation coefficient obtained, the more similar the forms and the higher the reliability (Mugenda & Mugenda, 2012; Craig & Wollack). The internal consistency of the items will be determined from scores obtained. Cronbach’s coefficient alpha will be computed to determine how items correlate among themselves.

3.8.3. Trustworthiness of the Qualitative research process.

3.8.3.1. Credibility

Credibility is the extent to which the study actually investigated what it set out to investigate which was to assess the needs of Kenyans for curriculum reform. The credibility of the study was mainly ensured through *triangulation*, which basically means bringing together various perspectives.

The study utilized Three types of triangulation: triangulation of data collection techniques, triangulation of data sources, and triangulation of analysis (Rothbauer, 2008; Jwan & Ong’ondo, 2011). During the study, various data generation techniques (interviews, focused group discussions, analysis of content in print and social media and submissions in the form of memoranda).

In terms of data sources, the triangulation involved getting data from different participants (Jwan & Ong’ondo, 2011). Each set of participants yielded different evidence that provided different insights regarding curriculum reform. The different

sources were learners, parents, education officers, various key informants/stakeholders and various corporate institutions.

The findings of the Quantitative phase were triangulated with the results of the Qualitative phase so as to give a more complete picture of the needs for curriculum reform.

3.8.3.2. Dependability

3.8.3.3. Confirmability

3.9. Ethical Considerations

3.9.1 Access and Informed consent

3.9.2 Confidentiality and Anonymity

3.10. Summary

CHAPTER FOUR

QUANTITATIVE DATA FOR ECD

4.1 Introduction

The Ministry of Education attaches great importance to Early Childhood Development (ECD) programmes for children aged between 0-8 years. Indeed, Early Childhood Education is the cornerstone upon which primary education is founded. A sound Early Childhood Education helps to lay a strong foundation for a child's all round development physically, mentally, socially, emotionally and spiritually. The government is thus committed to increasing access to education opportunities for all Kenyans to be able to realize basic education for all.

Various studies on the effect of early childhood education and care have shown that effective early childhood education and care programmes result in higher school participation, completion and success rates in primary and secondary levels of education. In addition, the studies also have shown that there are low incidences of crime, low rate of work absenteeism, higher social and gender equality and low health service requirement. The cumulative result of these advantages of early childhood education and care programmes is higher national socio-economic development. Burma, E. (1994), Early Childhood Development Network for Africa (1998), K.I.E. (1987), UNICEF (1999 & 2005).

This study was a needs assessment for curriculum reform in ECDE curriculum. The study was guided by six themes derived from the objectives of the study. These included society needs, competencies, activity areas, learning approaches, assessment and cross cutting issues. Responses were gathered from the ECDE teachers while an observation schedule was used to gather information on availability of resources.

4.2.1 General Societal ECDE Needs

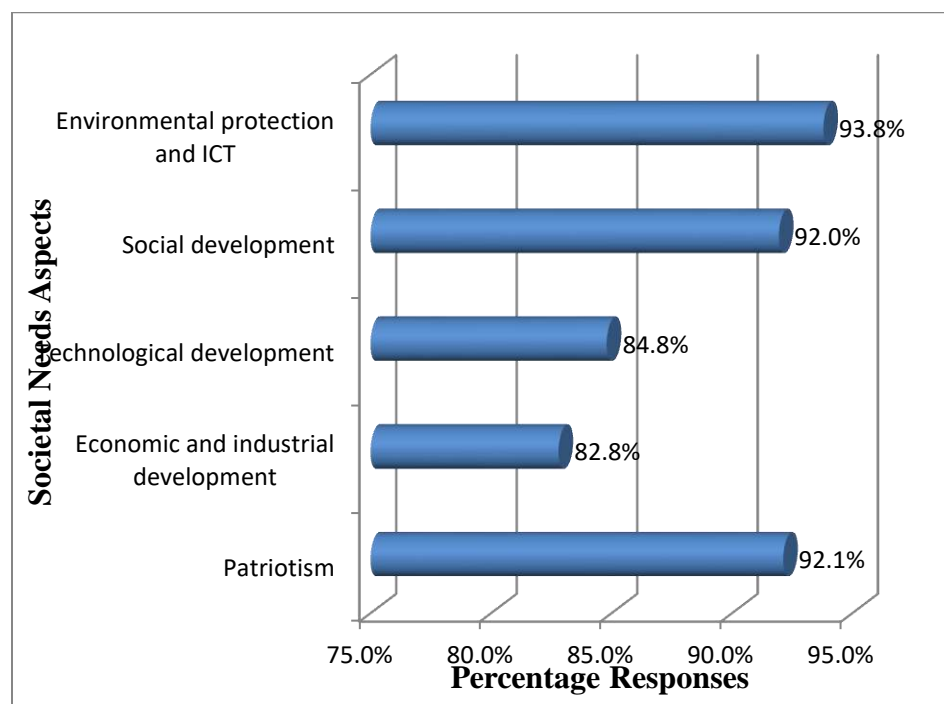
Societal needs are considered to be what the people who constitute the population of a country need for their lives to be productive and happy in the local context. The curriculum is a major factor determining the knowledge and skills that future citizens will possess, and hence their capacity to contribute productively to their society and governments in many countries. The greatest importance of education lies in its link with well-being and

prosperity, as it is claimed that it is virtually impossible to attain high levels of economic development and have a productive economy and a high standard of living without a knowledgeable and skilled workforce.

Societal considerations suggest that the quality and appropriateness of schooling is very important in guiding the way content of the curricula should be designed to inspire and enrich people's lives with the knowledge, skills and attitudes most helpful to them and their country. Empirical evidence has it that value education is essential for sustained social and economic development and the realization of human potential. Value education is a powerful force in shaping human beings in any society and plays a vital role in giving the youth, the training necessary to pursue their dreams and aspirations. The dreams of youth in a society can only be actualized if the curriculum is guided by the philosophical ideals of a societal aspects like nationalism, patriotism, national unity, economic and industrial development, technological development, social development, international consciousness, respect for all cultures, self-fulfillment, social equality, social responsibility, sound morals, good health, information communication and technology; and environmental protection are given due consideration. It is with the view of the aforementioned that the study sought the views of the stakeholders in reforming the ECDE curriculum. The findings with regard to the extent to which various aspects of societal needs should be emphasized are presented as follows;

Teachers from ECDE were required to give their responses in regard to the extent to which societal needs should be emphasized in the curriculum. They were asked to indicate the extent to which the identified societal needs should be emphasized in the school curriculum using a five-pointer likert scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=Some extent' and 'G=Great extent'. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. Teachers' responses on each identified societal need which constituted the average percentage rating are presented in Figure 4.1.

Figure 4.1: ECDE teachers' responses on the extent to which the ECDE level curriculum should emphasize societal needs



The teachers rated environmental protection highest at 93.8% followed by patriotism at 92.1%, social development at 91.9%, technological development at 84.8% and economic and industrial development at 82.8%. When all the societal needs under investigation were averaged, majority (89.1%) of the teachers were in support of the ECDE level curriculum emphasising societal needs.

4.2.2 Desired Competencies for Curricula Reforms

Aligning the curriculum to address the aspirations of the Constitution, Vision 2030 and the East African Community treaty should be prioritized. It has been proposed that the content for basic education should be designed with a view of equipping the learners with relevant knowledge that emphasizes on technology, innovation and entrepreneurship (Vision 2030), the development of their full capacities, living and working in dignity, enhancing the quality of their lives, making informed decisions and continuing with learning as a lifelong engagement.

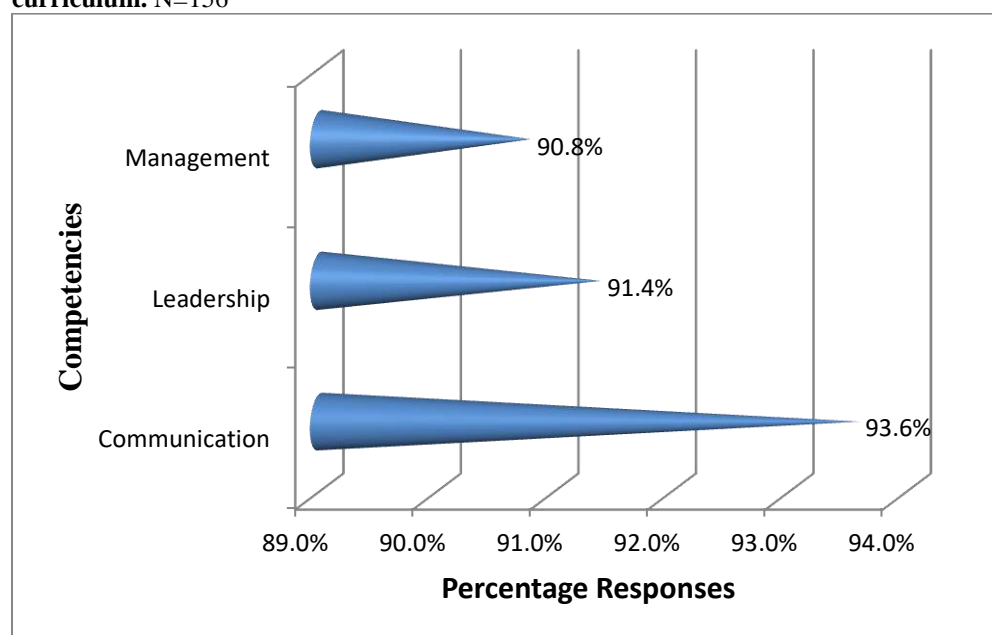
This was re-emphasized by Task Force which recommended major reforms of the curriculum to align it with the Constitution and to ensure that the aspirations of Vision 2030; structure the curriculum within skills and competences framework that identifies the knowledge, skills and competences all learners will acquire, at the same time provide both vertical and horizontal coherence (Republic of Kenya, 2012).

4.2.2.1 *Desired competencies to be incorporated at ECDE level*

The survey further established the extent to which 21st century competencies should be incorporated into the Curricula.

ECDE teachers were required to rate the skills, values, attitudes and knowledge that should be emphasized into the curriculum. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S= Some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. Teachers responses on each identified 21st century competence which constituted the average percentage rating are presented in Figure 4.2.

Figure 4.2: Teachers’ responses on the extent to which competencies should be emphasized in the ECD curriculum. N=156

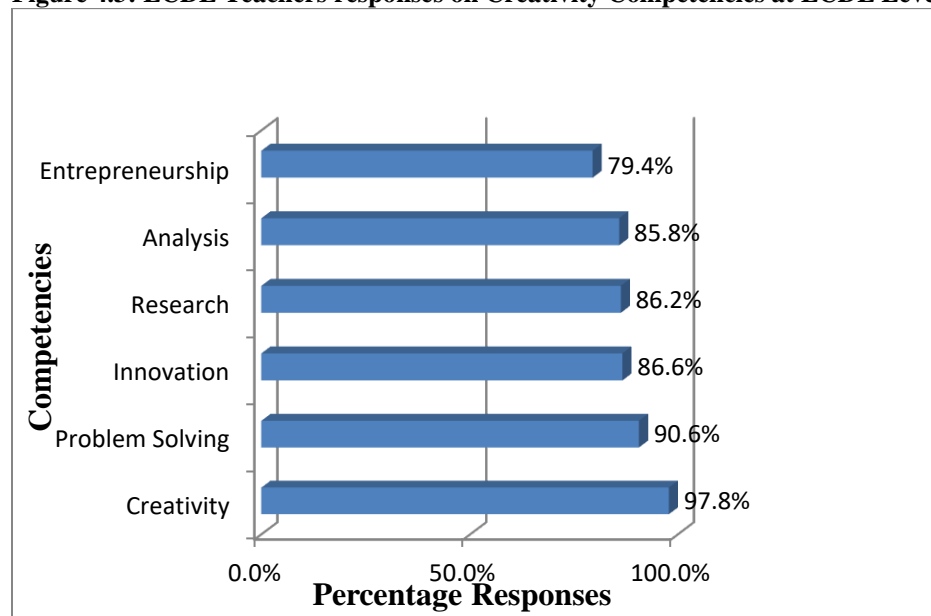


Communication competence was rated highly by majority (93.6%) of the ECD teachers. Leadership and management were also rated highly by 91.4% and 90.8% respectively. On average majority (92%) of the ECDE teachers rated these competencies highly.

The high percentage rating implies that the ECDE learners should be given a strong foundation in the requisite skills for effective transition to the primary level and other subsequent levels. This observation is in line with a study carried out in Korea by IBE-UNESCO (2012) which found communication to be one of the competence skill recommended for elementary level.

The study also sought to establish the extent to which creativity competencies should be emphasized at the ECD level. Figure 4.3 provides a summary of ECD teachers' responses with regard to creativity and related competences.

Figure 4.3: ECDE Teachers responses on Creativity Competencies at ECDE Level



Majority of the teachers (97.8%) indicated that creativity competencies should be emphasized at the ECD curriculum. Entrepreneurship was least preferred by 79.4% of the teachers though the preference was still high.

ECDE teachers were also required to indicate the extent to which collaboration and related competencies should be emphasized in the ECDE curriculum. The responses are presented in Table 4.1.

Table 4.1: ECDE Teachers Responses on Competencies under Collaboration

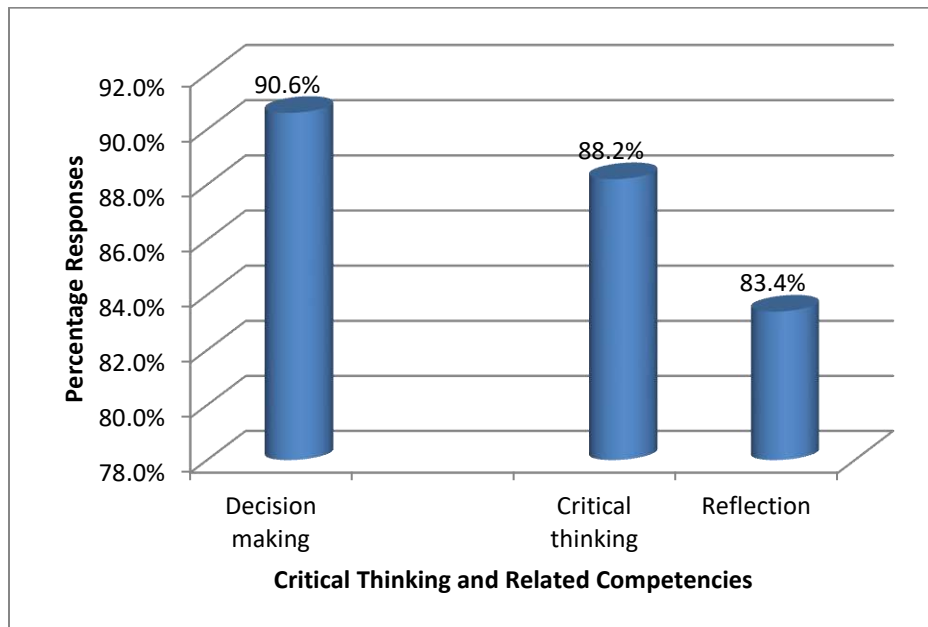
Competencies	Percentage
Collaboration	87.6
Interpersonal relationship	91.6
Coordination	91
Planning	91.6
Organizing	92.2
Mentoring	88.8
Coaching	83
Networking	85.8
Negotiation	87.4
Average %	88.8%

N=156

Majority of the teachers (92.2%) indicated tha organizing competence should be emphasized in the ECDE curriculum. Majority of the teachers (above 80%) also indicated that all the other listed competencies should be emphasized in the ECDE curriculum. The overall average percentage responses by the ECDE teachers on the extent to which collaboration and related competencies should be emphasized in the ECDE curriculum was 88.8%. The high preference emphasy of collaboration and related competencies in the ECDE curriculum is in line with the recommendation for Singapore elementary level which emphasizes basic skills such as communication skills and cooperation skills.

Responses were sought from the ECDE teachers on the extent to which critical thinking competence should be emphasized at ECDE curriculum. Their responses are presented in Figure 4.4.

Figure 4.4: ECDE teacher's responses on the extent to which critical thinking should be emphasized at ECD level N=156



The average percentage responses by ECDE teachers on critical thinking and related competencies was high at 87.6%. Individually, most of the teachers (90.6%) indicated that critical thinking and related competencies should be emphasized in the ECDE curriculum. Fewer of the ECDE teachers (83.4%) indicated that critical thinking and related competencies should be emphasized in the ECDE curriculum.

4.2.3 Activity Areas that should be included in the ECDE Curriculum

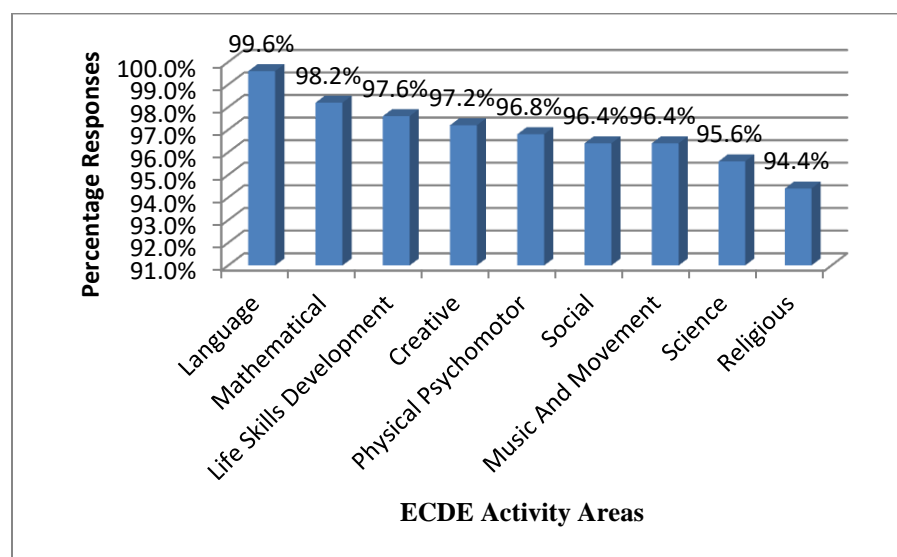
The study sought to establish the extent to which activity areas identified should be emphasized in the ECDE curriculum. Responses were obtained from the ECDE teachers. The respondents were asked to indicate the extent to which the identified learning areas should be emphasized in the school curriculum using a five-pointer Likert Scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=Some extent' and 'G= Great extent'.

4.2.3.1 Extent ECDE Activity Areas should be emphasized in the School Curriculum

ECDE teachers were asked to indicate the extent to which various activity areas should be emphasized in the school curriculum using a five-pointer Likert Scale. They were required

to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=Some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. Teachers responses based on percentage mean ratings are presented in Figure 4.5.

Figure 4.5: ECDE Teachers Responses on the Extent to which Activity Areas should be Emphasized in the School Curriculum (N=153)



Language activity area had the highest rating of 99.6% followed by mathematical activity area at 98.2%. All the same, all the activity areas had very high ratings (above 90%) showing how critical they are for inclusion in the ECDE school curriculum.

The findings are in line with that of a study carried out by KICD (2014) which found that ECDE and lower primary curriculum is expected to equip learners with language, arithmetic and reading skills. According to the KICD study, ECDE and lower primary level act as a springboard for the upper levels.

4.2.4 Learning approaches that should be used in delivering the ECDE Curriculum

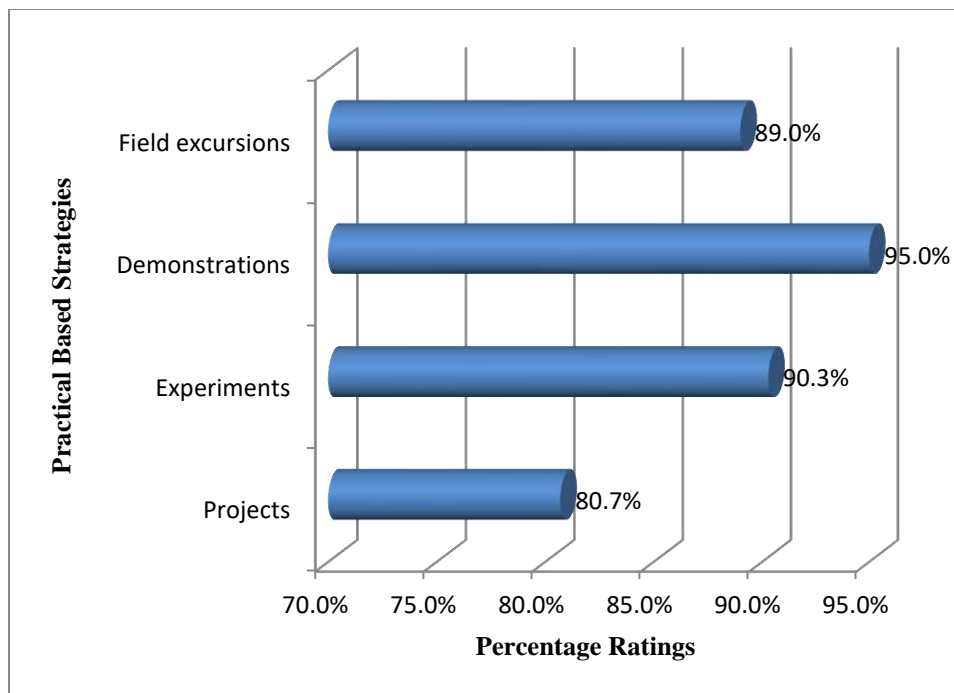
The ECDE teachers’ were asked to rate the extent to which various practical-based methods of instruction should be used in delivering the ECDE curriculum. They were required to indicate their choices by selecting ‘N=Never’, ‘R=Rarely’ and ‘A= Always’

The responses were weighted out of 3 and averages derived. From the weighted averages, percentage mean ratings were further derived.

4.2.4.1 Practical methods of teaching

ECDE teachers responded to a set of items in a questionnaire regarding the extent to which they would want to use practical based methods of teaching. Their responses based on percentage mean ratings are presented Figure 4.6.

Figure 4.6: ECDE teachers responded on the extent to which they would want to use practical based methods of teaching Practical methods of teaching

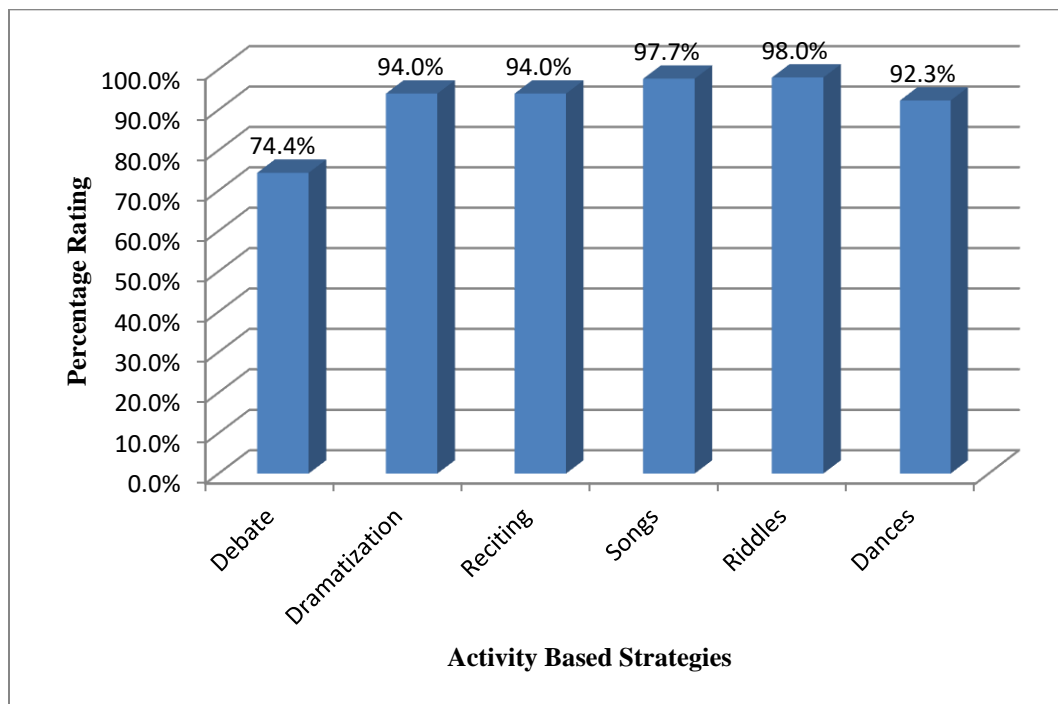


Demonstrations are rated highly by teachers at this level with a percentage rating of 95.0%. The least preferred approach by ECDE teachers was use of projects at a rating of 80.7%. The mean percentage rating of all the approaches was 88.7%

4.2.5 Learners' Activity-Based Strategies

ECDE teachers were asked to indicate the extent to which various learners' activity-based strategies should be used in delivering the ECDE curriculum. Their responses are presented in Figure 4.7.

Figure 4.7: ECDE teachers' responses on the extent to which various learners' activity-based strategies should be used in delivering the ECDE curriculum

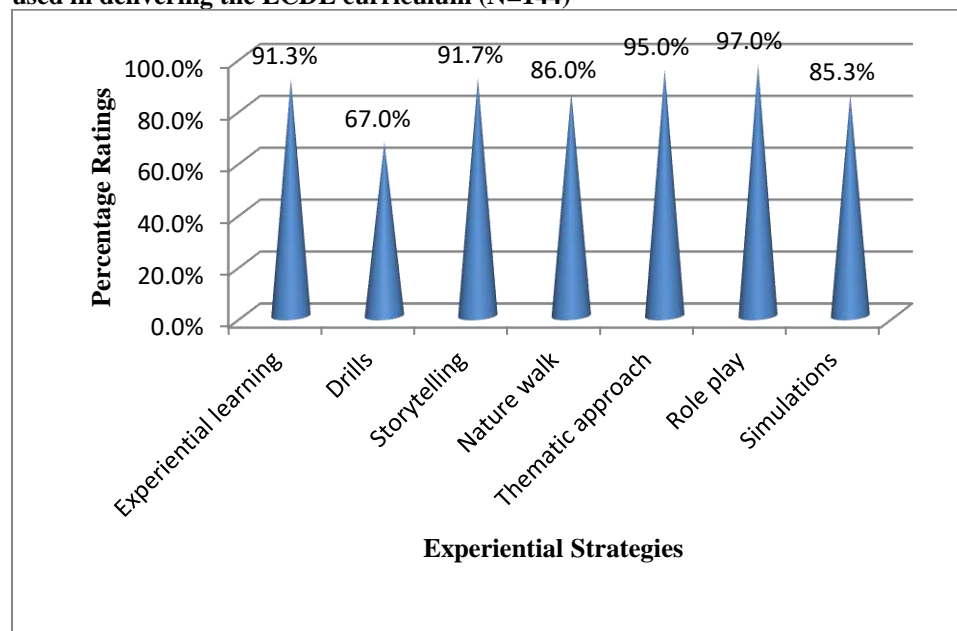


Majority of the ECDE teachers (98.00%) indicated that riddles should be used in delivering the ECDE curriculum. Debate was least preferred by 74.40% of the ECDE teachers. The overall mean percentage rating of learners' activity-based strategies 91.73%. This means that at this level of education, learners' activity-based strategies should be used at a higher frequency.

4.2.6 Experiential Learning Strategies

ECDE teachers rated the extent to which experiential approaches of learning should be used in delivering the ECDE curriculum. Their responses are presented in Figure 4.8.

Figure 4.8: ECDE teachers' responses on the extent to which experiential approaches of learning should be used in delivering the ECDE curriculum (N=144)



Role plays topped this cluster with a percentage rating of 97.00. The least preferred approach was drills at 67.00%. Role play should be used at a higher frequency because they also help the learners to identify their talents.

4.2.6.1 Lecture method

Lecture is a direct method of teaching and ECDE teachers did not give it a high rating. The sampled respondents rated it at 58.00%. This may be attributed to the fact that lecture method as a pedagogical approach encourages learners to be passive when learning is taking place which usually highly discouraged at this level of education.

4.2.6.2 Other Suggested learning approaches

Other suggested learning approaches which can be used to deliver the ECDE curriculum included poems, memorization, colouring, modeling, drawing, filling and testing in order for the child to differentiate, free play, fixed play, social play, individualized learning, learning through play, news telling, peer teaching so that children can learn from one another, kalongos, tongue twisters, rhymes and use of talking walls.

4.2.7 Forms of Assessment

ECDE teachers from both public and private schools from the entire country were randomly sampled and given questionnaires to respond to with regard to the extent to which various forms of assessment contribute to effective measurement of learners' achievements at the ECDE level. Their responses were collected using a five-point Likert scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=Some extent' and 'G= Great extent'. The different forms of assessment were clustered into formative and summative. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings and composite means were further derived. Their responses are presented as in the Table 4.10:

Table 4.2: ECDE teachers Responses on Assessment Methods in ECDE level (N=150)

Formative Assessment	% Rating	Summative Assessment	% Rating
Progress assessment	96.0%	End of term examination	82.8%
Observation Checklist	92.2%	End of year examination	83.6%
Continuous assessment	88.2%		
Composite mean	92.1%	Composite mean	83.2%

The findings demonstrate that formative assessment stands highly rated at 92.1% compared to summative assessment at 83.2%. In the formative assessment, progress assessment was rated highest at 96.0% compared to observation checklist at 92.2 % and continuous assessment at 88.2%. In the summative assessment, end of term examination was rated at 82.8% and end of year examination at 83.6% showing an insignificant difference between the two forms of assessment.

4.2.8 Nurturing the Potential and Talents of Learners at ECDE Level

The study sought to establish the extent to which teachers should use various strategies to nurture potential and talents among ECD learners. Their responses were collected using a five-point Likert scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=Some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings and composite means were further derived. Their responses are presented as in the Table 4.11:

Table 4.3: ECDE Teachers Responses on Strategies of Nurturing the Potential and Talents of Learners

Strategies N = 150	Percentage Rating
Games and sports	94.2
Clubs and societies	93.0
Cooperative learning, competition among schools and academic conferences	91.9
Curriculum enrichment	91.8
Ability grouping and mentorship programs	91.6
Special needs classes	88.0
Early admission to schools	87.6
Special schools for gifted and talented	84.2
Accelerated learning and advanced placement	81.2
Average percentage	89.3

ECDE Teachers ranked the best strategies the new curriculum should incorporate to nurture the talents of learners as follows; games and sports (94.2%), clubs and societies (93.0%), cooperative learning, competition among schools and holding of academic conferences (91.9%), curriculum enrichment (91.8%) and ability grouping and mentorship programs(91.6%).

The respondents also cited special needs classes (88.0%), early admission to schools (87.6%), special schools for the gifted and talented (84.2%) and accelerated learning and advanced placement (81.2%) as strategies which the envisaged new curriculum should incorporate to some extent for nurturing talents of the learner.

4.2.9 Cross Cutting Issues

The Early Childhood Development Education (ECDE) teachers are responsible for nurturing the young learner’s potential at very early age. ECDE teachers gave responses on extent to which various cross-cutting issues should be addressed in the ECDE curriculum. Their responses were

collected using a five-point Likert scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=Some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. Their percentage mean ratings are presented in Table 4.12.

Table 4.4: ECDE teachers’ responses on extent to which various Cross Cutting Issues should be promoted through the curriculum

Cross cutting issues	Percentage rating(N=156)
Integrity	93.8
Technology	80.4
Security and safety	96.2
Disabilities	91.4
Health and hygiene	98.6
Gender issues	89.6
Financial literacy	80.6
Child rights	96.8
Environment	94.8
Drug and substance abuse	87.6
Average %	90.38

Hygiene was rated highest by majority of the ECDE teachers (98.6%), followed by child rights at 97%, environment which includes climate change at 94.8%, security and safety at 96.2% and the lowest was technology at 80.4% and financial literacy at 80.6%. HIV and AIDS which part of health has a considerable negative impact in several ways, children affected are vulnerable and absent from school; Malnutrition is itself a major course for pupil absenteeism and attention deficit in class. This will in turn influence their performance in different class activities.

Their response on the extent to which cross cutting issues should be included in envisage curriculum indicated that in average over 90.4% affirmed.

4.2.10 Learning Resources

Resources are important in the teaching and learning process. The resources are geared towards enhancing learning, teaching and content delivery. The educational resources are in the form of physical, human or material that assists the teacher to effectively and efficiently deliver content.

The survey sort to establish the availability of resources which are important in implementing and actualizing a competency based curriculum. Information was gathered through observing the available resources in the ECDE centres. The findings were classified and are presented as general, sports, media, home science, agriculture, music and science resources.

4.2.10.1 Availability of ECDE General Resources

ECDE general resources were observed using an observation schedule. The results are presented in Table 4.13.

Table 4.5: Availability of General ECDE Resources N=127

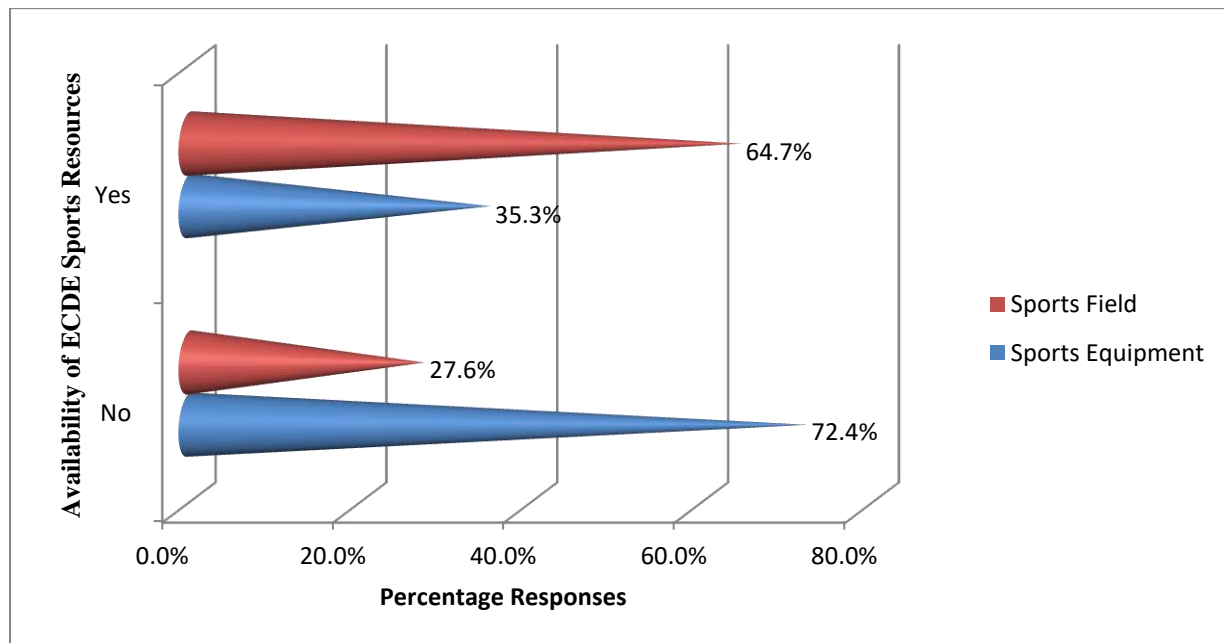
Resources	Availability of Resources	
	Yes (%)	No (%)
Safety tools and equipment	27.6	72.4
Classroom	93.7	6.3
Play ground	88.2	11.8
Play equipment	58.3	41.7
Reading materials	80.3	19.7
Furniture	89.8	10.2
Library	22.0	78.0
Library books	36.2	63.8
Syllabus	90.6	9.4
Toilets	89.8	10.2
Water	87.4	12.6
Electricity	48.0	52.0
Charts	85.8	14.2
Bulletin boards	20.5	79.5
Flannel boards	13.4	86.6
Flash cards	52.0	48.0
Flyers	17.3	82.7
Costumes decoration	28.3	71.7
Painting	30.7	69.3
Photographs Pictures	46.5	53.5
Puzzles games	33.1	66.9
Learning areas	64.6	35.4
Textbooks	72.4	27.6
Models	29.9	70.1
Toys	38.6	61.4

Classrooms were the most available resources shown by a high rating of 93.7%, followed by syllabus (90.6%), furniture and toilets (89.8%) and play grounds (88.2%). Flannel boards (13.4%), flyers (17.3%) and library (22.0%) were least available.

4.2.10.2 Availability of ECDE sports Resources

ECDE sports resources were observed using an observation schedule. The results are presented in Figure 4.9.

Figure 4.9: Availability of ECDE sports Resources N=124



The findings show that majority (72.4%) of the ECDE centres did not have sports equipment. However, 64.7% of the ECDE centres had sports field.

4.2.10.3 Availability of ECDE Media Resources

ECDE Media Resources were also observed using an observation schedule. The results are presented in Table 4.15.

Table 4.6: Availability of ECDE Media Resources N=120

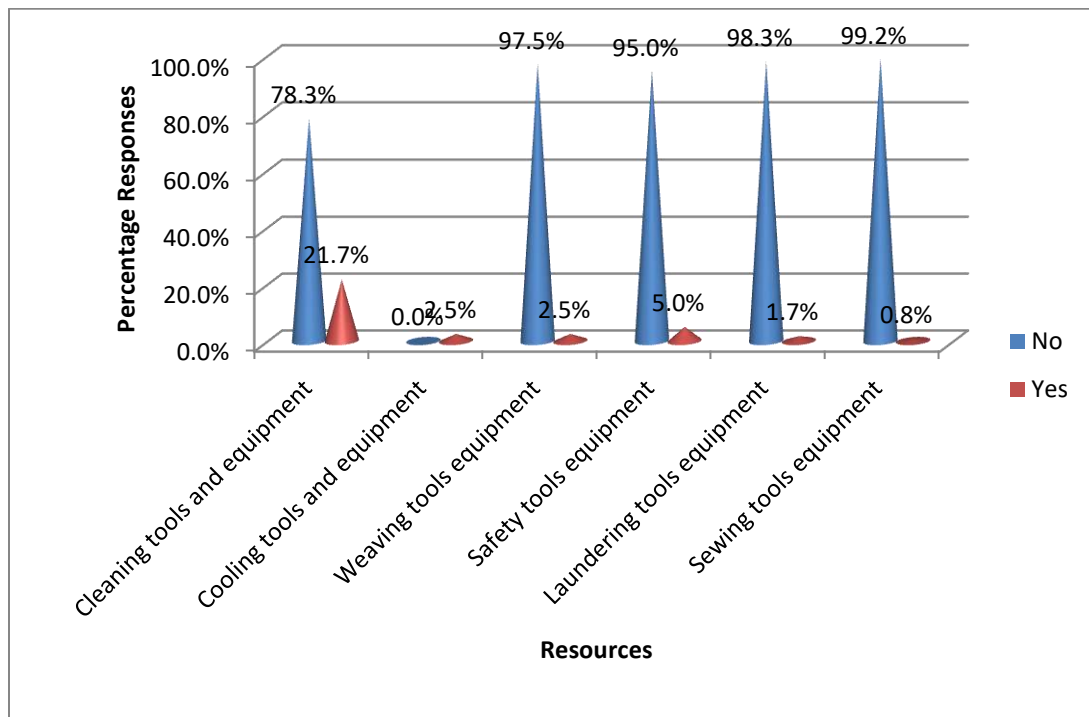
Resources	Availability of Resources	
	No (%)	Yes (%)
Storage devices	86.7	13.3
Computers	86.7	13.3
Laptops	95.8	4.2
Internet	95.0	5.0
Simulation software	95.8	4.2
Slides avail	95.8	4.2
Recording studio	98.3	1.7
DVDs	95.8	4.2
CDs	96.7	3.3
CD player	95.0	5.0
DVD players	94.2	5.8
Television set	90.8	9.2
Radio	84.2	15.8
Projectors	96.7	3.3
Tablets	96.7	3.3
IPads	99.2	0.8
IPods	97.5	2.5
Mobile phones l	85.8	14.2
Cameras	95.8	4.2
Electronic teaching learning content	96.7	3.3

The findings shows that the most available media resources were IPads (99.2%), recording studios at 98.3%, IPods at (97.5%) and electronic teaching learning content at 96.7%. The least available media resources were storage devices (86.7%), computers (86.7%), radio (84.2%) and mobile phones at 85.8%.

4.2.10.4 Availability of ECDE Home science Resources

ECDE home science resources were also observed using an observation schedule. The results are presented in Figure 4.10.

Figure 4.10: Availability of ECDE Home science Resources from the Observation Schedule

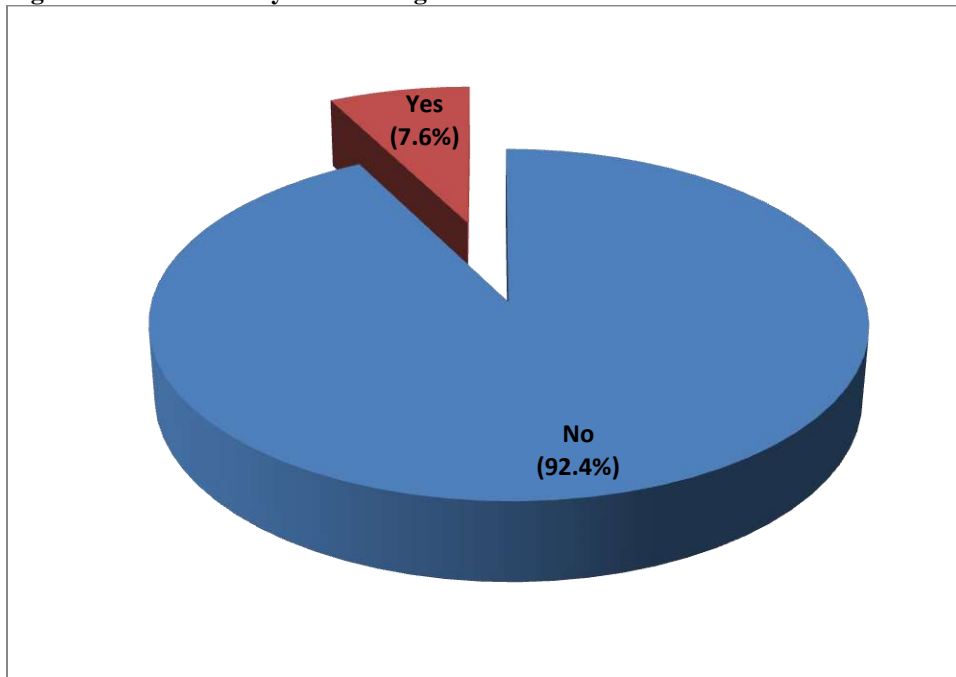


The findings show that the majority (99.2%) of the ECDE centres did not have sewing tools equipment, laundering tools equipment (98.3%), cooling tools and weaving tools equipment at (97.5%), and safety tools equipment at 95.0%. Cleaning tools and equipment were the most available at 27.1%.

4.2.10.5 Availability of ECDE Agriculture Resources

ECDE agricultural resources were observed using an observation schedule. The results are presented in Figure 11.

Figure 4.11: Availability of ECDE agriculture Resources N=119

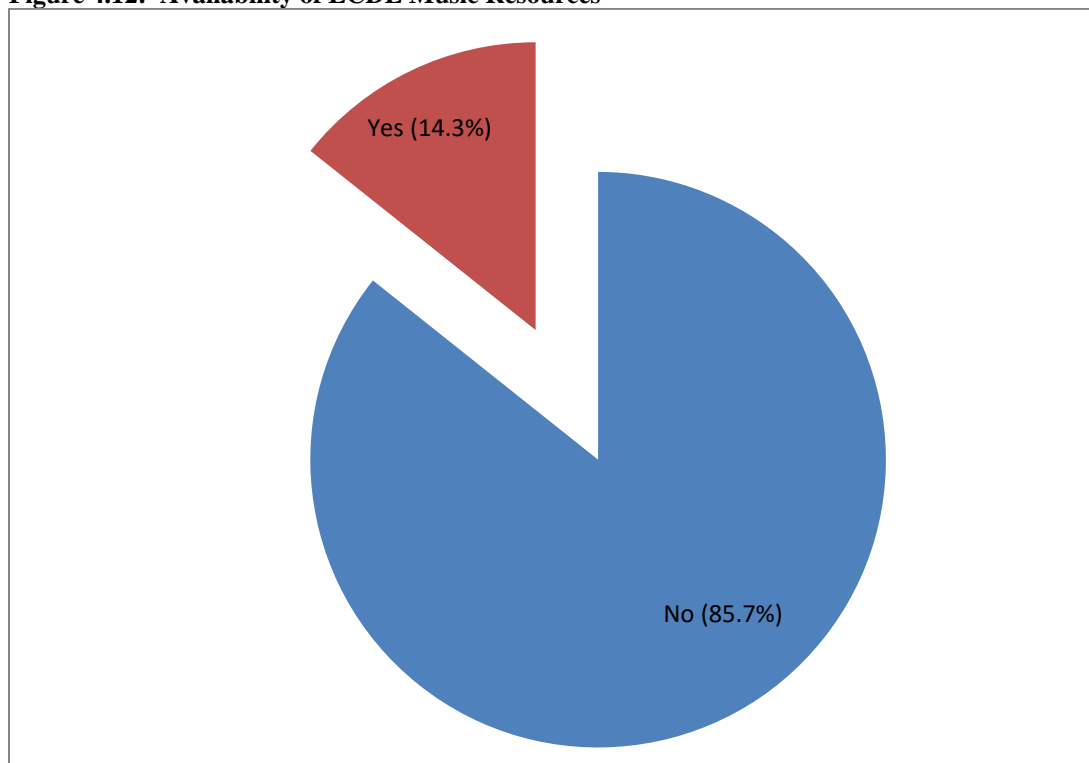


The findings show that majority (92.4%) of the ECDE centres did not have Garden tools. However, a few of the ECDE centres (7.6%) had garden tools.

4.2.10.6 Availability of ECDE Music Resources

ECDE music resources were observed using an observation schedule. The results are presented in Figure 12.

Figure 4.12: Availability of ECDE Music Resources

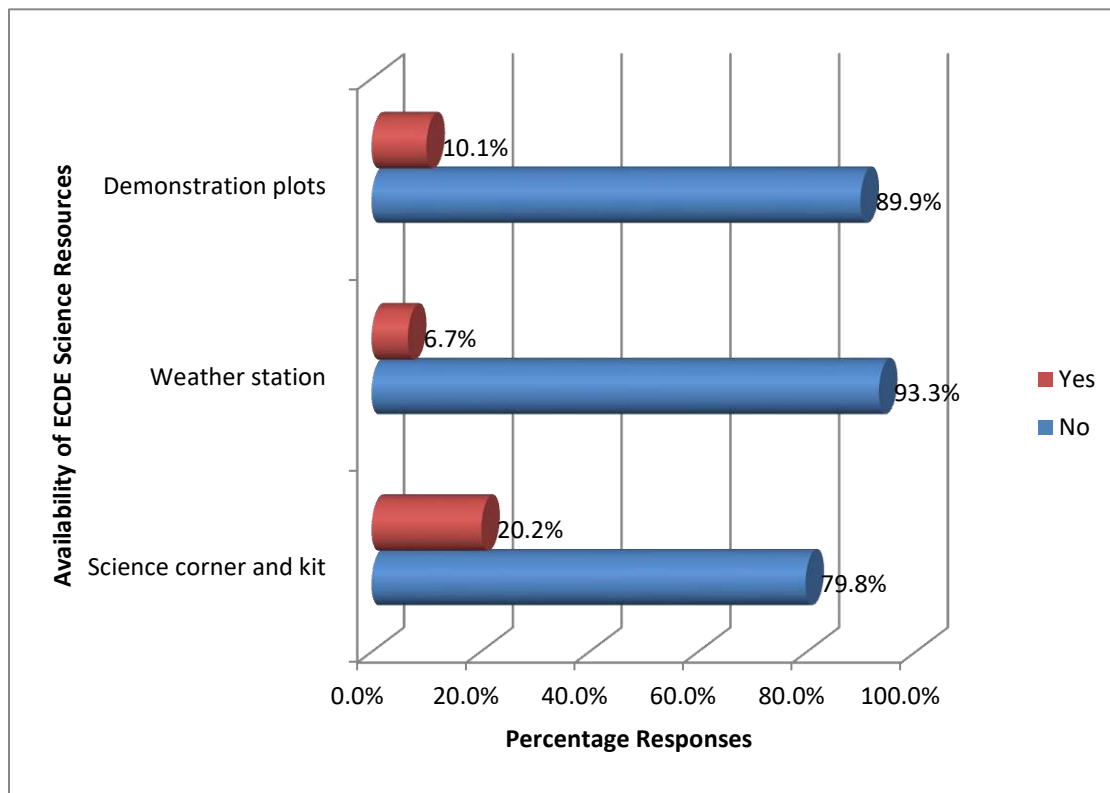


Majority of the ECDE centres (85.7%) did not have musical tools equipment. However, a few of the ECDE centres (14.3%) had musical tools equipment.

4.2.10.7 Availability of ECDE Science Resources

ECDE science resources were observed using an observation schedule. The results are presented in Figure 4.13.

Figure 4.13: Availability of ECDE Science Resources N=119



The findings show high rating of non-availability of ECDE science resources. High ratings were found in science corner and kits (79.8%), weather station (93.3%) and demonstration plots (89.9%).

4.3 Findings on Primary Level Needs

4.3.1 Introduction

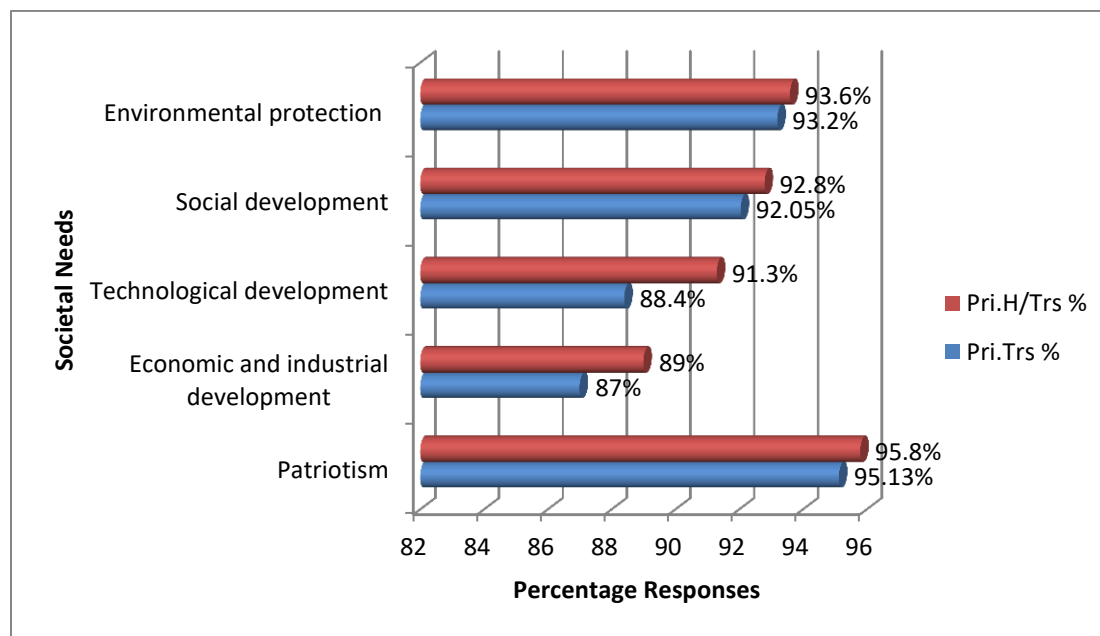
Primary school level gives learners educational foundation from where they spring to other levels of education. It dictates the progression to secondary education and later to the tertiary levels. This study was a needs assessment for curriculum reform in primary curriculum. The study was guided by six themes derived from the objectives of the study. These included society needs, competencies, activity areas, learning approaches, assessment and cross cutting issues. Responses were gathered from the primary school

head teachers and teachers while an observation schedule was used to gather information on availability of resources.

4.2.1 General Societal Primary Level Needs

Head teachers and teachers in primary schools were required to give their responses in regard to the extent to which societal needs should be emphasized in the curriculum. They were asked to indicate the extent to which the identified societal needs should be emphasized in the school curriculum using a five-pointer Likert scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=Some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. Head teachers and teachers’ responses on each identified societal need which constituted the average percentage rating are presented in Figure 4.14.

Figure 4.14: Primary Head teachers and teachers responses on the extent to which societal needs should be emphasized in the primary level curriculum N=842



Patriotism was ranked first by the head teachers (95.1%) and teachers (95.8%), followed by environmental protection 93.2% and 93.6%, social development 92.0% and 92.8%. However,

technological development was rated differently by teachers at 88.40% and head teachers at 91.3%. Economic and industrial development ranked slightly below by teachers at 87.0% and head teachers 89.0%.

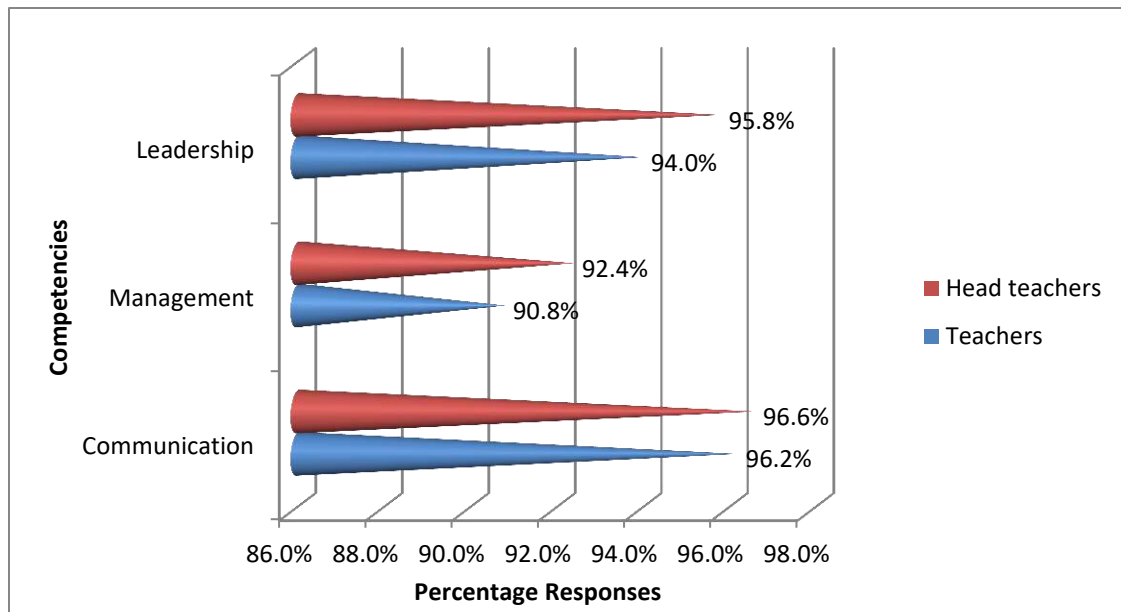
4.3.2 Competencies

4.3.2.1 Introduction

The survey further established the extent to which 21st century competencies should be incorporated into the primary curricula. The identified competencies were twenty one items, clustered into four 4Cs of the 21st century skills including; communication, collaboration, critical thinking and creativity whose results and discussions are presented below.

Primary school head teachers and teachers were required to rate the skills, values, attitudes and knowledge that should be emphasized in the curriculum. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=Some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. Primary school head teachers and teachers’ responses on desired competencies classified under communication are presented in Figure 15

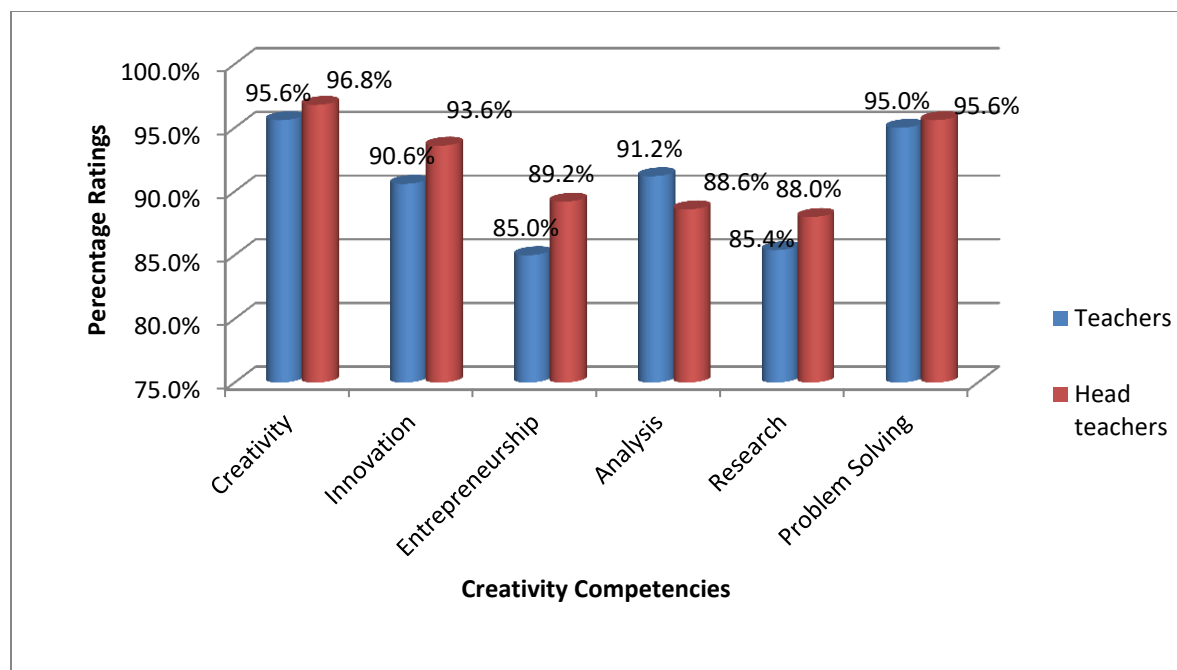
**Figure 4.15: Primary Head teachers and teachers Responses on desired competencies
Classified under Communication**



The findings show that all the respondents rated each sub theme above 90%. The overall percentage rating for communication, leadership and management was 93.7%. These implies that these societal needs will equip the learners for 21st C challenges and make them seize the opportunities brought about by new forces locally and internationally. Similar studies carried out in Singapore by (Soland et al, 2013 and Voogt&Roblin, 2012) provided a roadmap on key values that were in their education framework for 21st Cs which included; creativity, critical thinking, communication, collaboration, social and cultural skills. The education sector emphasizes these core values that hope to be cultivated in all its learners.

The primary school head teachers and teachers' responses on desired competencies classified under creativity are presented in Figure 16

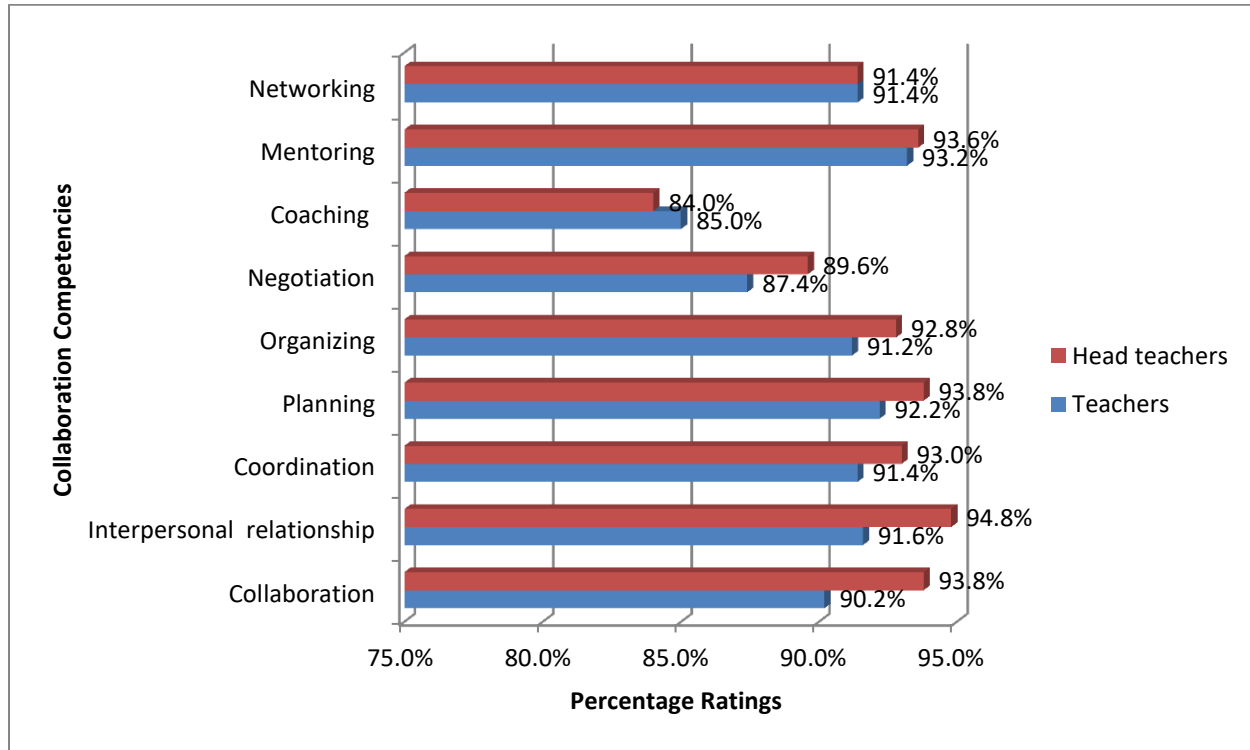
Figure 4.16: Primary School Head teachers and teachers Responses on Competencies under Creativity



The findings indicated that creativity competencies were rate high by over 85% of both the head teachers and the teachers. The average rating of all the creativity competencies was 90.5% of the teachers and 91.1% of the head teachers. These responses can be closely linked to a study carried out by Rychen D.S. and Salganik L.H (eds.) (2001) which revealed that a creative person should have divergent thinking, problem solving skills, originality, and ability to see or create new values. Considering the convergence on the need to nurture creativity in the curriculum and the literature encountered, constructs of problem solving, divergent thinking, research and innovation will find their place in the content of the proposed curriculum.

The primary school head teachers and teachers' responses on desired competencies classified under collaboration are presented in Figure 4.17

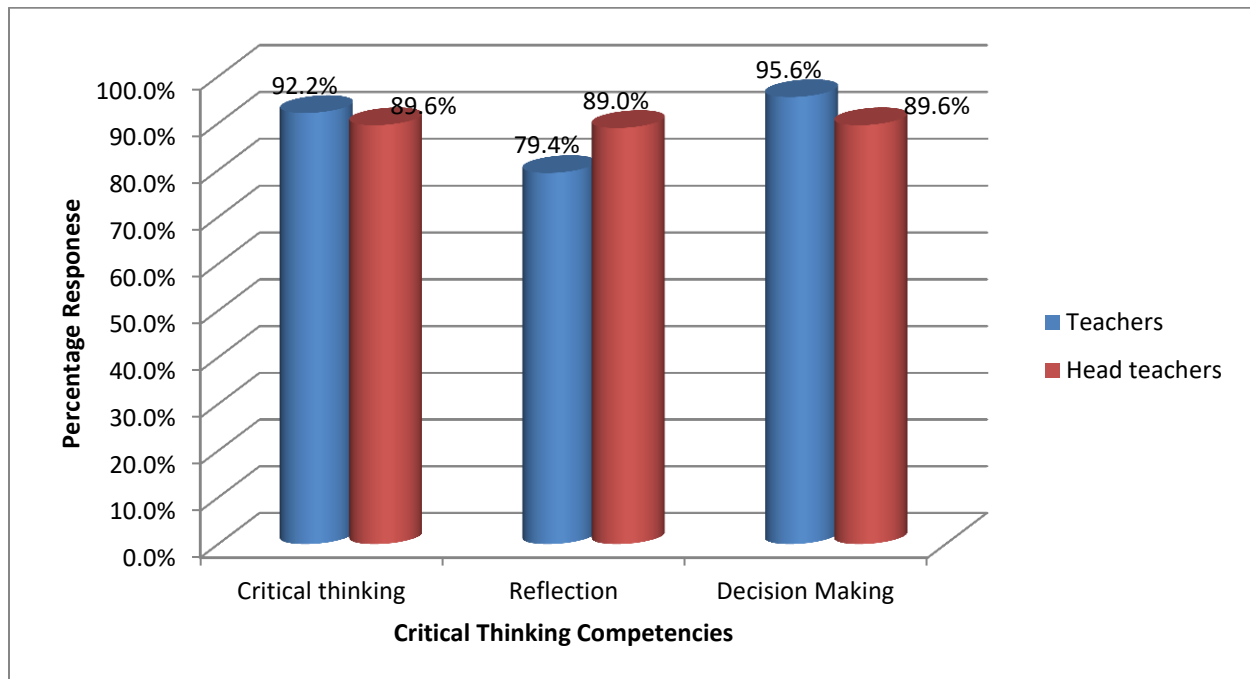
Figure 4.17: Head teachers and teachers' responses on competencies classified under collaboration.



Collaboration was considered a major desired competence with an overall percentage rating of 90%. This critical because if knowledge is learned to support the performance of skills then learners will satisfactorily excel in aspects of knowledge, skills and values (Soland et al 2013 and Voogt & Roblin, 2012).

The primary school head teachers and teachers' responses on desired competencies classified under critical thinking are presented in Figure 18

Figure 4.18: Primary head teachers and teachers' Responses on desired competencies under Critical Thinking



The percentage rating for critical thinking and related competencies by primary school head teachers was as follows; critical thinking 92.2%, reflection 79.4% and decision making 95.6%. The overall mean percentage rating for the three aspects was 89.06% while teachers rated the same aspects slightly below 90%. This is consistent with other competencies rated earlier hence should be emphasized in the curriculum. The results show a strong consensus among different respondents on the aspect of critical thinking, reflection and decision making, presumably learners to develop critical thinking skills and the ability to adapt to new learning situations as they transit from one sub sector of education to another.

4.3.6: Additional information on competencies

The acquisition of the above four 21st century skills will be pivotal in reforming the curriculum based on the competency based curriculum modules of instruction. The term 21st century skills refers to a broad set of knowledge, skills, work habits, and character traits that are believed by educators, school reformers, researchers, employers, and others to be critically important to

success in today's world, particularly in college programs and contemporary careers and workplaces. Generally speaking, 21st century skills can be applied in all academic subject areas, and in all educational, career, and civic settings throughout a student's life.

The following list provides a brief illustrative overview of the knowledge, skills, work habits, and character traits commonly associated with 21st century skills:

- Critical thinking, problem solving, reasoning, analysis, interpretation, synthesizing information
- Research skills and practices, interrogative questioning
- Creativity, artistry, curiosity, imagination, innovation, personal expression
- Perseverance, self-direction, planning, self-discipline, adaptability, initiative
- Oral and written communication, public speaking and presenting, listening
- Leadership, teamwork, collaboration, cooperation, facility in using virtual workspaces.
- Information and communication technology (ITC) literacy, media and internet literacy, data interpretation and analysis, computer programming
- Civic, ethical, and social-justice literacy
- Economic and financial literacy, entrepreneurialism
- Global awareness, multicultural literacy, humanitarianism
- Scientific literacy and reasoning, the scientific method
- Environmental and conservation literacy, ecosystems understanding
- Health and wellness literacy, including nutrition, diet, exercise, and public health and safety

These implies that competencies clustered under communication, critical thinking, collaboration and creativity should be emphasized in tandem with the vision 2030 and Sustainable Millennium Development Goals (SMDGs) critical for development of this country in Science and technology. The envisioned curriculum review will embrace the above skills in its content with the express objectives of producing functional products of our education system.

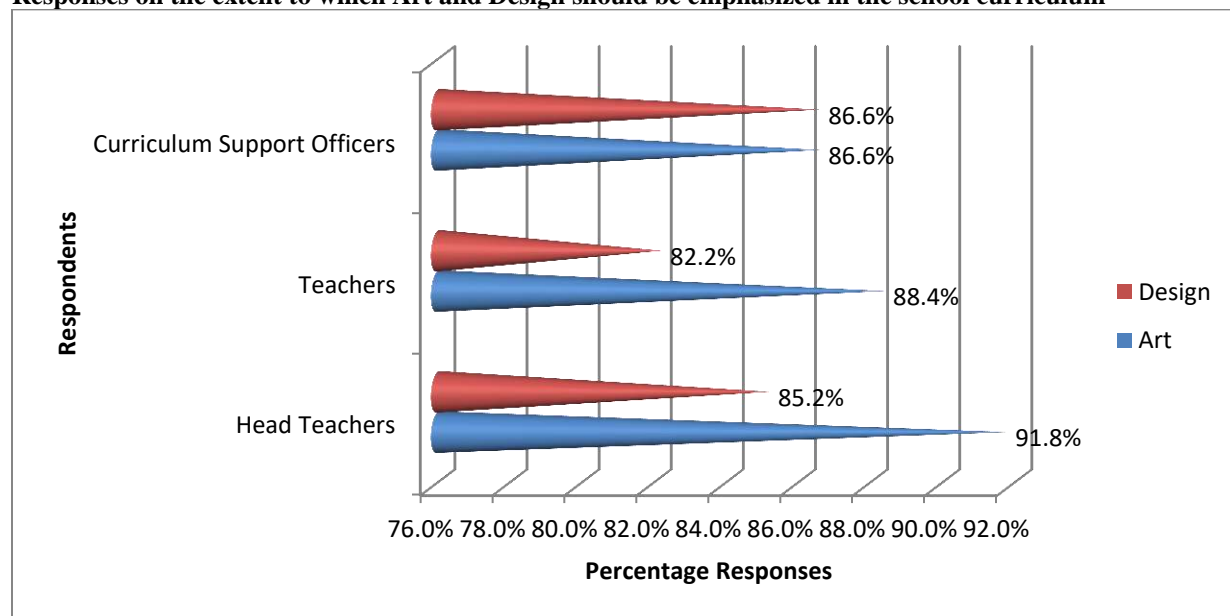
4.3.3 Learning Areas

The study sought to establish the extent to which learning areas identified should be emphasized in the school curriculum. Responses were obtained from heads of institutions, teachers and curriculum support officers. The respondents were asked to indicate the extent to which the identified learning areas should be emphasized in the school curriculum using a five-point likert scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=Some extent' and 'G= Great extent'. The different individual learning areas were clustered into broader learning areas and composite means for each of them calculated. The findings are presented according to the broader categorization.

4.3.1 Extent to which Art and Design should be emphasized in the school curriculum

The responses were classified according to levels and based on the broader categorization. Figure 4.19 shows responses from heads of schools, teachers and Curriculum support officers on inclusion of art and design in the primary school curriculum.

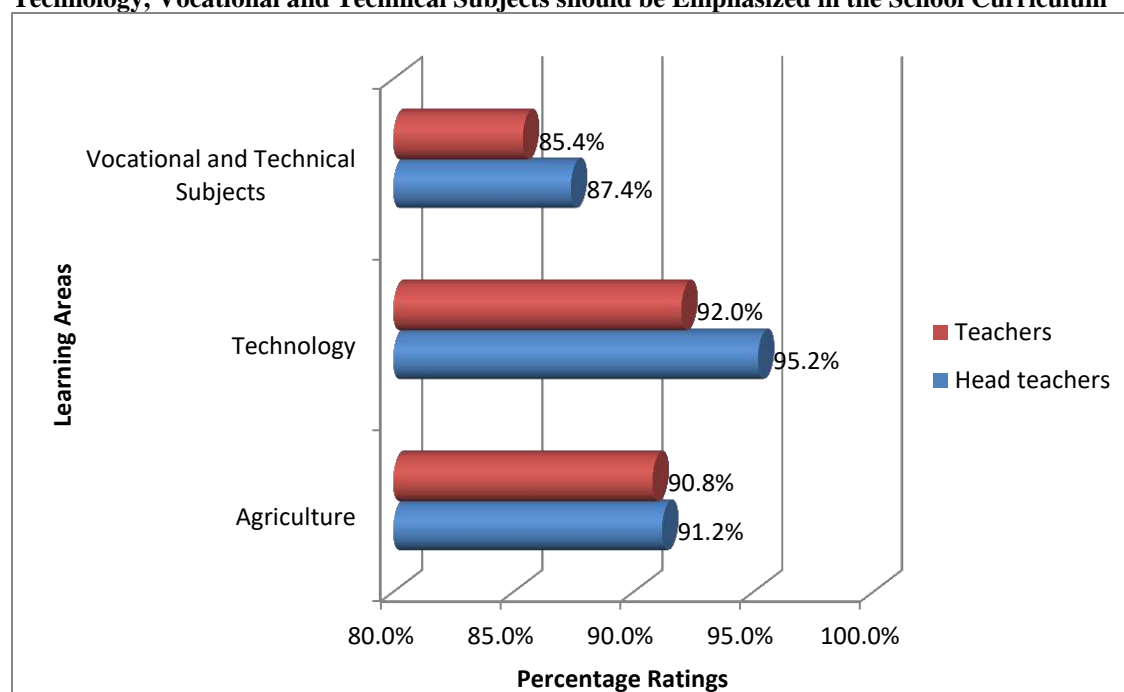
Figure 4.19: Head Teachers, Teachers and Curriculum Support Officers Mean Percentage Responses on the extent to which Art and Design should be emphasized in the school curriculum



Inclusion of design was rated highly with a mean percentage rating of 91.8% by the head teachers and 88.4% of the teachers in primary schools. On average, the percentage rating of inclusion of both art and design was high (above 80%) by the heads teachers. The curriculum support officers mean percentage rating of both art and design stood at 86.6% which was also high. This means that while designing the curriculum art and design should be highly considered.

The primary school head teachers, teachers' and curriculum support officers' responses on the extent to which agriculture, technology, vocational and technical subjects should be emphasized in the school curriculum Table 4.20.

Table 4.20: Head Teachers and Teachers Mean Percentage Responses on the extent to which Agriculture, Technology, Vocational and Technical Subjects should be Emphasized in the School Curriculum

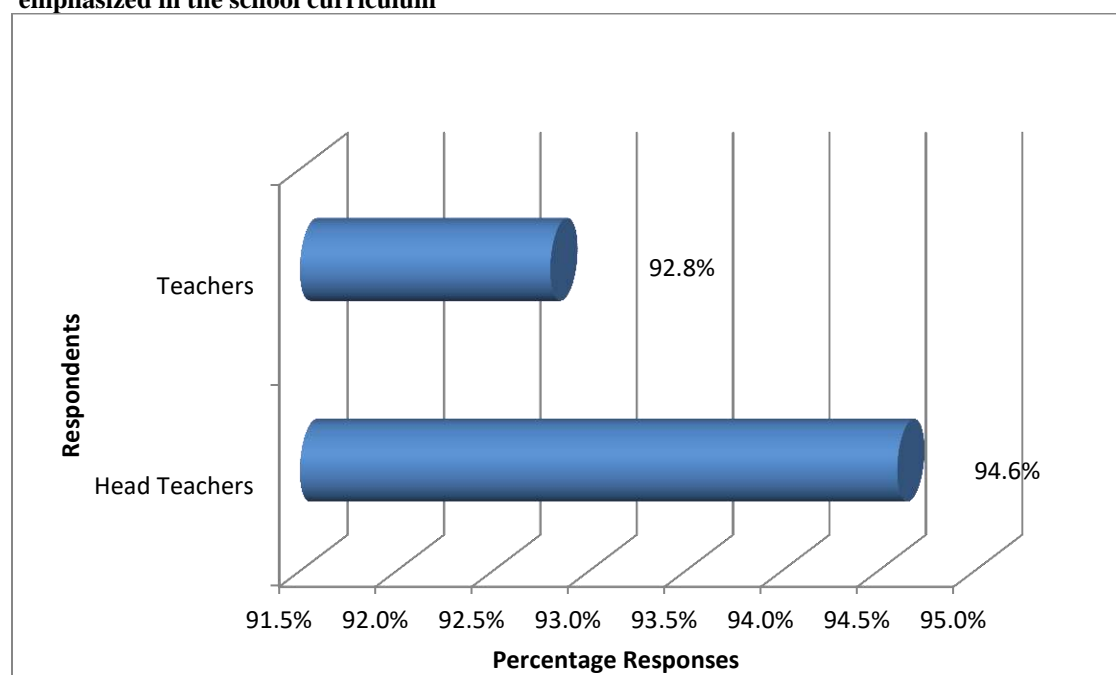


The head teachers 95.2% and 92.0% of the teachers strongly supported emphasis of technology in the school curriculum. Vocational and technical subjects were least rated at 87.4% of the head teachers and 85.4% of the teachers.

4.3.3.4: Extent to which Physical Education should be emphasized in the school curriculum

The heads teachers and teachers rated the extent to which Physical Education should be emphasized in the primary school curriculum. Their findings are presented in Figure 4.21.

Figure 4.21: Heads Teachers and Teachers Responses on the extent to which P.E. should be emphasized in the school curriculum

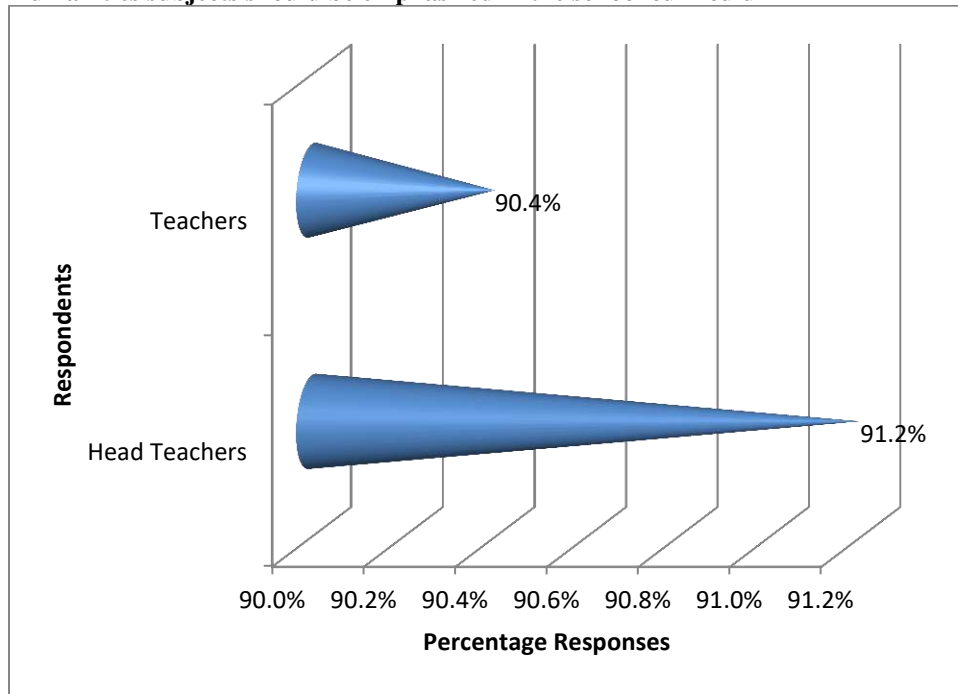


Majority of the head teachers (94.6%) and 92.8% of the teachers strongly supported emphasis of P.E. in the school curriculum. This indicated that P.E. is important in schools and thus should be emphasized in the envisaged primary school curriculum.

Extent to which Humanities should be emphasized in the school curriculum

The head teachers and teachers rated the extent to which humanities subjects should be emphasized in the school curriculum. Their findings are presented in figure 4.22.

Figure 4.22: Heads teachers and Teachers Percentage Responses on the extent to which Humanities subjects should be emphasized in the school curriculum

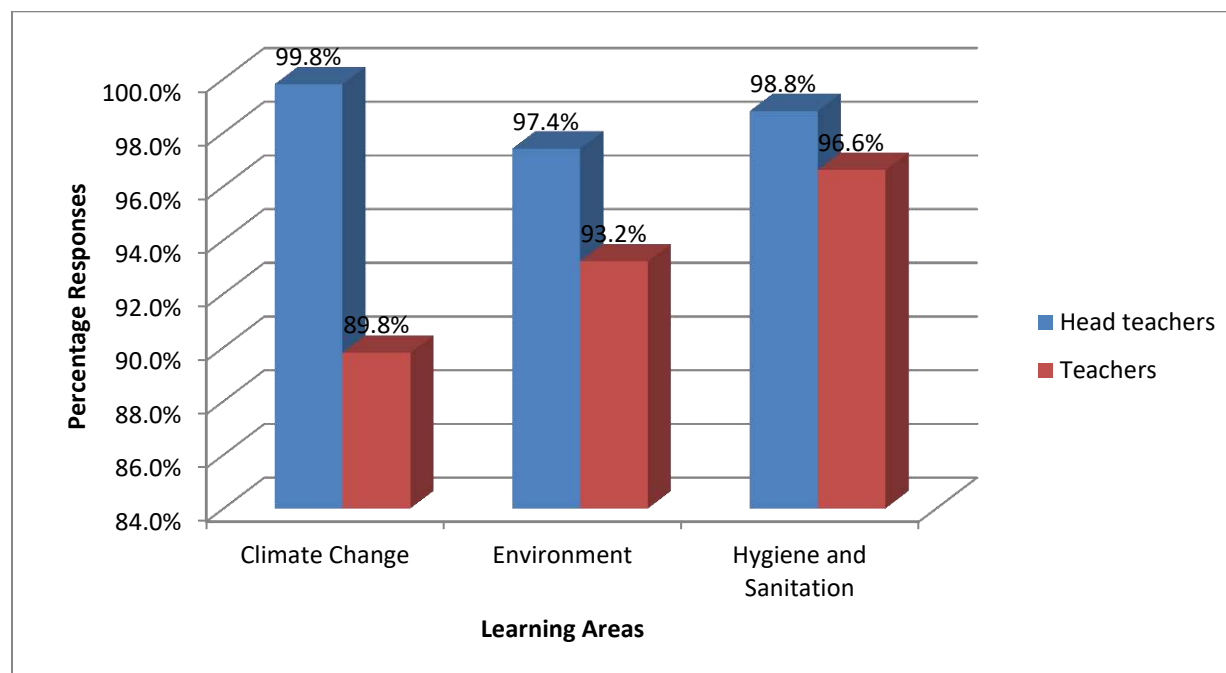


Humanities subjects was rated highest by the head teachers (91.2%) and teachers 90.4%. This implied that humanities subjects should be highly emphasized in the envisaged curriculum.

4.3.3.6: Extent to which Environment and Climate Change Aspects should be emphasized in the school curriculum

The head teachers and teachers rated the extent to which environment and climate change aspects should be emphasized in the school curriculum. Their findings are presented in Figure 4.23.

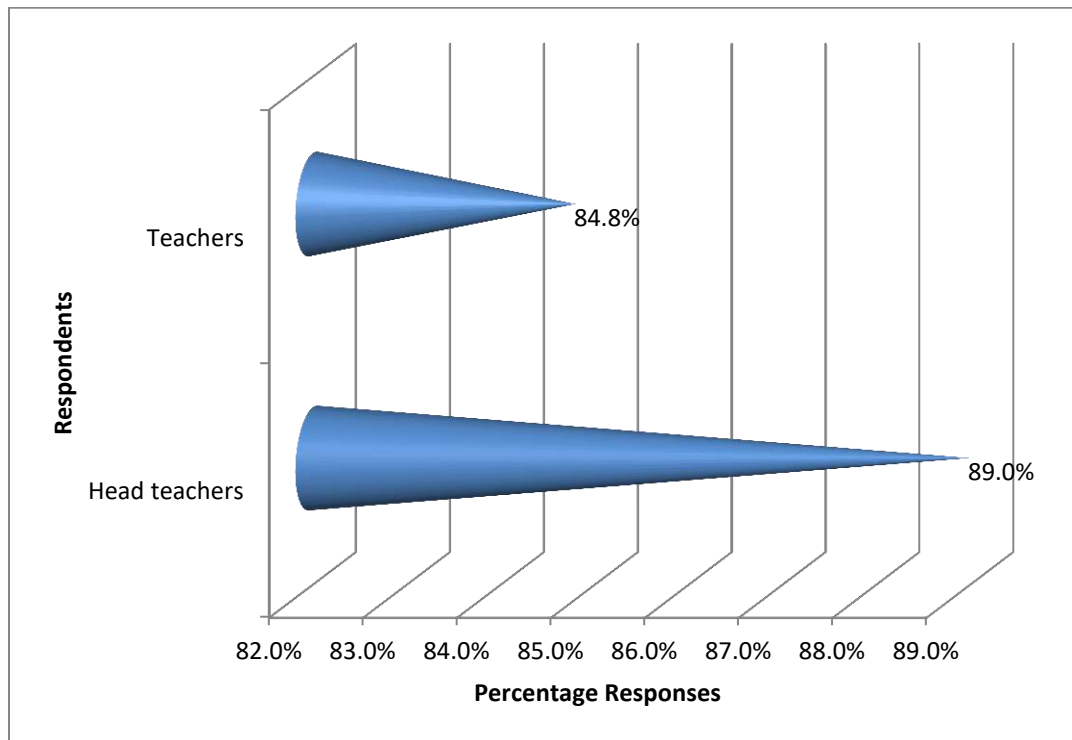
Figure 4.23: Heads teachers and Teachers Mean Percentage Responses on the extent to which Environment and Climate Change subjects should be emphasized in the school curriculum



Almost all the head teachers (99.8%) indicated that climate change subjects should be emphasized in the envisaged curriculum. The head teachers 97.4% and 98.8% indicated that environment and hygiene and sanitation subjects respectively should be emphasized in the envisaged curriculum.

Head teachers and teachers' responses on the extent to which entrepreneurship should be emphasized in the school curriculum are presented in Figure 4.24.

Figure 4.24: Heads teachers and Teachers Mean Percentage Responses on the extent to which entrepreneurship subject should be emphasized in the school curriculum

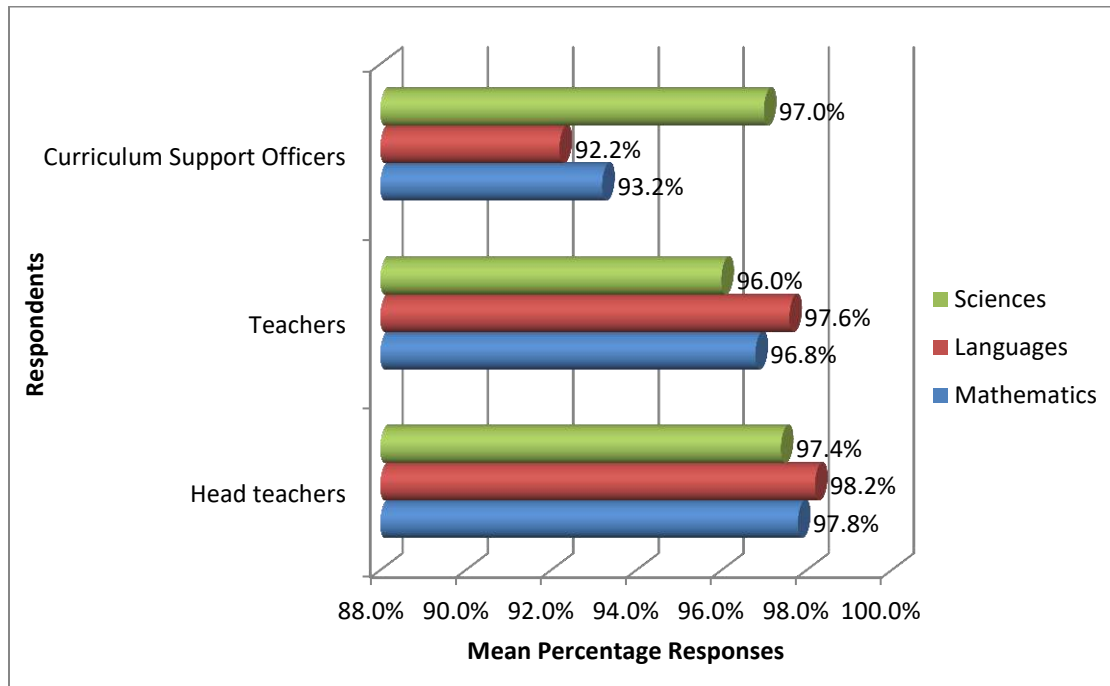


Majority of the head teachers (89.0%) and teachers (84.8%) indicated that entrepreneurship should be emphasized in the envisaged curriculum.

4.3.3.10: Extent to which 21st Century subjects should be emphasized in the school curriculum

The head teachers, teachers and curriculum support officers rated the extent to which mathematics, languages and sciences subjects should be emphasized in the school curriculum. Their findings are presented in Figure 4.25

Figure 4.25: Head teachers, Teachers and Curriculum Support Officers Responses on the extent to which 21st Century subjects should be emphasized in the school curriculum



The findings shows that majority of all the respondents (above 90%) supported emphasizes of mathematics, languages and sciences in the envisaged curriculum. The head teachers, teachers and curriculum support officers overall mean percentage ratings for the subjects were 97.8%, 96.8%, and 94.1% respectively.

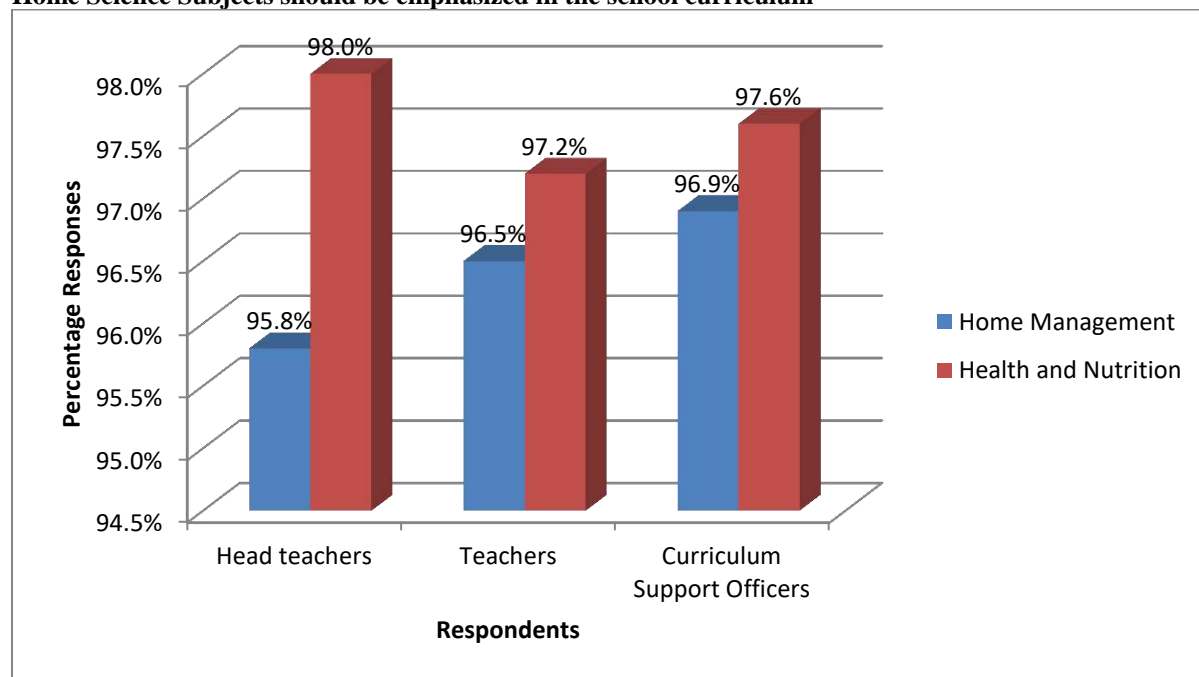
The importance of mathematics, sciences and languages to the assimilation and acquisition of the 21st century skills is highly emphasized in the country's blue- print for economic development which flags the teaching of mathematics, languages and sciences as being vital to the country's development. Studies have also shown that countries like Singapore and Malaysia with high

technological development have put great emphasis on mathematics and sciences as a foundational requirement for their technological advancement.

4.3.3.12: Extent to which Home Science subjects should be emphasized in the school curriculum

The head teachers, teachers and curriculum support officers rated the extent to which home science subjects should be emphasized in the school curriculum. Their findings are presented in Figure 4.26.

Figure 4.26: Head teachers, Teachers and Curriculum Support Officers Responses on the extent to which Home Science Subjects should be emphasized in the school curriculum



Inclusion of health and nutrition was rated highly with a mean percentage rating of 98.0% by the head teachers, 97.6% of the curriculum support officers and 97.2% of the teachers. On average, the mean percentage rating of inclusion of the home science subjects was high by 96.9% of the

head teachers, 96.9% of the teachers and 97.3% of the curriculum support officers. This means that while designing the curriculum home science subjects should be highly considered.

4.3.4 Learning approaches

Primary schools head teachers and teachers were also presented with items in a questionnaire which sought to establish the level at which they felt that different learning approaches should be used to deliver the primary level curriculum. Likert scale was used to establish the frequency at which they would prefer using the different learning approaches with options of never, rarely and always on the scale. Their responses were analyzed and presented in form of tables with percentage ratings and average percentage ratings per cluster.

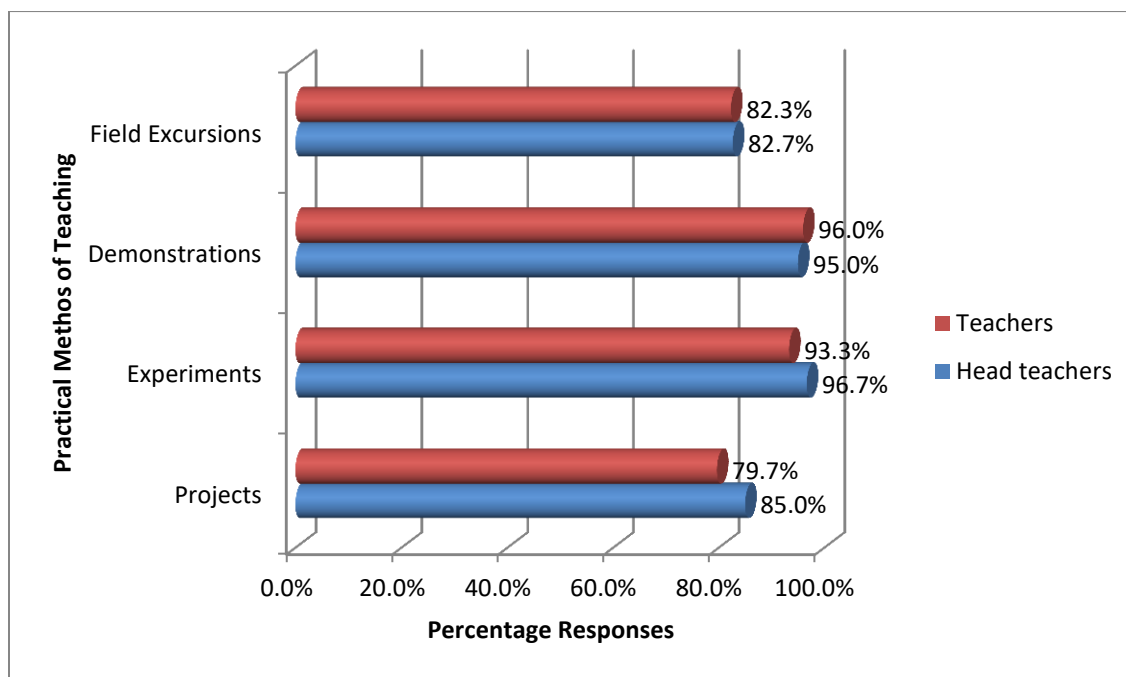
4.3.4.1 21st Century teaching strategies

The head teachers rated brainstorming at 92.67% while discussion had a percentage rating of 95.3%. A larger proportion of primary school head teachers preferred use of discussion method to brainstorming. Teachers rated discussion highly with a percentage rating of 96.3%. This compares very closely with the level of rating this approach that was given by the head teachers at 95.3%. Teachers had a rating of 87.70% on brainstorming and this was a bit lower than the rating given by their head teachers. It is though worth noting that both approaches had relatively high percentages in terms of preference by the respondents. This shows that both the head teachers and teachers highly prefer the use of discussion method. During discussions, learners sharpen their communication skills and they also learn how to collaborate.

4.3.4.2: Practical Methods of teaching

Primary school head teachers and teachers responded to a set of items in a questionnaire regarding the extent to which they would want to adopt practical based methods of teaching. Their responses are presented in Figure 4.27

Figure 4.27: Head teachers and Teachers Responses on use of Practical Methods of teaching



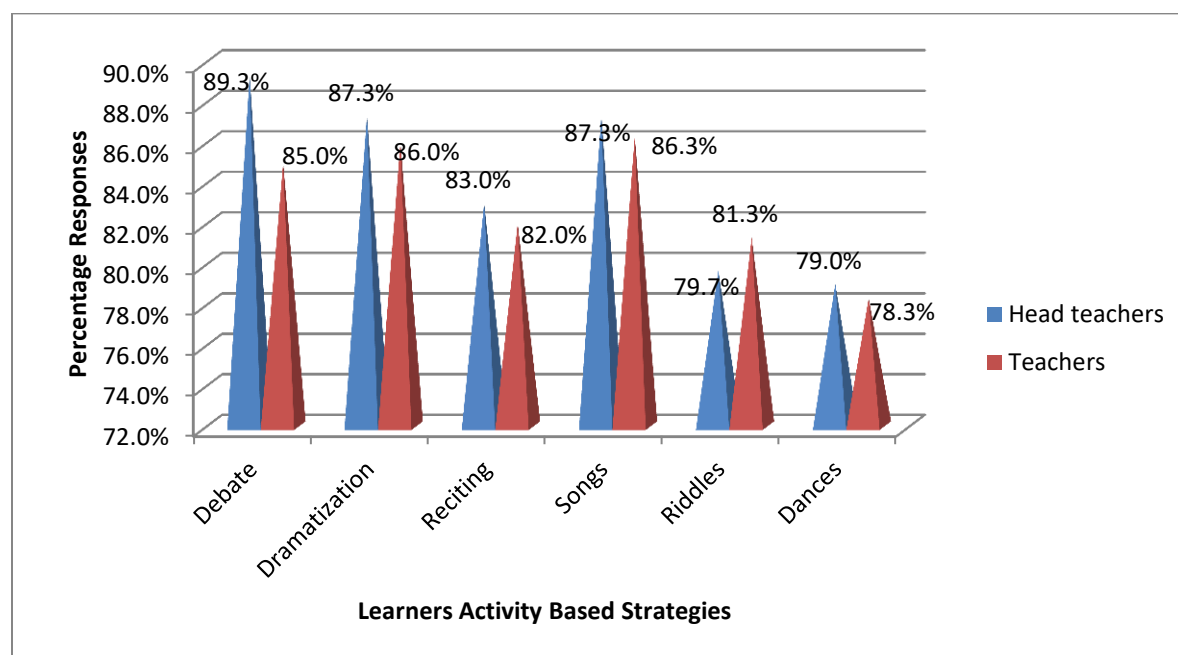
Majority of the primary school head teachers (96.7%) rated experiments high while teachers rated use of demonstrations highly (96.0%). All the same the two approaches were rated highly by over 90% of the head teachers and teachers. This implies that experimentation and demonstrations should be emphasized while delivering the primary school curriculum as a large proportion of head teachers and teachers shows high preference in use of this method. When demonstration and experimentation methods are used to deliver the curriculum, it is likely that

important skills will be acquired by the learners hence making them competent in performing some certain tasks in their day-to-day lives. Use of field excursions and projects had ratings of 82.7% and 85.0% respectively by the head teachers and 82.3% and 79.7 % respectively by teachers.

4.3.4.2: Learners' Activity-Based Strategies

Primary school teachers responded on the extent to which they would want to adopt learners' activity-based strategies of teaching. Their responses are presented in Figure 4.28.

Figure 4.28: Head teachers and Teachers responses on the extent to which Learners' activity strategies should be used in delivering the primary school curriculum (N=534)



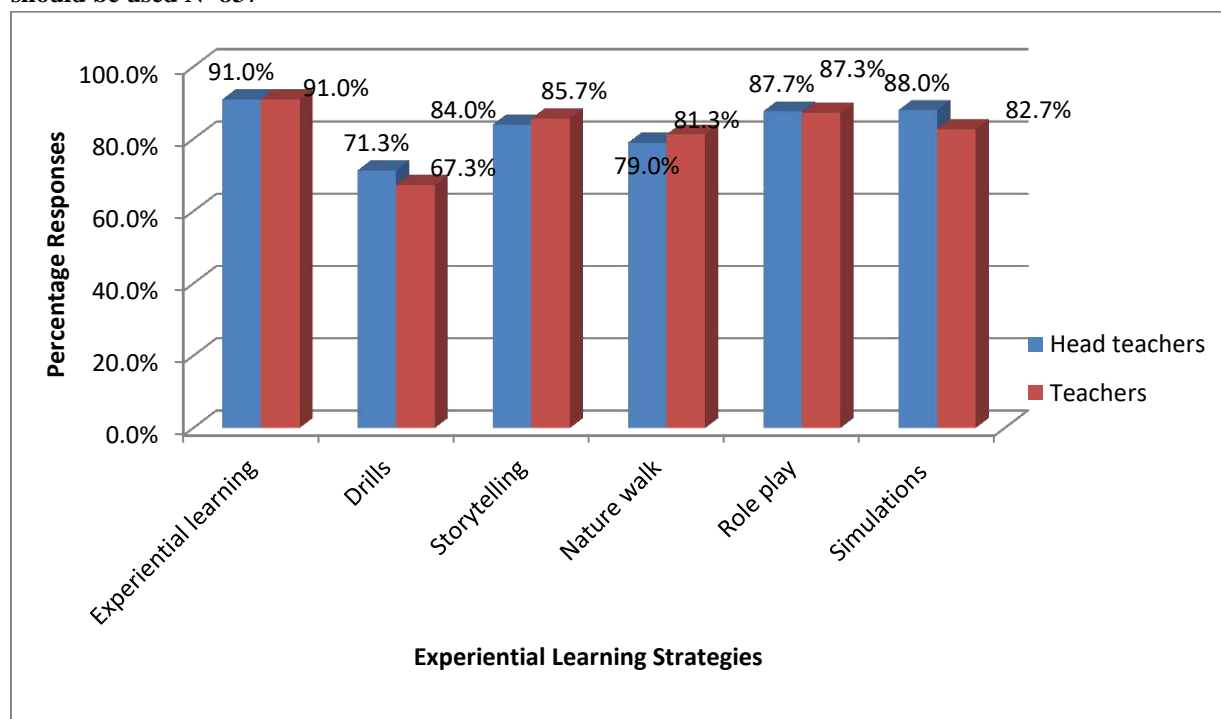
Debate and dramatization featured prominently with ratings of 89.3% and 87.3% respectively by the head teachers while for the teachers' songs and dramatization featured prominently at 86.3% and 86.0% respectively. All the same debate, dramatization and songs were highly rated by over 85% of the head teachers and teachers. This means that both head teachers and teachers at this level highly prefer the use of these three learner-centered approaches. Learner-centred approaches are deemed fit for use in a competence-based curriculum because they provide

opportunities for learners to use individualized materials, have flexible learning time and to get continuous feedback from the facilitator. Reciting, riddles and dances had percentage ratings of 83.0%, 79.7% and 79.0% respectively by the head teachers whose ratings were very close to the teachers at 82.0%, 81.3% and 78.3% respectively.

4.3.4.3: Experiential Learning Strategies

Primary school level teachers' responses on the extent to which they would want to adopt experiential approaches of learning are presented in Figure 4.29.

Figure 4.29: Head teachers and Teachers responses on the extent to which Experiential learning strategies should be used N=837



A similar number of head teacher and teachers highly rated experiential learning at 91.0% and this was followed by role plays with a percentage rating of 87.7% by head teachers and 87.3% by teachers. Story telling had a rating of 84.0% by head teachers and 85.67% by teachers. These three approaches were rated highly and it implies that they are fit for use while delivering the primary level curriculum. Comparing the rating given to storytelling by their secondary school

counterparts, the rating is higher in the primary level and this implies that teachers at this level would prefer use of the storytelling approach and probably this is due to the age of the learners they deal with. Simulations, nature walk and drills were given slightly lower ratings by both the head teachers and teachers probably again due to the tender level of the learners.

4.3.4.4: Lecture method

The head teachers rated this approach at 61.67% while the teachers rated it at 56.67%. Comparatively, this rating is relatively low. Lecture is one of the traditional methods of teaching where the teacher acts as the “tower of knowledge”. With the technological advancement, learners are able to access knowledge on their own and therefore this assumption that the teacher is the one who knows everything no longer holds. It therefore implies that lecture method will not find a place among the preferred learning approaches if Kenya as a country intends to deliver the competence-based curriculum effectively. Furthermore, lecture method does not promote active participation by the learners during the learning process

4.3.4.5: Other learning approaches to be used in delivering the primary level curriculum

Respondents were given an opportunity to state any other method that they thought would be used to deliver the primary level curriculum. Other learning approaches as given by the primary school head teachers include giving of assignments, conducting research, competing in answering questions in various schools, conditioning, co-operative learning, drama festivals, virtual tours, peer teaching, question and answer, reading story books, use of resource persons, student facilitation, free play and apprenticeship. The teachers had similar suggestion like those of the head teachers in use question and answer method and making use of resource persons. The teachers also suggested use of case studies, team teaching, observation, e-learning, games and discovery method.

4.3.6 Assessment

Primary Teachers

Primary school head teachers and teachers were asked to respond to the effectiveness and validity of the various assessment forms used in our school system on to determine learners’

outcomes. The different forms of assessment were clustered into formative and summative and overall mean rating for each of them calculated. The responses were constructed in the form of a Likert scale with “level of extent” being the construct of measurement. Their responses are presented as in Table 4.7:

Table 4.7: Head teachers and Teachers responses on the extent to which various forms of assessment contribute to effective measurement of learners’ achievements at Primary level

Formative assessment	Percentage rating		Summative assessment	Percentage rating	
	Head Teachers	Teachers		Head Teachers	Teachers
Continuous assessment	97%	95%	End of term examination	90.4%	92%
Project work	85.2%	79%	End of year examination	88. %	89.2%
			National examination	85%	83.6%
			Project work	85.2%	79%
Overall Mean Percentage Ratings	91.1%	87%	Overall Mean Percentage Ratings	87.15%	85.95%

The head teachers’ and teachers rated continuous assessment highest at 97% and 95% respectively followed by end of term examination at 90.4% and 92% respectively. The least preferred form of assessment by the head teachers was national examinations which were rated at 85% while teachers least preferred project work at 79%. Other forms of assessments suggested by the head teachers and teachers were aptitude test, assessment of research, co-curricular assessment observation and oral assessment.

4.3.6. Nurturing the Potential and Talents of Learners

The head teachers, teachers and curriculum support officers indicated the extent to which various strategies can be used to nurture the learners potential and talents. According to the head teachers, nurturing of learners potential and talents may be best enhanced through curriculum enrichment and games and sports at a percent rating of 96.0% and 94.9% respectively. Also featured prominently as strategies for nurturing learners potential and talents were; special schools for gifted and talented (94.3%), clubs and societies(90.9%), ability grouping and

mentorship programs(90.8%), cooperative learning, competition among schools and academic conferences (90.3%) and special needs classes(90.2%).

The responses from teachers at primary level on the strategies to be used to nurture potential and talent in learners indicated that games and sports was the most preferred strategy at a percent rating of 96% with curriculum enrichment coming second at 93.4% a case similar to that of the head teachers. Clubs and societies received a high rating of 91.6%. There was convergence of views in suggestions of strategies for nurturing the learners potential and talents among the head teachers and teachers. Cooperative learning, competition among schools, academic conferences, ability grouping and mentorship programs as well as special needs classes were also considered vital for nurturing learners' talents by the primary school teachers at a percent rating of 89.7%, 89.4% and 88.2 % respectively. Early admission to school and; accelerated learning and advanced placement had a lower ranking at 74.9% and 81.4% respectively by the head teachers and 67.8 % and 78.2% respectively by the teachers.

A similar situation was observed from the 33 curriculum support officers who rated the following strategies on nurturing the learners potential and talents as follows ; curriculum enrichment (95.2%), special needs classes(94.6%), special schools for gifted and talented(94%), ability grouping and mentorship(92.8) and clubs and societies (92.2%). This reflects a clear position for the inclusion of these areas in the new curriculum. The other strategies 'which were preferred by the curriculum support officers included; games and sports 89%), cooperative learning, competition among schools, and academic conferences (84.6%) and early admission to schools (84.2%) and accelerated learning and advanced placement at (81.2%).

Curriculum enrichment the most preferred strategy according to Renzulli and Ries, 2009 as it extends the mastery of the curriculum by providing a series of planned activities to reinforce the curriculum content by enriching the learning environment, learning experiences and teaching approaches. Identifying and nurturing the learners potential and talents through curriculum is critical for the learner self-fulfillment and for the country to realize economic development and therefore, the envisaged new curriculum should nurture every child potential. Children blossom

through the academic curriculum when sports and arts are integral to their learning environment. For a long time intelligence of a child has been measured by the grades, ranks and marks scored in school examinations. Many parents reprimand or give up on their children who do not measure up to this yardstick. The result of this is frustration on the part of the learners and negligence on the part of the parents with serious consequences at both individual and societal level. Desired psychological constructs such as a sense of confidence, self-awareness and self-esteem fail to be nurtured and developed in such children. Every child has potential, what really matters are the child's ability to turn potential into real, tangible and measurable performance. The reality is that there are multiple intelligences and infinite potential that each person possesses. Thus, every child is 'intelligent' in his/her own way. It is for the afore going that nurturing potential and talent should be a major area of focus in the intended new curriculum. The new curriculum and by extension schools will have to embed within them strategies that will enable every learner to harness their potential through well-developed learning activities that will lead to the identification and subsequent development of these areas of potential and talent.

4.3.7 Contemporary /Emerging Issues

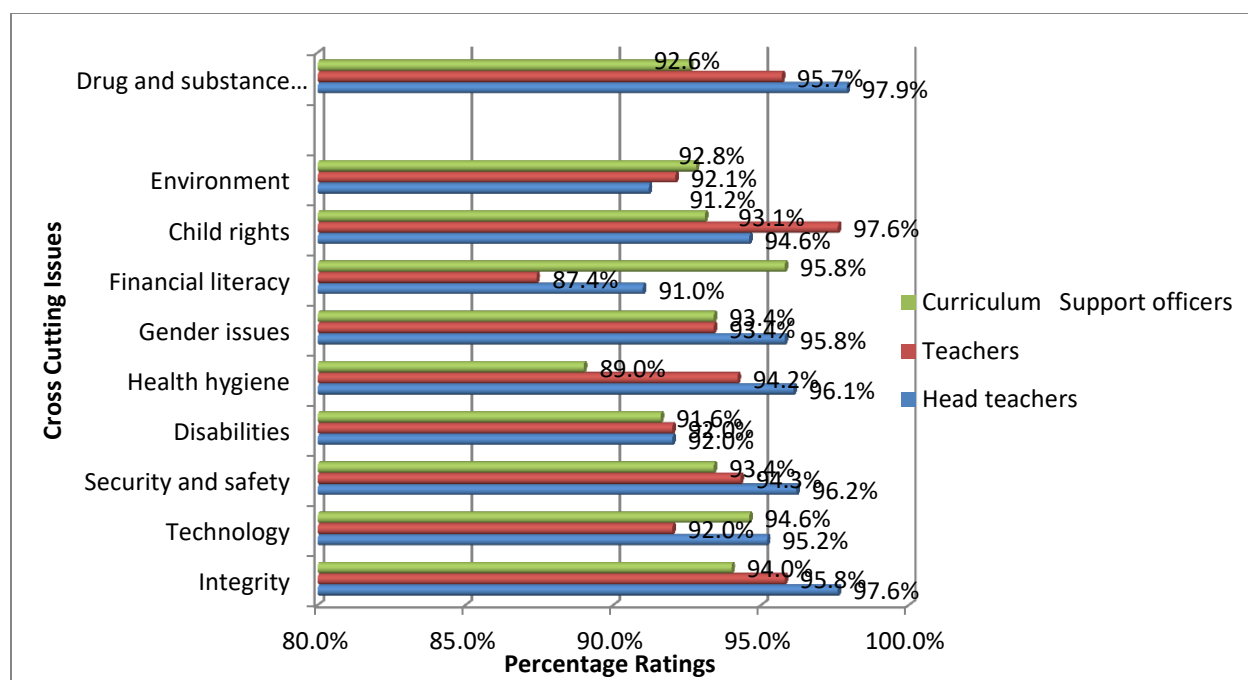
Cross cutting issues are matters that touch a number of different aspects of the society, on general principles such as democracy, human rights, good governance, children's rights, gender equality, population and family life education, poverty alleviation, environment and development, to mention but a few. Cross-cutting issues are commonly defined as topics which, by their very nature, have a strong impact on all operations in a given field and, therefore, must receive special attention hence their inclusion in the intended new curriculum. These issues cut across all the levels of education. Hence they need a lot emphasizes in the future curriculum. To address crosscutting issues and also to make learning meaningful, hence to enable learners develop deep understanding of what they learn, teachers need to use participatory and cooperative teaching methods. Participatory and cooperative teaching methods help learners develop critical thinking, reflect on their own situations and get insights of their own situations.

The various cross cutting issues were identified from different policy documents such as : Kenya constitution 2010,vision 2030, Education for Sustainable development(ESD),Child Act(2001),

Millennium Development Goals (MDGs), Sustainable Development Goals (SDGs), Sessional paper no 1 of 2015 among others. Each of these documents emphasizes different aspects of the cross cutting issues and education has been identified as the wheel to nurture them among the youth.

The Constitution is the supreme law of Kenya and gives more clarification on the direction education should take in several chapters. Chapter 2 and 6 deals with principles of governance, leadership and integrity; chapter 4 deals with bills of rights which include child rights; part 2 deals with environment; part 3 deals with specific application of rights like children rights and persons with disabilities; chapter 5 part 2 deals with environment and natural resources; chapter 12 deals with national security. All these are cross cutting issues and if they are not in cooperated in the future curriculum, it will out rightly be declared unconstitutional. The other cross cutting issues like technology, health issue and drug abuse are emphasized in the blue print of developing the country to a middle level economy, the Vision 2030. A few of the cross cutting issues have been included in the current curriculum but in the envisaged curriculum, they need to be emphasized. The primary school head teachers, teachers and curriculum support officers were required to rate the extent to which various cross cutting issues should be emphasized in the envisaged primary school curriculum. Their responses are presented in Figure 4.30.

Figure 4.30: Head Teachers, Teachers’ and Curriculum support officers responses on extent to which various cross-cutting issues should be addressed in the primary school curriculum.



On average 94.8%, 93.4% and 93.0% of primary school head teachers, teachers and curriculum support officers respectively affirmed the need to have cross-cutting issues addressed by the curriculum. The highest rated cross-cutting issues was drug and substance abuse by 97.9% of the head teachers, child right by 97.6% of the teachers and financial literacy by 95.8% of the curriculum support officers. The least preferred cross-cutting issue by the head teachers was environment at 91.2%, financial literacy by teachers at 87.4% and health and hygiene by curriculum support officers at 89%.

All the above issues need to be addressed at all levels of the curriculum and are supported by various government and international policy documents. For example issues of security are a thorn in the flesh worldwide especially with the advent of radicalization among the youth. Technology is the way of the future in the global village and that is why it has been emphasized in vision 2030. Health and environment have been given a lot weighting in the social pillar of the vision 2030. It is important to note that some 21st cross cutting issues like financial literacy were given some weighting by the secondary teachers. Drug and substance abuse is a very big issue worldwide and the youth need to be informed about the vice to make informed decision. That is why the Government has formed NACADA to coordinate activities of reducing or eradicating

the menace. Corruption is cancer in the Kenyan society and the country is rated very highly. The youth need to be informed about the dangers of the vice. The government has reorganized HIV as a disaster which is reducing the youthful and productive population.

4.3.8 Learning Resources

4.3.8.1 Introduction

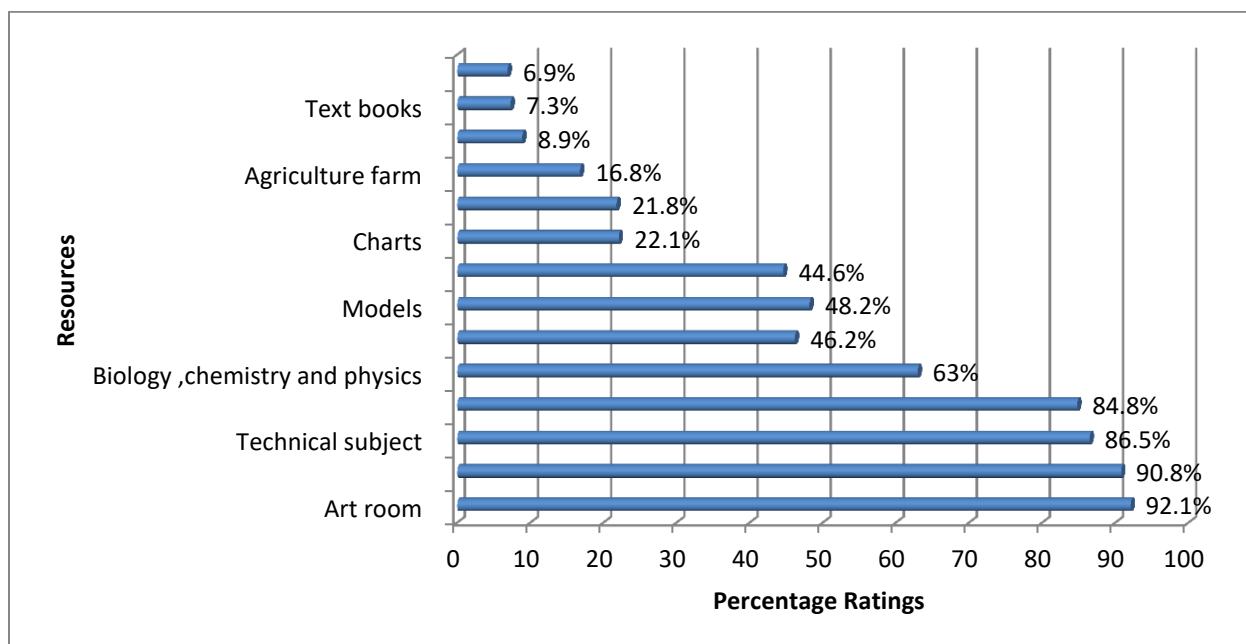
School resources are geared towards enhancing learning, teaching and content delivery. Educational resources are the teaching and learning items, structure materials and human resources that assist the teacher to effectively and efficiently deliver content. In recent years there has been a shift among educationists from the traditional teacher-centered learning to student-centered learning. It has been established that effective instruction is more allied to active participation in the teaching learning process (as in laboratory work) than to passive participation (as during a lecture). This shift in pedagogy calls for use of different strategies to effectively engage learners to acquire requisite knowledge, skills and attitudes.

In line with the Education for All (EFA) initiatives, Millennium Development Goals (MDG's), Sustainable Development Goals (SDG), Education for Sustainable Development (ESD), the Constitution of 2010, Sessional paper no 1 of 2015, the realization of Kenya's Vision 2030, of providing a globally competitive quality education, training and research for development, will be achieved through adoption of pedagogy that emphasizes exploration, collaboration, experimentation, creativity, critical thinking and innovation. This calls for the provision of relevant resources that promote these 21st century skills and competencies.

4.3.8.2 General Teaching and Learning Resources

The survey sort to establish the availability of resources which are important in implementing and actualizing a competency based curriculum. Information was obtained by observing the available resources in the schools. Figure 4.31 shows the availability of general teaching and learning resources in primary schools.

Figure 4.31: None Availability of General Teaching and Learning Resources



The findings show that art room (92%), music rooms (90.8%), technical subjects (86.5%), home science (84.8%) and science laboratory (63%) were observed and rated highly as unavailable in the sampled institutions.

In the provision of a globally competitive quality education and training this will be possible through adoption of pedagogy that emphasizes exploration, collaboration, experimentation, creativity, critical thinking and innovation. This calls for the provision of relevant resources that promote these 21st century skills and competencies. But from the discussion above this will be impossible if the resources are not available and even if they are available, they are inadequate.

4.3 Summary

The following summary was teased from various themes

4.4.1 Societal Needs

Based on the respondents views the most desired societal needs were; environmental protection, Social development, Patriotism, Economic and Industrial development ranked between 100% and 92.50%.

4.4.2 Competencies

Based on the responses of the head teachers and teachers, it can be deduced that there was consensus among the respondents on competencies such as creativity, innovation, collaboration and critical thinking which were ranked highly above 90% .

4.4.3 Talent identification and development

The head teachers and teacher rated highly games and sports, curriculum enrichment, clubs and societies, special schools for talented and gifted with above 92% as opposed to early admissions that was ranked least.

4.4.4 Content and learning Areas

Both primary head teachers and teachers emphasized to great extent of technology ,Agriculture and Vocational and technical subjects ,which rated at 95.2% ,95.8%) and 87.4 respectively, besides the sciences, languages, and humanities.

4.4.5 Pedagogical Approaches

The findings on pedagogical approaches preferred by SNE primary teachers and head teachers were, discussions100%, experiments 93.33%, brainstorming 90.33% and demonstrations 90%.

4.4.6 Teaching and Learning Resources

The observation of teaching and learning resources at primary level showed that Art room, music room, technical subject equipment and home science rooms were not available by above 80% in most primary schools

4.4.7 Assessment

The most preferred form of assessment was formative with Continuous Assessment Tests and End of term Examinations being ranked at 95% and 92% by teachers and 97.2% and 94.2% by head teachers. However project work was highly rated by head teachers. Summative assessment modes were rated slightly above 80%.

4.4.8 Contemporary/Emerging Issues

The head teachers and teachers at primary level were in agreement with regard to what should be emphasized into the curriculum that is integrity rate d at 96.9%, followed by health and hygiene at 95.3%, environment and child rights ranked above 95%.

4.5 SNE Primary Level Needs

4.5.1 Introduction

This chapter presents the findings and discussions on the following themes in line with survey objectives: Societal Needs, competencies, learning Areas, Learning Approaches, Assessment modes, Nurturing talents, Cross Cutting and Learning resources essential for 21st Century schools.

Aligning the curriculum to address the aspirations of the Constitution, Vision 2030 and the East African Community treaty should be prioritized. It has been proposed that the content for basic education should be designed with a view of equipping the learners with relevant knowledge that emphasizes on technology, innovation and entrepreneurship (Vision 2030), the development of their full capacities, living and working in dignity, enhancing the quality of their lives, making informed decisions and continuing with learning as a lifelong engagement.

This was re-emphasized in the Task Force recommended major reforms of the curriculum to align it with the Constitution and to ensure that the aspirations of Vision 2030 are met; Structure the curriculum within a skills and competences framework that identifies the knowledge, skills and competences all learners will acquire, and which will provide both vertical and horizontal coherence.

In line with the Education for All (EFA) initiatives, Millennium Development Goals (MDG's), Sustainable Development Goals (SDG), Education for Sustainable Development (ESD), the Constitution of 2010, Sessional paper no 1 of 2015, the realization of Kenya's Vision 2030, of providing a globally competitive quality education, training and research for development, will be achieved through adoption of pedagogy that emphasizes exploration, collaboration, experimentation, creativity, critical thinking and innovation. This calls for the provision of relevant resources that promote these 21st century skills and competencies.

Cross cutting issues are matters that touch a number of different aspects of the society, on general principles such as democracy, human rights, good governance, children's rights, gender equality, population and family life education, poverty alleviation, environment and development, to mention but a few. Cross-cutting issues are commonly defined as topics which, by their very nature, have a strong impact on all operations in a given field and, therefore, must receive special attention hence their inclusion in the intended new curriculum. These issues cut across all the levels of education. Hence they need a lot emphasizes in the future curriculum To address crosscutting issues and also to make learning meaningful, hence to enable learners develop deep understanding of what they learn, teachers need to use participatory and cooperative teaching methods. Participatory and cooperative teaching methods help learners develop critical thinking, reflect on their own situations and get insights of their own situations.

Responses were sought from Primary level SNE teachers and Head teachers who were asked to indicate the extent to which various items measuring the themes should be emphasized in the school curriculum using a five-pointer Likert Scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=Some extent' and 'G= Great extent'. The composite means for each item were worked out using SPSS, then converted into percentage mean rating .

4.5.2 Societal Needs

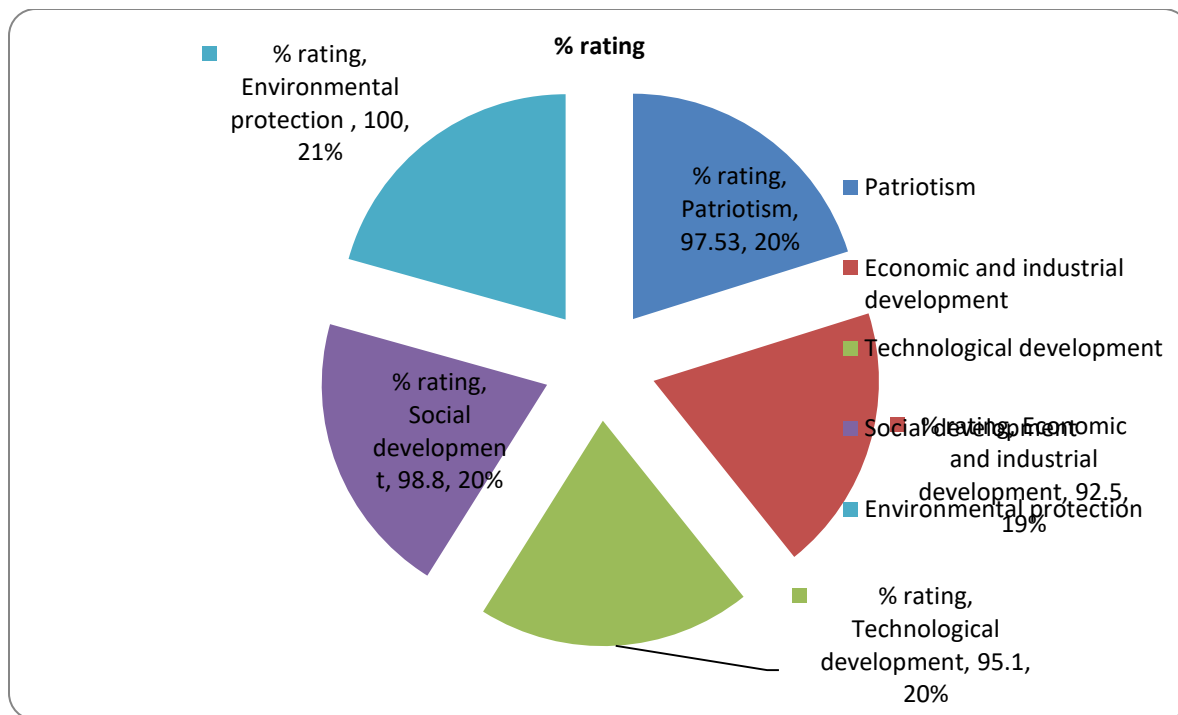
It is view of the aforementioned that the study sought the views of the stakeholders in reforming the countries curriculum that below are the findings with regard to the extent to which various aspects of societal needs should be emphasised.

Table 4.3.1.2: Primary schools special needs education teachers' responses to what extent the primary level curriculum should emphasise societal needs

Societal Needs aspects	% rating
Patriotism	97.53
Economic and industrial development	92.50
Technological development	95.10

Social development	98.80
Environmental protection	100.00
Average percentage	96.79

Figure 4.3.1.2: Primary schools special needs education teachers' responses to what extent the primary level curriculum should emphasise societal needs



The respondents were required to give their responses in regards to the extent to which societal needs should be emphasised in the curriculum and on average all were in agreement at 96.79%. The response rated Environmental protection highest at 100%, followed by Social development at 98.80%, Patriotism at 97.53%, Technological development at 95.10% and Economic and Industrial development at 92.50% .

Due to the variations in levels of the development of the learners and areas of specialisations of the respondents associate with the groups gave emphasis laid on the aspects varied accordingly.

4.3.2 Competencies

Table 4.3.2.1: Summary distribution of responses on desired competencies classified under Communication

<i>Competencies</i>	<i>N=20</i>	<i>N=164</i>	<i>N=20</i>
	<i>SNE Pri.H/Trs(%)</i>	<i>SNE Pri.Trs(%)</i>	<i>SNE EARC(%)</i>
Communication	90.80	97	96.6
Management	94.00	88.6	85
Leadership	92.8	92.8	96.2

The teachers sampled from primary from Special schools rated above 90% all the competencies such as communication, management and leadership.

This view concurs with the responses of the SNE head teachers and teachers primary level whose rating was above 90% on the aspects of communication, management and leadership. These competencies are considered critical path in promoting the acquisition of key competencies to be achieved through curriculum reforms. The Constitution affirms equitable, quality and efficiency in provision of education to all learners including SNE which seem to be a desire for teachers and head teachers across all levels.

Table 4.3.2.2: Shows a range of responses on Competencies classified under Creativity, by the Head teachers and teachers in Public and Private schools.

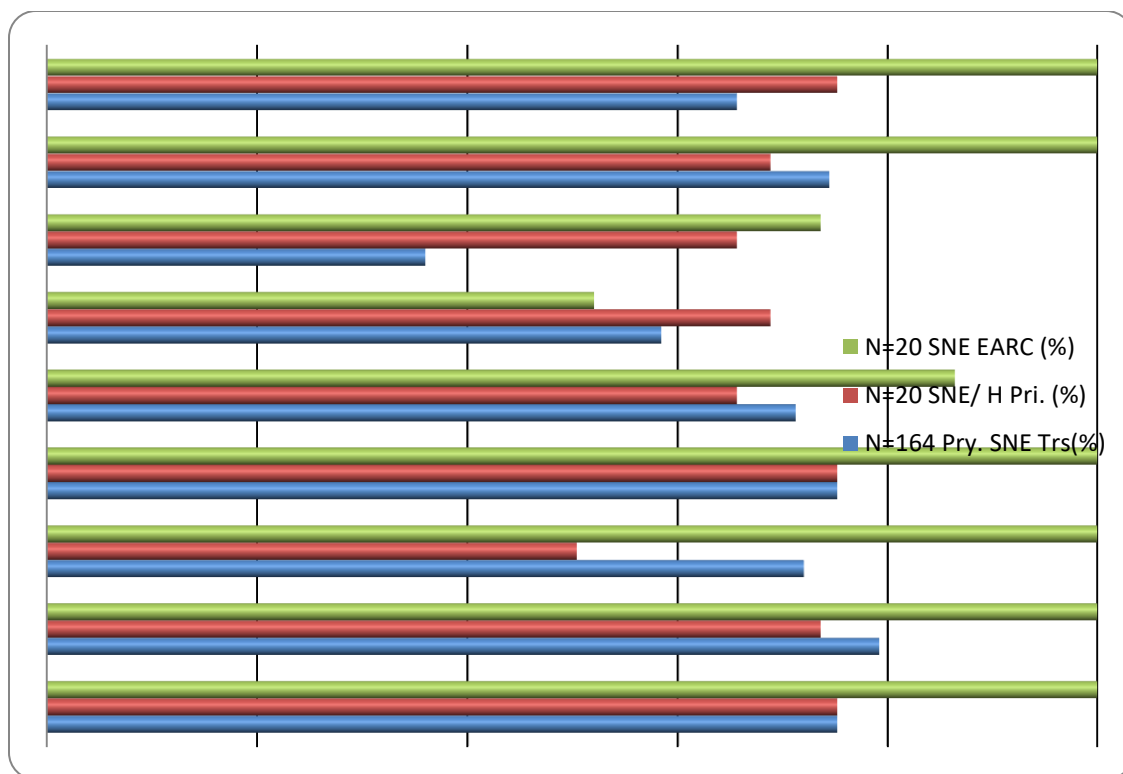
<i>Competencies</i>	<i>N=20</i>	<i>N=164</i>	<i>N=20</i>
	<i>SNE Pri.H/Trs(%)</i>	<i>SNE Pri.Trs (%)</i>	<i>SNE EARC(%)</i>
Creativity	89.2	93.8	91.1
Innovation	88.6	93.8	100
Entrepreneurship	89.2	85	100
Analysis	88.6	90.80	96.6
Research	93.8	89.2	96.6
Problem Solving	90	85.4	100
%	89.9	89.66	97.3

Table 4.3.2.2: provides a summary of various respondents' views on the skills, knowledge, attitudes and values that can be achieved through innovation, creativity, entrepreneurship, problem solving analysis and research. The percentage range from the lowest was 89.99% and highest 97.3%. These responses can be closely linked to a study carried out by Rychen D.S. and Salganik L.H (eds.) (2001) which revealed that a creative person should have divergent thinking, problem solving skills, originality, and ability to see or create new values. Considering the convergence on the need to nurture creativity in the curriculum and the literature encountered, constructs of problem solving, divergent thinking, research and innovation will find their place in the content of the proposed curriculum.

Table 4.3.2.3: Primary head teachers and teachers views on SNE Competencies

<i>Competencies</i>	<i>N=164</i> Pry. SNE Trs(%)	<i>N=20</i> SNE/ H Pri. (%)	<i>N=20</i> SNE EARC (%)
Collaboration	93.8	93.8	100
Interpersonal relationship	94.8	93.4	100
Coordination	93	87.6	100
Planning	93.8	93.8	100
Organizing	92.8	91.4	96.6
Negotiation	89.6	92.2	88
Coaching	84	91.4	93.4
Mentoring	93.6	92.2	100
Networking	91.4	93.8	100
%	91.8	92.2	97.6

Figure 4.3.2.3: Primary head teachers and teachers views on SNE Competencies



The distribution on responses in **Table 4.3.2.3** and **Figure 4.3.2.3**:by teachers, head teachers, and EARC Officers who directly interact with learners seem to agree to a great extent that collaboration and inter related competencies such as interpersonal relationship, coordination, planning, networking among others should be embedded into the curriculum reforms. A key conclusion therefore is that collaboration was considered a major desired competence with an overall percentage rating of 90 %.This critical because if knowledge is learned to support the performance of skills then learners will satisfactorily excel in aspects of knowledge, skills and values ([Soland et al. 2013](#), and [Voogt & Roblin 2012](#)).

Table 4.3.2.4: Analysis of respondents views on desired competencies classified under Critical Thinking

<i>Competencies</i>	<i>N=20</i>	<i>N=80</i>	<i>N=20</i>
	<i>SNE HT Pri./Trs(%)</i>	<i>SNE Pri. Trs(%)</i>	<i>SNE EARC</i>
Critical thinking	79.4	81.4	100
Reflection	93.8	93.8	96.6
Decision Making	94.8	94.8	96.6
%	89.33	89.8	97.7

Overall % rating for critical thinking was 91.56 which translate to a total of 1,596 and a ratio of (0.09:0.909) respondents agreeing that critical thinking and its related competencies should be emphasized into curriculum reforms.

Table 4.3.2.4: The results show a strong consensus among different respondents on the aspect of critical thinking, reflection and decision making, presumably learners to develop critical thinking skills and the ability to adapt to new learning situations as they transit from one sub sector of education to another.

The acquisition of the above four 21st century skills will be pivotal in reforming the curriculum based on the competency based curriculum modules of instruction.

The term **21st century skills** refers to a broad set of knowledge, skills, work habits, and character traits that are believed—by educators, school reformers, researchers, employers, and others—to be critically important to success in today’s world, particularly in collegiate programs and contemporary careers and workplaces. Generally speaking, 21st century skills can be applied in all academic subject areas, and in all educational, career, and civic settings throughout a student’s life.

These implies that competencies clustered under communication, critical thinking, collaboration and creativity should be emphasized in tandem with the vision 2030 and Sustainable Millennium Development Goals (SMDGs) and critical for development of this country in Science and technology. The envisioned curriculum review will embrace the above skills in its content with the express objectives of producing functional products of our education system.

4. 5.3 Learning Areas that should be included in the Curriculum

Table 4.3.3.1:Heads of SNE Institutions, Teachers and EARC Officers Mean Percentage Responses on the extent to which Art and Design should be emphasized in the school curriculum

Learning Areas	Primary Schools (SNE)		EARC Officers N=20
	Head teachers (N=20)	Teachers (N=164)	
Art	91.8	88.4	89
Design	85.2	82.2	94
Average%	88.5	85.3	91.5

Art as a teaching area was rated highly by the primary school head teachers (91.8%) and teachers (88.4%) in SNE primary schools. All the principals in SNE secondary schools embraced inclusion of art in to the curriculum while a higher percentage of teachers (93.0%) rated the inclusion of design into the curriculum than those who preferred inclusion of design (91.0%). The average rating of inclusion of the two areas in SNE schools is also very high (above 85%).This have further been echoed by the EARC officers whose average rating for the inclusion is 91.5%. This means that art and design should be highly considered for inclusion in the SNE curriculum.

Table 4.3.3.2::Heads of SNE Institutions, Teachers and EARC Officers Mean Percentage Responses on the extent to which Agriculture, technology, vocational and technical subjects should be emphasized in the school curriculum

Learning Areas	Primary Schools (SNE)	
	Head teachers (N=20)	Teachers (N=164)
Agriculture	96.5	98.0
Technology	91.1	91.4
Vocational and technical subjects	98.0	100
Average%	95.2	95.7

Majority of the head teachers (98%), all primary school teachers and principals indicated that vocational and technical subjects should be emphasized in the school curriculum. However, most (97.0%) of the secondary school teachers were in highly in favour of technology while majority (98.0%) of the EARC officers highly preferred agriculture subject to be emphasized in the school curriculum .

Table 4.3.3.3:Heads of SNE Institutions, Mean Percentage Responses on the extent to which Physical Education subjects should be emphasized in the school curriculum

Learning Areas	Primary Schools (SNE)	
	Head teachers (N=20)	Teachers (N=164)
P.E.	98.0	97.2

Majority of the primary school head teachers (98%) and teachers (97.2%) and all the secondary school principals indicated that physical education should be emphasized in the school curriculum. However, fewer (91.0%) of the secondary school teachers were and (95.0%) of the EARC officers indicated that physical education should be emphasized in the school curriculum.

Physical Education has continued to be an area of neglect in the current curriculum. In the monitoring studies carried out by KIE (2004, 2006, 2007) it was apparent that P.E was not taught in many schools as prescribed in the curriculum yet P.E helps the learners in promoting healthy development and social interaction. In this survey it was rated above 80% by all respondents. This high response rate affirmed that P.E. should be emphasized in the envisaged new curriculum. Studies and life experiences have shown that the P.E. contributes to the physical and emotional well being of the learners.

Table 4.3.3.4:Heads of SNE Institutions and Teachers Mean Percentage Responses on the extent to which Humanities subjects should be emphasized in the school curriculum

Learning Areas	Primary Schools (SNE)	
	Head teachers (N=25)	Teachers (N=164)
Humanities	94.6	94.2

Majority of the primary school head teachers (94.6%) and teachers (94.2%) and all the secondary school principals indicated that humanities subjects should be emphasized in the school curriculum. However, fewer (93.0%) of the secondary school teachers were and (91.0%) of the EARC officers indicated that humanities subjects should be emphasized in the school curriculum.

Table 4.3.3.5:Heads of SNE Institutions, Teachers Mean Percentage Responses on the extent to which Environment and Climate Changes subjects should be emphasized in the school curriculum

Learning Areas	Primary Schools (SNE)		EARC Officers N=20
	Head teachers (N=20)	Teachers (N=164)	
Climate Change	94.6	89.8	90.0
Environment	97.4	93.2	98.0
Hygiene and sanitation	100.0	98.0	100.0
Average%	97.3	93.7	98.0

Majority of the head teachers in SNE primary schools (97.3%) and 98.0% of the principals in SNE secondary schools indicated that environment and climate change subjects should be emphasized in the school curriculum. However, fewer (93.7%) of the primary school teachers and EARC officers (94.4%) indicated that environment and climate change subjects should be emphasized in the school curriculum.

Table 4.3.3.6: Heads of SNE Institutions and Teachers Mean Percentage Responses on the extent to which financial subjects should be emphasized in the school curriculum

Learning Areas	Primary Schools (SNE)	
	Head teachers (N=20)	Teachers (N=164)
Entrepreneurship	95.0	94.2

Majority of the head teachers in SNE primary schools (95.0%) and teachers (94.2%) and the SNE secondary school principals (90.0%) and teachers (95.0%) indicated that entrepreneurship subjects should be emphasized in the school curriculum.

The high rating on the financial subjects is an indication that they are important part of the curriculum. The importance of these subjects is universal as the world becomes more businesslike in nature and the economic well being of countries determines the quality of life for its citizens.

Table 4.3.3.7: Heads of SNE Institutions, Teachers and EARC Officers Mean Percentage Responses on the extent to which 21st Century subjects should be emphasized in the school curriculum

Learning Areas	Primary Schools (SNE)		EARC Officers (N=20)
	Head	Teachers	

		teachers (N=20)	(N=164)
Mathematics	100	97.2	91.0
Languages	98.4	100	93.0
Sciences	99.2	97.2	89.0
Average%	99.2	98.1	91.0

All the head teachers and principals indicated that mathematics subject should be emphasized in the school curriculum. Apart from mathematics subject the all secondary school principals supported the inclusion of mathematics, languages and sciences subjects in the school curriculum.

Studies have also shown that countries like Singapore and Malaysia with high technological development have put great emphasis on mathematics and sciences as a foundational requirement for their technological advancement. The Malaysian education system, like others around the world, has emphasized the development of strong content knowledge in subjects such as science, mathematics, and language (Government of Malaysia, 2012).

Table 4.3.3.8: Heads of SNE Institutions, Teachers and EARC Officers Mean Percentage Responses on the extent to which Home Science Subjects should be emphasized in the school curriculum

Learning Areas	Primary Schools (SNE)		EARC Officers (N=20)
	Head teachers (N=20)	Teachers (N=164)	
Home management	100	88.6	94.4
Health and nutrition	100	100	95.0
Average%	100	94.3	94.7

All the primary school head teachers (100%) and teachers (100%) in SNE primary schools Health and nutrition indicated that health and nutrition as a home science subject should be emphasized in the envisaged school curriculum. A similar situation was also observed in SNE secondary schools where all the principals and teachers embraced inclusion of health and nutrition in the school curriculum. The average rating of inclusion of the two areas in SNE schools is also very high (above 90%). This have further been echoed by the EARC officers whose average rating for the inclusion is 94.7%. This means that home science subjects should be highly considered for inclusion in the SNE curriculum.

The rating of inclusion of the home science subjects was very high across all the school levels. This implies that the curriculum implementers highly support the inclusion of the home science subjects in the envisaged curriculum. These high rating may be attributed to the fact that these subjects are very important since they define the wellness of the individual as he/she interacts with their environment on a day to day basis.

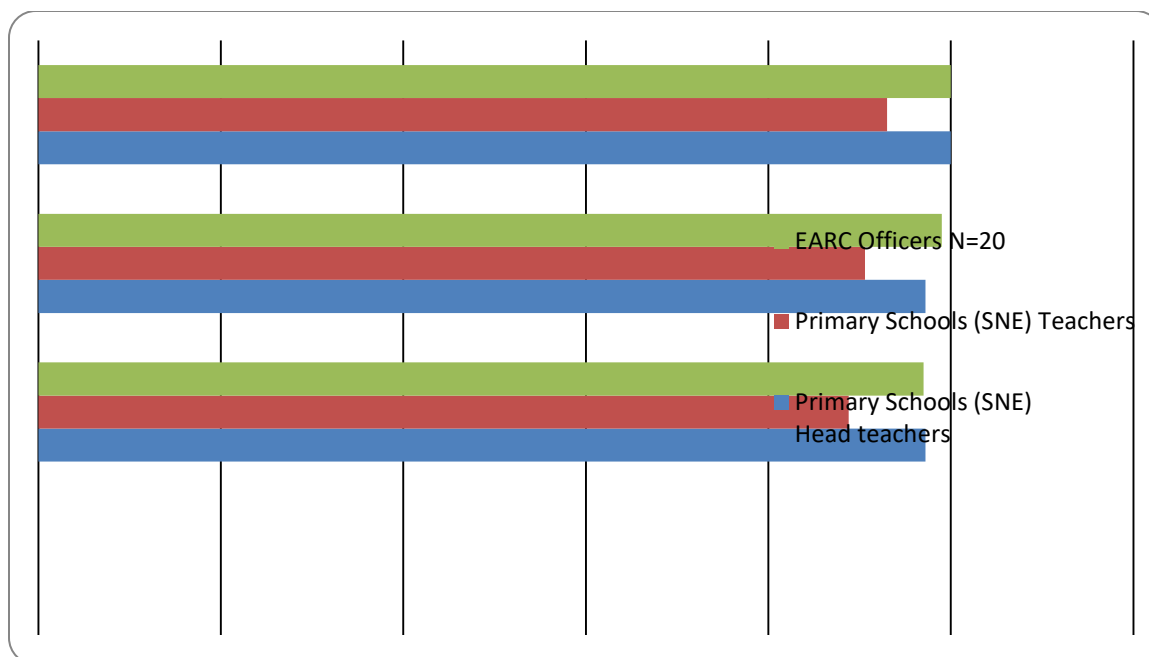
4.5.5: Extent to which other Special Needs Areas should be emphasized in the school curriculum

The heads of schools, teachers and EARC officers rated the extent to which other special needs areas should be emphasized in the school curriculum.

Table 4.3.3.8:Heads of SNE Institutions, Teachers and EARC Officers Mean Percentage Responses on the extent to which other Special Needs Areas should be emphasized in the school curriculum

Learning Areas	Primary Schools (SNE)		EARC Officers N=20
	Head teachers (N=20)	Teachers (N=164)	
Speech Training	97.2	88.8	97.0
Orientation & Mobility	97.2	90.6	99.0
Activities of Daily Living	100	93.0	100
Average %	98.1	90.8	88.5

Figure 4.3.3.8:Heads of SNE Institutions, Teachers and EARC Officers Mean Percentage Responses on the extent to which other Special Needs Areas should be emphasized in the school curriculum



Inclusion of activities of daily living as a learning area in the envisaged curriculum was supported by all the SNE primary school head teachers and the EARC officers. Overall, the mean rating of the other special learning areas was very high (above 85%) implying that these areas are critical for learners with special needs and thus should be embedded in the envisaged school curriculum. The secondary school principals also rated the extent to which society as learning area should be emphasized in the curriculum and all of them were in support.

4.5.6.:Analysis of SNE primary teachers and head teachers’ responses on learning approaches

4.5.6.1 Introduction

The curriculum reform should align the intended curriculum with the constitution of Kenya. Section 54 of the Constitution of Kenya requires that people with disability have the right to access educational institutions and facilities for persons with disabilities that are integrated into society to the extent compatible with the interests of the person. To align the curriculum to this dictate of the Kenyan constitution, survey deliberately sampled some special needs schools and sought opinions on various aspects including that of learning approaches. Data was collected from both primary and secondary school special schools. A total of 164 SNE primary school teachers and 20 SNE primary school head teachers were involved in this survey. The collected responses were analysed and presented in tables which follow.

Table 4.3.4.1:21st century teaching strategies

Primary SNE Teachers		Primary SNE Head teachers	
Approach	Percentage rating (N=164)	Approach	Percentage rating (N=20)
Brainstorming	79.00	Brainstorming	90.33
Discussions	92.00	Discussions	100.00
Average %	85.50	Average %	95.17

From both groups of teachers, discussion approach and brainstorming are relatively highly rated though for primary school SNE teachers the rating is lower at 79.00%. The sampled primary school SNE teachers indicated that discussion method should be used more than brainstorming when delivering the curriculum of the special needs learners. For the primary school head teachers, brainstorming and discussion are highly preferred as methods of delivering SNE curriculum. Both methods are fit for use in the competence based curriculum going by the high ratings indicated by the respondents.

4.5.6.2: Practical methods of teaching

SNE teachers and head teachers responded to a set of items in a questionnaire regarding the extent to which they would want to use practical based methods for learning purposes. Their responses were analysed and presented in table 4.3.4.2

Table 4.3.4.2

Primary SNE Teachers		Primary school SNE Head teachers	
Approach	Percentage rating (N=164)	Approach	Percentage rating (N=20)
Projects	83.33	Projects	95.33
Experiments	91.00	Experiments	100.00
Demonstrations	96.33	Demonstrations	100.00
Field excursions	89.00	Field excursions	90.33
Average %	89.92	Average %	88.75

Primary school SNE teachers rated use of experiments and demonstrations relatively high at 91.00% and 96.33% respectively as approaches to be used while delivering the adapted primary school SNE curriculum. The head teachers also gave these two approaches very high ratings as compared to projects and field excursions. Learners with special needs should be presented with

learning opportunities which are multi-facet so as to complement the senses which might be affected by their disability. Use of demonstrations and experiments might be appropriate for them given that they involve most of the learners' senses including the auditory, sight, smell and tactile.

Table 4.3.4.2: Learner activity based strategies

SNE primary teachers and head teachers' responses on the extent to which various learner activity based strategies should be used in delivering the SNE primary school curriculum

Primary SNE Teachers		Primary school SNE Head teachers	
Approach	Percentage rating (N=164)	Approach	Percentage rating (N=20)
Debate	82.00	Debate	90.33
Dramatization	91.67	Dramatization	95.33
Reciting	83.67	Reciting	85.67
Songs	86.33	Songs	85.67
Riddles	73.33	Riddles	81.00
Dances	88.33	Dances	90.33
Average %	84.22	Average %	88.06

In this cluster of learning approaches, primary school teachers preferred dramatization more as opposed to the other approaches. Their heads also rated this approach highly at 95.33%.

Table 4.3.4.3: Experiential learning strategies

Primary school SNE teachers and heads responded to a set of items in a questionnaire regarding the extent to which they would want to use experiential learning approaches of teaching. Their responses were analysed and presented in **Table 4.3.4.3:**

Primary SNE Teachers		Primary school SNE Head teachers	
Approach	Percentage rating (N=164)	Approach	Percentage rating (N=20)
Experiential learning	90.33	Experiential learning	95.33
Drills	70.67	Drills	71.33
Storytelling	84.67	Storytelling	85.67
Nature walk	83.00	Nature walk	81.00
Role play	90.67	Role play	90.33
Simulations	90.33	Simulations	100.00
Average %	84.95	Average %	87.28

From the analysed data, SNE primary school teachers gave simulations and experiential learning the same rating of 90.33%. For this category of teachers, role play has the highest rating at 90.67%. It is also evident that use of simulations was highly preferred by the primary school SNE heads with a rating of 100.00% followed by experiential learning at 95.33%.

4.5.6.3: Lecture method

This method was rated relatively low by the two groups and the ratings for SNE primary teachers and SNE primary head teachers were 57.33% and 62.00% respectively. This means that this method should be used on very rare occasions while delivering the adapted SNE curriculum for basic education.

4.5.6.4: Use of Individualized Education Programme (IEP) and thematic approach

In this approach, the teacher develops a programme for the individual learner. The teacher also develops a broad objective of the programme, identifies the strengths of the child and the weaknesses. The programme focuses on dealing with the weaknesses of the learner. Ratings of the extent of use of IEP for SNE primary and SNE primary heads were relatively high. SNE primary school teachers rated it at 95.00% and the heads rated it at 95.33%. Primary school teachers rated the use of thematic approach at 85.00% while their heads rated it at 95.33%.

4.5.6.5: Analysis of EARC officers' responses on learning approaches

A total of 33 curriculum support officers and 20 EARC officers' responded to a questionnaire with items on the different learning approaches including 21st century strategies, practical methods, Learners' activity based methods, experiential learning and lecture method. Their responses were analysed and presented in tables which follow.

Table 4.4.5.1:21st Century teaching strategies

EARC officers	
Approach	Percentage rating (N=20)
Brainstorming	85.00
Discussions	96.70
Average %	90.85

From the findings displayed in the two tables, these two methods are highly rated. They should therefore be used while delivering the curriculum.

Table 4.3.5.2:Practical methods of teaching

EARC officers' responses on the extent to which various practical based strategies should be used in delivering the curriculum

Practical based strategies

EARC officers	
Approach	Percentage rating (N=20)
Projects	86.70
Experiments	86.70
Demonstrations	96.70
Field excursions	93.30
Average %	90.85

Both EARC officers and CSOs rated demonstrations very highly with a rating of 96.70% and 94.00% respectively while field excursions were rated lowest with 76.60%. Surprisingly, EARC officers rated field excursions the second highest with a percentage rating of 93.30%. Practical approaches at all levels of education should be encouraged for use because they will help

learners in attaining the competencies to be stipulated by the competence based curriculum to be designed.

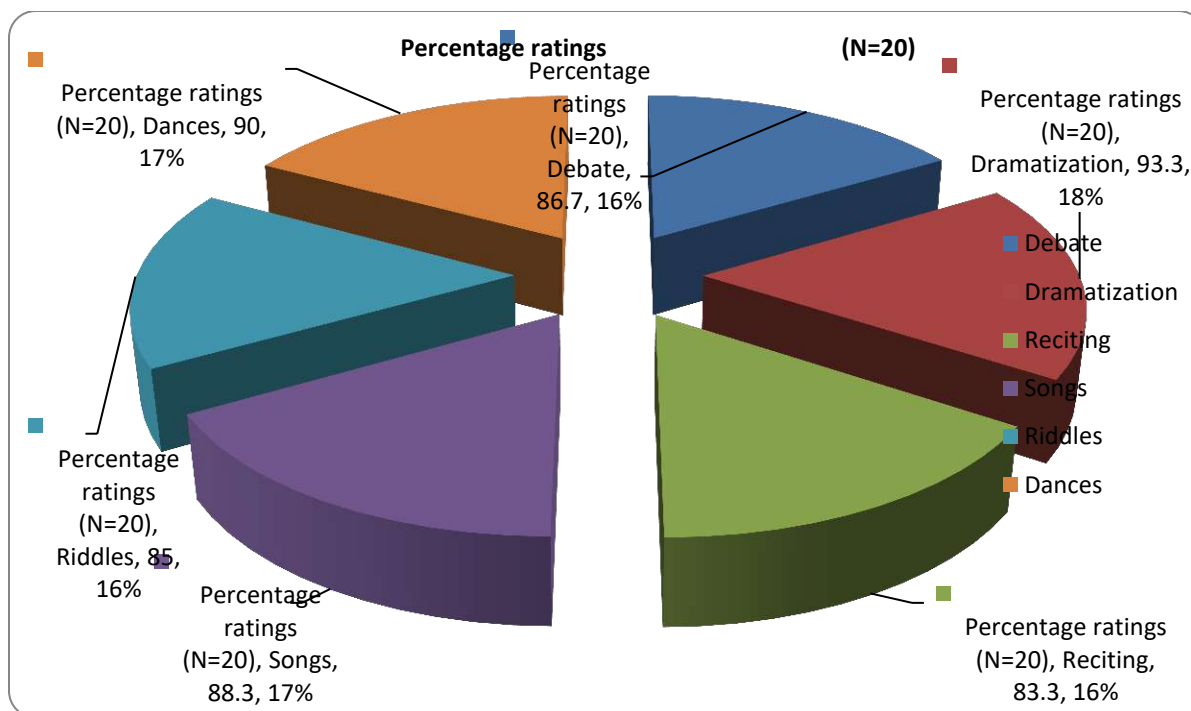
Table 4.3.5.3:Learners' Activity based strategies

EARC officers' responses on the extent to which various learners' activity based strategies should be used in delivering the curriculum

EARC officers	
Approach	Percentage ratings (N=20)
Debate	86.70
Dramatization	93.30
Reciting	83.30
Songs	88.30
Riddles	85.00
Dances	90.00
Average %	87.77

Figure 4.3.5.3:Learners' Activity based strategies

EARC officers' responses on the extent to which various learners' activity based strategies should be used in delivering the curriculum



Learners' activity based methods were comparatively rated higher by EARC officers with an average percentage rating of 87.77% while CSOs preferred the use of this cluster at an average percentage rating of 78.78.

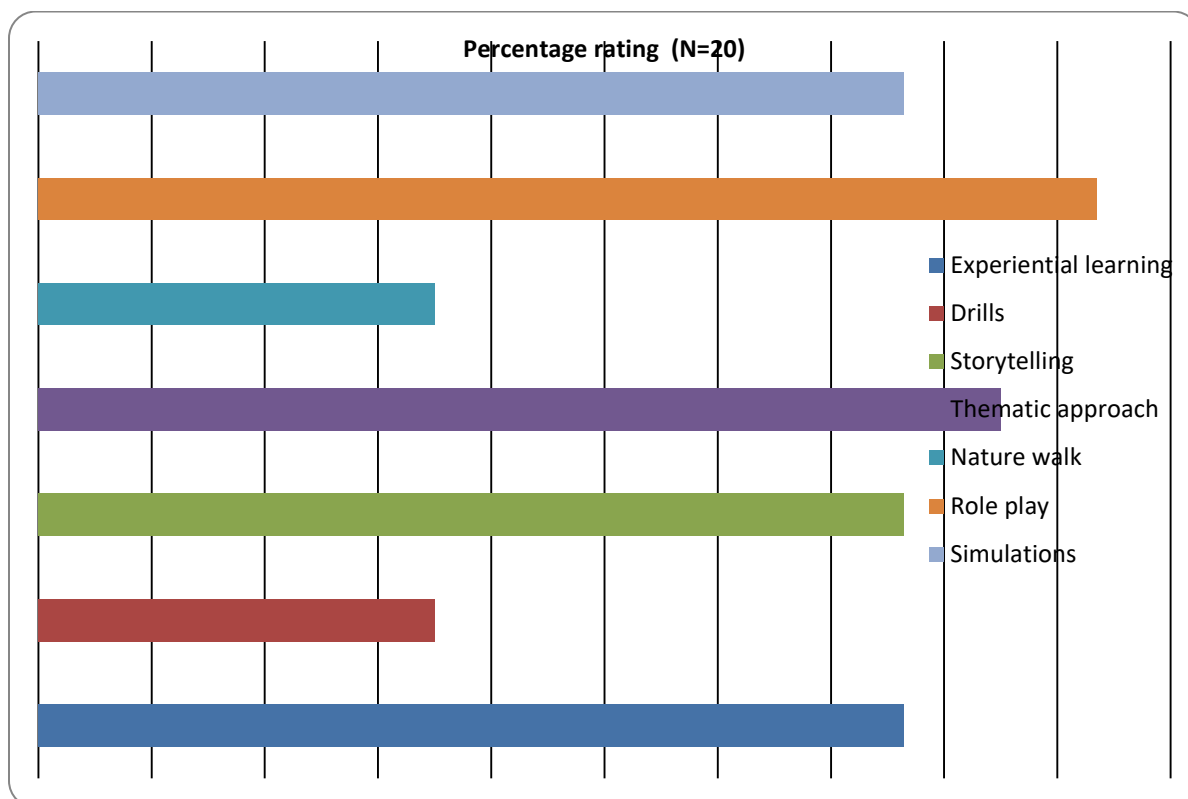
Table 4.3.5.6: Experiential learning strategies

EARC officers' responses on the extent to which various experiential learning strategies should be used in delivering the curriculum

EARC officers	
Approach	Percentage rating (N=20)
Experiential learning	93.30
Drills	85.00
Storytelling	93.30
Thematic approach	95.00
Nature walk	85.00
Role play	96.70
Simulations	93.30
Average %	91.66

Figure 4.3.5.6: Experiential learning strategies

EARC officers' responses on the extent to which various experiential learning strategies should be used in delivering the curriculum



Experiential learning, storytelling and role play were rated highly by these two groups of educationists. Their inherent benefits in education cannot be over-emphasized.

4.5.6.6: Lecture method

This method was rated by curriculum support officers and EARC officers at 67.60% and 58.30% respectively. This implies that these two methods should be used sparingly while delivering the curriculum.

4.5.6.7: IEP approach

The EARC officers rated this learning approach at 93.30%. It is a good idea to offer individualized attention to learners given that learners are of different abilities and as such, they need individualized attention.

4.5.7: Assessments

4.5.7.1 Primary Head Teachers in Special Needs Education Schools

Primary head teachers sampled from Special Needs Education schools were asked to respond to the effectiveness and validity of the various assessment forms used in our school system to evaluate learners' achievements. The different forms of assessment were clustered into formative and summative and composite means for each of them calculated. The findings were presented as in the table below:

Table 4.3.6.1: SNE Primary Head Teachers' responses on the extent to which various forms of assessment contribute to effective measurement of learners' achievements at Primary level.

SNE primary head teachers (N=7)

Formative assessment %rating		Summative assessment Percentage rating		A close examination of the
Continuous assessment	97.2%	End of year examination	88.6%	
Projectwork	94.20%	National examination	80.0%	
End of term examination	94.2%	Projectwork	94.2%	

responses posted by the SNE Head teachers reveals a high preference for formative rather than summative mode of assessment. Formative assessment received a rating of 95.7% while

summative was the least preferred receiving a rating of 89.25%. . Continuous assessment was rated highest at 97.2% compared to other forms of assessment. National examination was least preferred and was rated at 80.0 %

4.5.7.2: SNE Primary Teachers

SNE primary Teachers were purposely sampled from the entire country and a questionnaire on assessment modes in the country administered to them. The responses were collected using a five- point Likert Scale. The different forms of assessment were clustered into formative and summative and composite means for each of them calculated. The findings were presented as in the table below:

Table 4.3.6.2: SNE Teachers’ responses on the extent to which various forms of assessment contribute to effective measurement of learners’ achievements at Primary and Secondary level.

SNE primary teachers(N=164)

Formative assessment	% rating	Summative assessment	% rating
Continuous assessment	92.20%	End of year examination	76.0%
Project work	83.8%	National examination	66.0%
End of term examination	78.6%	Project work	83.8%
	88%		76.1%

From the responses of SNE teachers, there is preference for formative assessment 88% as compared summative assessment 76.1%. Continuous assessment was rated highest at 92.2% followed by project work at 83.8% and end of term examination. A national examination was the least preferred form of assessment receiving a rating of 66.00%.

Table 4.3.6.3: Nurturing the Potential and Talents of Learners

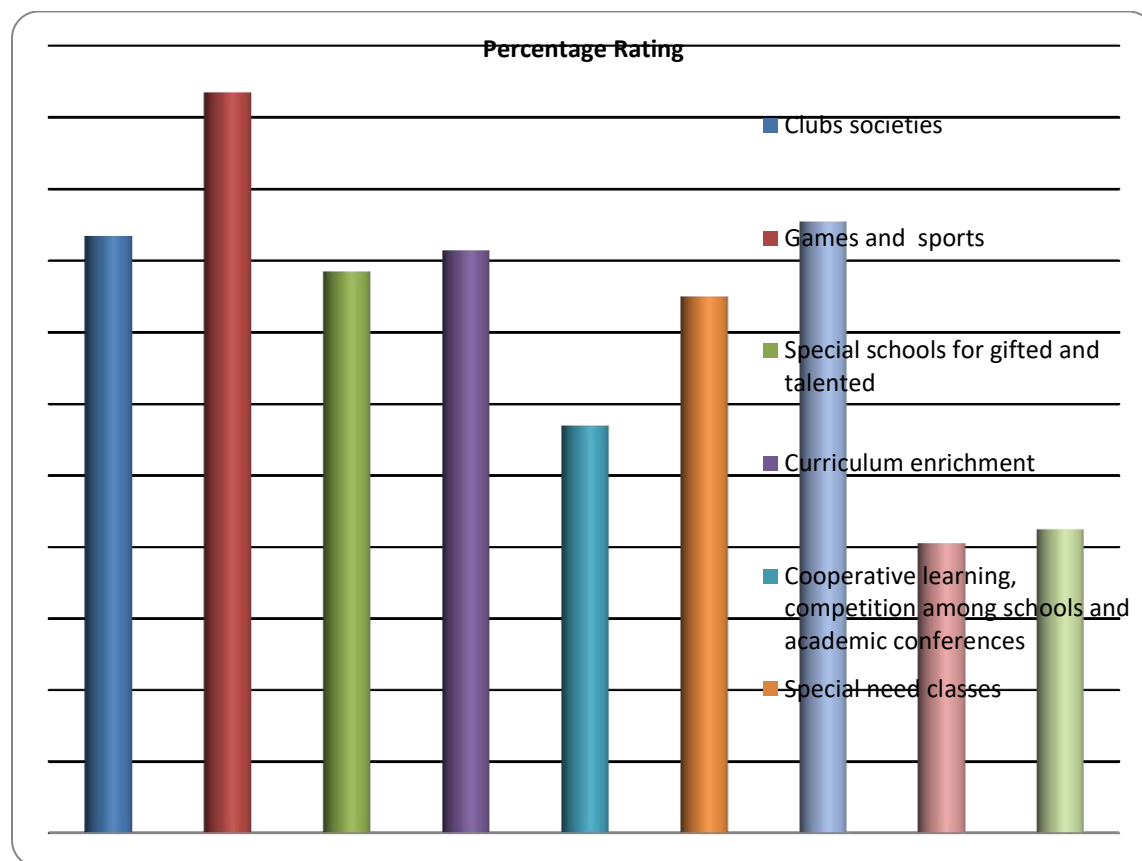
SNE Primary Teachers and Head Teachers responses

(N = 30)

	Percentage Rating
Clubs societies	94.7
Games and sports	98.7
Special schools for gifted and talented	93.7
Curriculum enrichment	94.3
Cooperative learning, competition among schools and academic conferences	89.4
Special need classes	93.0
Ability grouping and mentorship programs	95.1
Early admissions	86.1
Accelerated learning and advanced placement	86.5

Figure 4.3.6.3: Nurturing the Potential and Talents of Learners
SNE Primary Teachers and Head Teachers responses

(N = 30)



The thirty (30) SNE Teachers and head teachers preferred to a great extent the following strategies for tapping the potential and talents of learners. This is evidenced by their responses as follows; games and sports (98.7%), ability grouping and mentorship programs (95.1%), clubs and societies (94.3%), curriculum enrichment (94.3%), special schools for gifted and talented (93.7%) and special needs classes (93.0%).

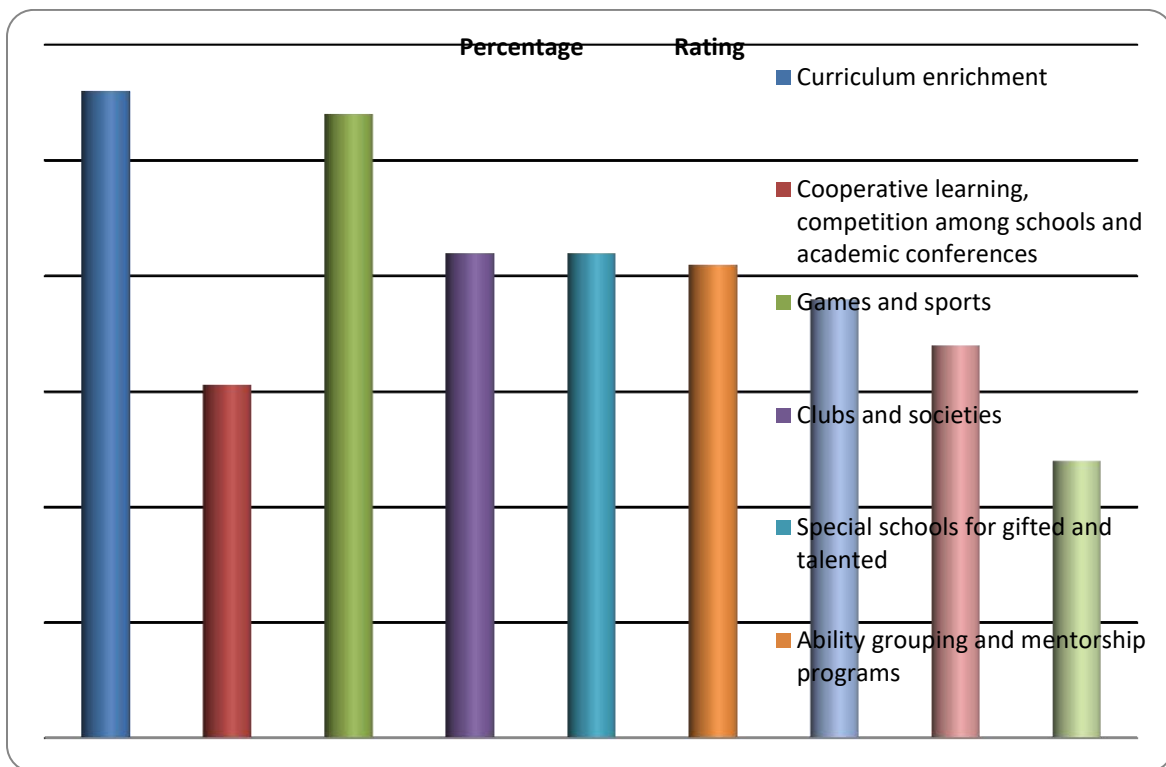
Cooperative learning, competition among schools and academic conferences (89.4%), accelerated learning and advanced placement (86.5%) and early admission to schools (86.1%) were also preferred to some extent.

The Kenya Vision 2030 is the country's long -term development blueprint. It aims to creating a globally competitive and prosperous country with a high quality of life for all its citizens. The blueprint aspires to transform Kenya into a newly industrializing middle income country by 2030. It supports the development of key training programs to support quantity and quality of talents needed in the key sectors of the economy. This implies, nurturing the potential and talents should be given more weighting in the envisaged new curriculum.

**Table 4.3.6.4: Findings on Nurturing the Potential and Talents of Learners
EARC Officers**

N = 20	Percentage Rating
Curriculum enrichment	98.0
Cooperative learning, competition among schools and academic conferences	85.3
Games and sports	97.0
Clubs and societies	91.0
Special schools for gifted and talented	91.0
Ability grouping and mentorship programs	90.5
Early admission to school	89.0
Special classes	87.0
Accelerated learning and advanced placement	82.0

**Figure 4.3.6.4: Findings on Nurturing the Potential and Talents of Learners
EARC Officers**



The strategies which should feature prominently according to EARC officers were curriculum enrichment (98.0%), games and sports (97.0%), clubs and societies(91.0%), special schools for gifted and talented (91%) and ability grouping and mentorship programs at 90%. The following attributes were also fairly rated by the respondents as follows; early admission to schools at 89.0%, special needs classes 87.0%, cooperative learning, competition among schools and academic conferences (85.3%) and accelerated learning and advanced placement (82%).

4.5.8 Cross Cutting Issues.

Cross cutting issues are matters that touch a number of different aspects of the society, on general principles such as democracy, human rights, good governance, children's rights, gender equality, population and family life education, poverty alleviation, environment and development, to mention but a few. Cross-cutting issues are commonly defined as topics which, by their very nature, have a strong impact on all operations in a given field and, therefore, must receive special attention hence their inclusion in the intended new curriculum. These issues cut across all the levels of education. Hence they need a lot emphasizes in the future curriculum

To address crosscutting issues and also to make learning meaningful, hence to enable learners develop deep understanding of what they learn, teachers need to use participatory and cooperative teaching methods. Participatory and cooperative teaching methods help learners develop critical thinking, reflect on their own situations and get insights of their own situations.

The survey sort to establish the extent to which various cross cutting issues should be addressed by the future curriculum. Information was sort from teachers, principals, curriculum support officers and Education Assessment resource centre officers (EARC).The various cross cutting issues were identified from different policy documents such as : Kenya constitution 2010,vision 2030,Education for Sustainable development(ESD),Child Act(2001),Millennium Development Goals(MDG), Sustainable Development Goals (SDG),Sessional paper no 1 of 2015 among others. Each of these documents emphasizes different aspects of the cross cutting issues and education has been identified as the wheel to nurture them among the youth.

The Constitution is the supreme law of Kenya and gives more clarification on the direction education should take in several chapters. Chapter 2 and 6 deals with principles of governance, leadership and integrity; chapter 4 deals with bills of rights which include child rights; part 2

deals with environment; part 3 deals with specific application of rights like children rights and persons with disabilities; chapter 5 part 2 deals with environment and natural resources; chapter 12 deals with national security. All these are cross cutting issues and if they are not in cooperated in the future curriculum, it will out rightly be declared unconstitutional. The other cross cutting issues like technology, health issue and drug abuse are emphasized in the blue print of developing the country to a middle level economy, the Vision 2030. A few of the cross cutting issues have been included in the current curriculum but in the envisaged curriculum, they need to be emphasized.

Table:4.3.7 .1:SNE Primary Head teachers and teachers’ responses to cross-cutting issues that should be addressed in the curriculum

Cross cutting issues	SNE primary Head teachers	SNE primary teacher
	Percentage rating(N=20)	Percentage rating(N=164)
Health and hygiene	91	98.3
Environment	91.4	93.2
Security and safety	93.2	96
Drug and substance abuse	93.2	93
Technology	96.6	95
Financial literacy	96.6	92.6
Child rights	96.6	97.6
Gender issues	97.2	92,6
Integrity	100	96
Disabilities	100	97
Average	95.08	95.21

Over 95.0% of teachers of Special Needs Education (SNE) in primary school level affirmed the need to have cross-cutting issues addressed by the curriculum. For individual cross cutting issues to be included in the curriculum, the responses were as follows; integrity at 96% ,drug and substance abuse at 93% ,financial literacy at 92.6% ,security and safety at 96% ,gender issues at 92,6% ,health education which includes other aspects such as HIV/AIDS, sexuality education, hygiene at 91% ,technology at 95% ,environment which includes climate change at 93.2% ,child rights at 97.6% and disabilities at 97.8% .

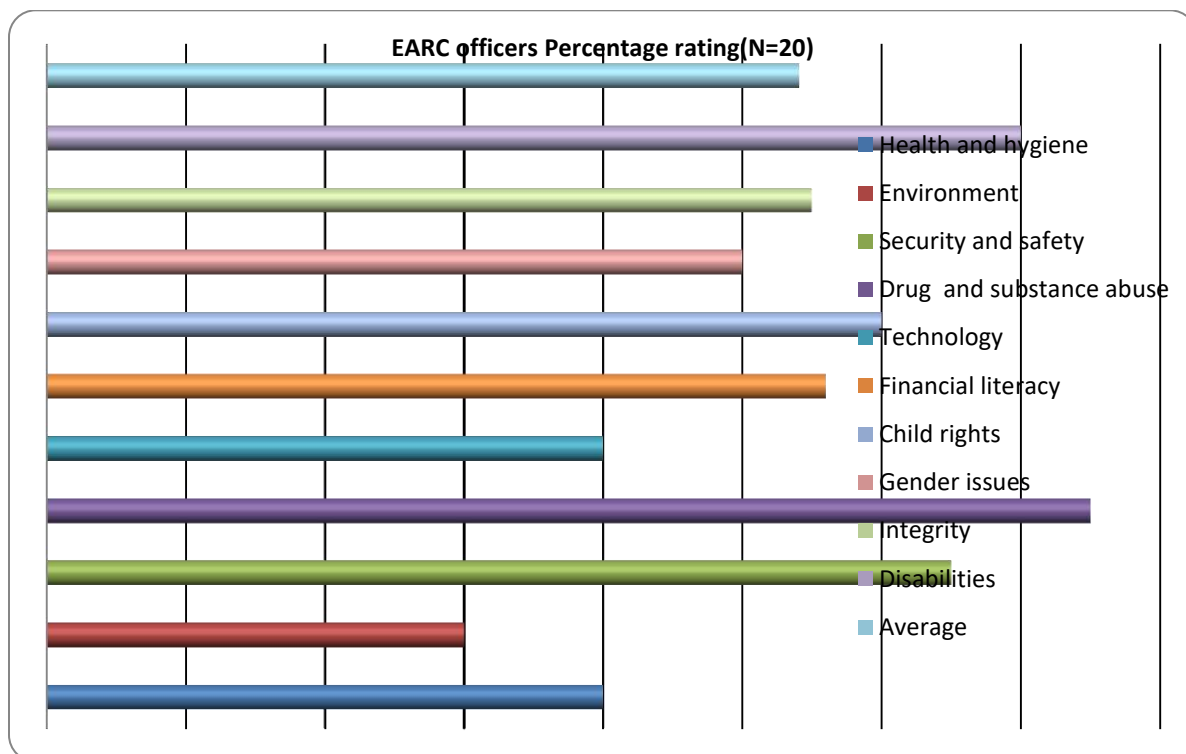
Over 95.2% of Head teachers of Special Needs Education (SNE) at primary school level affirmed the need to have cross-cutting issues addressed by the curriculum. For individual cross cutting issues to be included in the curriculum, the responses were as follows; integrity at 100% ,drug and substance abuse at 93.2% ,financial literacy at 96.6% ,security and safety at 93.2% ,gender issues at 97.2% ,health education which includes other aspects such as HIV/AIDS, sexuality education, hygiene at 98.3% ,technology at 95% ,environment which includes climate change at 91.4% ,child rights at 96.6% disabilities at 100%.

Table:4.3.7 .2:EARC officer's responses to cross-cutting issues that should be addressed in the curriculum

Cross cutting issues	EARC officers
	Percentage rating(N=20)
Health and hygiene	95
Environment	94
Security and safety	97.5
Drug and substance abuse	98.5
Technology	95
Financial literacy	96.6
Child rights	97
Gender issues	96
Integrity	96.5

Disabilities	98
Average	96.41

Figure:4.3.7 .2:EARC officer’s responses to cross-cutting issues that should be addressed in the curriculum



The Education Assessment Resource Centre (EARC) officers are responsible for identifying learners with special needs within their environment. Over 96.4% of EARC officers affirmed the need to have cross-cutting issues addressed by the curriculum. For individual cross cutting issues to be included in the curriculum, the responses were as follows; integrity (96.5%), drug and

substance abuse(98.5%),financial literacy(96.6%),security and safety (97.5%),gender issues(96%),health education which includes other aspects such as HIV/AIDS, sexuality education, hygiene 95%),technology(95%),environment which includes climate change (94%),child rights(97%) disabilities(98%).

All the above issues need to be addressed at all levels of the curriculum and are supported by various government and international policy documents. For example issues of security are a thorn in the flesh worldwide especially with the advent of radicalization among the youth. Technology is the way of the future in the global village and that is why it has been emphasized in vision 2030.Health and environment have been given a lot weighting in the social pillar of the vision 2030. It is important to note that some 21st cross cutting issues like financial literacy were given some weighting by the secondary teachers. Drug and substance abuse is a very big issue worldwide and the youth need to be informed about the vice to make informed decision. That is why the Government has formed NACADA to coordinate activities of reducing or eradicating the menace. Corruption is cancer in the Kenyan society and the country is rated very highly. The youth need to be informed about the dangers of the vice. The government has reorganized HIV as a disaster which is reducing the youthful and productive population.

Due to the variations in levels of the development of the learners and areas of specializations of the respondents, different groups gave emphasis to particular areas.

4.5.9 Learning Resources SNE Primary

The resources are geared towards enhancing learning, teaching and content delivery. Educational resources are the teaching and learning items, structure materials and human resources that assist the teacher to effectively and efficiently deliver content. In recent years there has been a shift among educationists from the traditional teacher-cantered learning to student-cantered learning. It has been established that effective instruction is more allied to active participation in the teaching learning process (as in laboratory work) than to passive participation (as during a lecture). This shift in pedagogy calls for use of different strategies and resources to effectively engage learners to acquire requisite knowledge, skills and attitudes.

In line with the Education for All (EFA) initiatives, Millennium Development Goals (MDG's),Sustainable Development Goals(SDG), Education for Sustainable Development (ESD),

the Constitution of 2010, Sessional paper no 1 of 2015, the realization of Kenya's Vision 2030, of providing a globally competitive quality education, training and research for development, will be achieved through adoption of pedagogy that emphasizes exploration, collaboration, experimentation, creativity, critical thinking and innovation. This calls for the provision of relevant resources that promote these 21st century skills and competencies.

The survey sort to observe the availability of resources that will assist the nurturing of SNE learner potentials. The observers rated in percentage the availability or none availability of the resources to be used to assist the hearing impaired and **Mental handicapped** learners in the learning process.

The summary of the findings are shown in Table: 4.3.7 .1 and Table: 4.3.7 .2. From the table it can be noted that some of the resources were not available completely like Loop induction hearing aids, Group hearing aids, Otto scopes, Speech room and Speech training Kit .The other resources like Audiometer, Ear moulds, Curriculum support materials and Functional assessment tools were not available in 75% of the schools visited.

Table: 4.3.8 .1: Observation schedule of availability of Hearing impaired SNE Teaching and Learning resources

Hearing impaired	Availability of resources (%)	
	Yes	No
Hearing Aides/ individual hearing aids	50	50
Group hearing aids		100
Loop induction hearing aids		100
Audiometer	25	75
Ear moulds	25	75
Otto scopes		100
Early toileting materials	25	75
Syllabuses	50	50
Curriculum support materials	25	75
Kenya sign language resource materials	50	50
Speech room		100
Speech training Kit		100
Functional assessment tools	25	75
Sign language interpreters	25	75
Support staff	75	25

For mentally handicapped schools the resources where there was acute shortages included Tambourines, Speech kits, Swimming pool, Floaters, Vocational workshops, materials, tools, equipment, Daily living skills training materials & equipment, Communication devices, Physiotherapy rooms & equipment and Physiotherapist. These resources are very critical to assist the already disadvantaged SN learners.

Table: 4.3.8 .2: Observation schedule of availability of Mental Handicapped SNE Teaching and Learning resources

Mental handicapped area / autism	resources (%)	
	Yes	No
Syllabuses		42.8
Curriculum support materials	62.5	37.5
Vocational workshops, materials, tools, equipment	28.6	71.4
Perceptual training materials	85.6	14.4
Daily living skills training materials & equipment	32	68
Adapted seats	32	68
Communication devices	25	75
Musical instruments	71.4	28.6
Audio visual materials and equipment	14.3	85.7
Adapted P.E material and equipment	62.5	37.5
Physiotherapy rooms & equipment	16.7	83.3
Physiotherapist	16.7	83.3
Support staff & specialized teachers	71.4	28.6
Tambourines	28.6	71.4
Speech kits	14.3	85.7
Swimming pool		100
Floaters		100

Table4.3.8.3: Observation schedule by data collectors availability of Teaching and learning resources across SNE schools at secondary level

The tables below shows the availability Physically Handicapped and Deaf Blind resources. From the tables it can be established that that many of the resources are not available in the SNE schools. Even the ones which are available are inadequate.

Physically Handicapped SNE Resources

Resources	Availability		Adequacy	
	N0%	YES%	N0%	YES%
Wheels Chairs	26.3	73.7	80.0	20.0
Pen book holder	57.9	42.1	0.0	
Adapted Seats Tables	43.8	56.2	71.4	28.6
Pointers	81.2	18.8	0.0	0.0
Adapted Toilets	68.8	31.2	75.0	25.0
Syllabus Physically handicapped	75.0	25.0	66.7	33.3
Physiotherapy Rooms	56.2	43.8	57.1	42.9
Physiotherapy Equipment	31.2	68.8	56.6	44.4
Physiotherapist	75.0	25.0	70.0	30.0
Swimming pools	75.0	25.0	75.0	25.0
Floaters	75.0	25.0	60.0	40.0
Physical Adaptations	100.0	0.0	0.0	0.0
Physical Pathways	100.0	0.0%	0.0	0.0
Grips	37.5	62.5	55.6	44.4
Speech Kit	62.5	37.5	0.0	0.0

DEAF BLIND RESOURCES

Resources	Availability		Adequacy	
	N0	YES	N	YES
	(%)	(%)	(%)	(%)
	(%)	(%)	(%)	(%)
Braille	71.	28.5	0.	0.0
Machine	5		0	
Hearing	61.	38.	0.	0.0
aids	5	5	0	
Calendar	69.	30.	0.	0.0
systems	2	8	0	
c				
Commu	10		8	16.7
nication	0.0	0.0	3.	
boards			3	
Toilet	85.	14.	6	33.3
Material	7	3	6.	
s			7	
Vocation				23.3
al				
worksho				
ps	10		76	
materials	0.0	0.0	.7	
tools				
equipme				
nt				
Sign				27.5
language	88.	11.	6	
interpret	9	1	2.	
ers			5	
Support	87.	12.	6	40.0
Staff	5	5	0.	
			0	
Syllabus	80.	20.	0.	0.0
Deaf	0	0	0	
blind				
White	0.0	0.0	6	31.1
cane			9.	
			0	
Optical	100		6	33.3
devices	.0	0.0	6.	
			7	
Braille	88.	11.	0.	0.0
Machine	9	1	0	

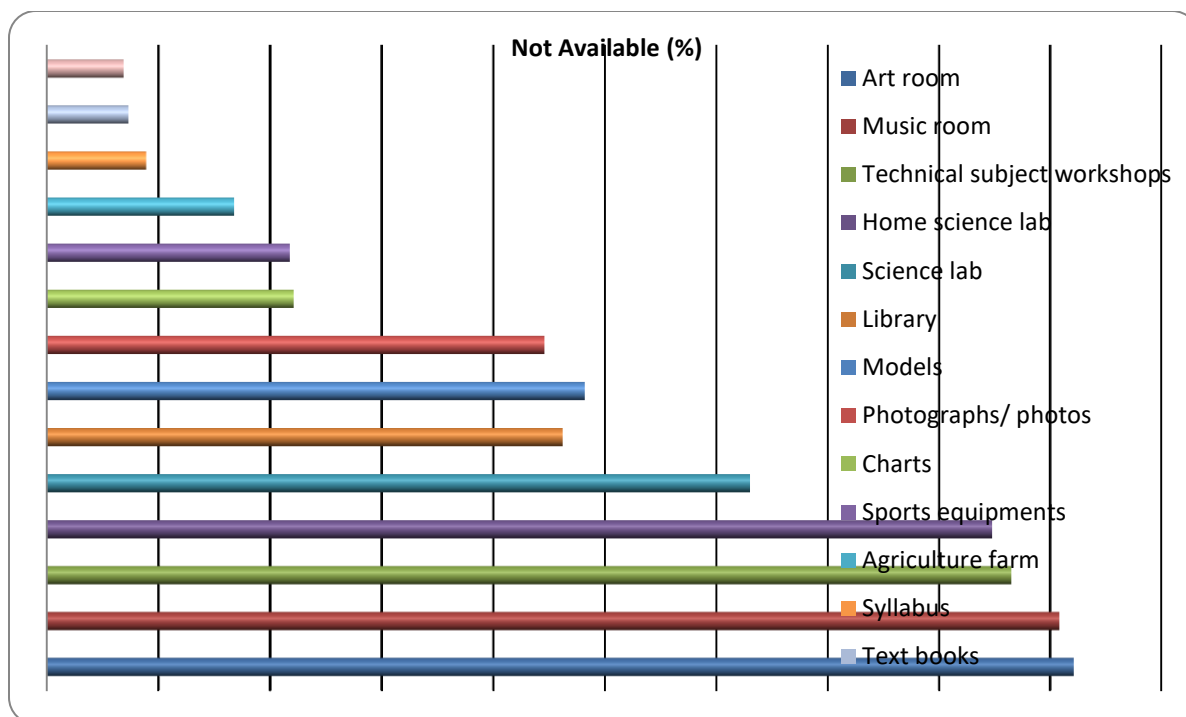
4.5.10 General Teaching and Learning Resources

The survey sort to establish the availability and adequacy of resources which are important in implementing and actualizing a competency based curriculum. Information was sort by researchers observing the available resources in the educational institutions at primary and secondary SNE levels

Table: 4.3.8 .3: Observation schedule of availability of General Teaching and Learning resources

Teaching and learning resource	Not Available (%)
Art room	92.1
Music room	90.8
Technical subject workshops	86.5
Home science lab	84.8
Science lab	63
Library	46.2
Models	48.2
Photographs/ photos	44.6
Charts	22.1
Sports equipments	21.8
Agriculture farm	16.8
Syllabus	8.9
Text books	7.3
Classrooms	6.9

Figure: 4.3.8 .3: Observation schedule of availability of General Teaching and Learning resources



From analysis, the data obtained shows that art room (92%), music rooms (90.8), technical subjects (86.5%), home science (84.8%) and science laboratory (63%) were observed and rated highly as unavailable in the sampled institutions.

In the provision of a globally competitive quality education and training this will be possible through adoption of pedagogy that emphasizes exploration, collaboration, experimentation, creativity, critical thinking and innovation. This calls for the provision of relevant resources that promote these 21st century skills and competencies. But from the discussion above this will be impossible if the resources are not available and even if they are available, they are inadequate.

In the provision of a globally competitive quality education and training this will be possible through adoption of pedagogy that emphasizes exploration, collaboration, experimentation, creativity, critical thinking and innovation. This calls for the provision of relevant resources that promote these 21st century skills and competencies. But from the discussion above this will be impossible if the resources are not available and even if they are available, they are inadequate.

4.5.11 Contemporary/Emerging Issues

All SNE teachers and head teachers rated Contemporary/Emerging Issues above 90% except integrity and disability which were 100% respectively.

4.6 Summary

The following summary was teased from various themes

4.6.1 Societal Needs

Based on the respondents views the most desired societal needs were; environmental protection, Social development, Patriotism, Economic and Industrial development ranked between 100% and 92.50% .

4.6.2 Competencies

Based on the responses of the SNE head teachers and teachers , it can be deduced that there was consensus among the respondents on competencies such as creativity,innovation,collaboration and critical thinking which were ranked highly above 90% .

4.6.3 Talent identification and development

The head teachers and teacher rated highly games and sports, curriculum enrichment, clubs and societies, special schools for talented and gifted with above 92% as opposed to early admissions that was ranked least.

4.6.4 Content and learning Areas

Both SNE primary head teachers and teachers emphasized to great extent of technology, Agriculture and Vocational and technical subjects ,which rated at 95.2% ,95.8%) and 87.4 respectively, besides the sciences, languages and humanities.

4.6.5 Pedagogical Approaches

The findings on pedagogical approaches preferred by SNE primary teachers and head teachers were,discussions100%,experiments 93.33%, brainstorming 90.33% and demonstrations 90%.

4.6.6 Teaching and Learning Resources

It was observed that teaching and learning resources for special schools were extremely inadequate because in some case they were not available to a great extent of 100%.

4.6.7 Assessment

The SNE primary teachers preferred formative assessment with Continuous Assessment Tests and projects being ranked highly at 92.02% and 88.3% and national examination rated least with 66.6%. Similarly head teachers rated CATs at 97.2%, followed by End term exams at 94.2% and project 94.2% respectively.

CHAPTER FIVE:

FINDINGS ON SECONDARY LEVEL NEEDS

5.1 Introduction

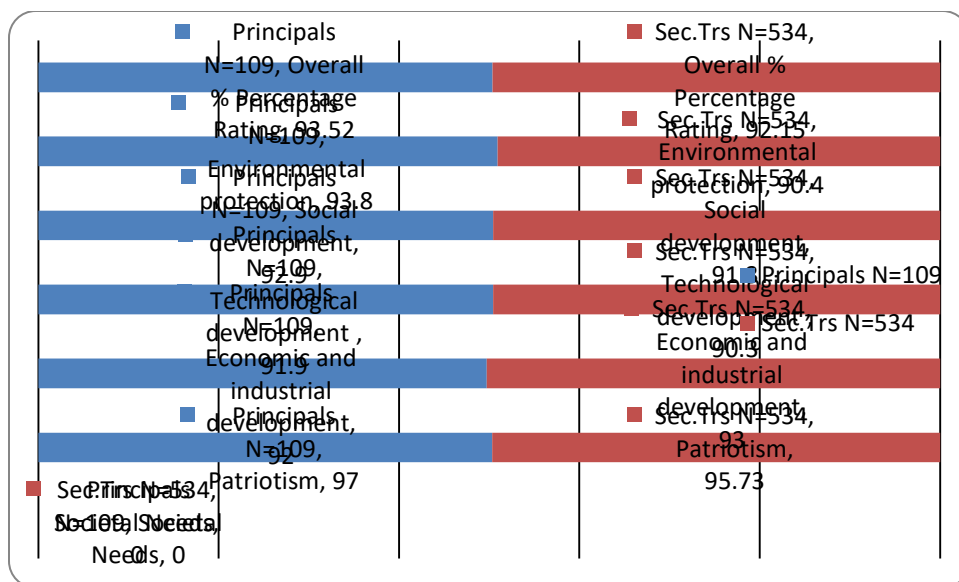
Secondary level of education is primarily important because it contributes immensely to individual earnings and economic growth and it is where people are able to interface with more technology around the world. Pertinently the quality of secondary education affects the levels above and below it primary and tertiary education. This study was a needs assessment for curriculum reform in Secondary curriculum. The study was guided by six themes drawn from the objectives of the study. The specific themes were society needs, competencies, learning areas, learning approaches, assessment and pertinent and emerging issues. Responses were gathered from the secondary school principals and teachers while an observation schedule was used to gather information on availability, adequacy, condition and utilization of learning resources.

5.2 Societal Needs for secondary level

Empirical evidence has it that value education is essential for sustained social and economic development and the realization of human potential. The dreams of youth in a society can only be actualized if the curriculum is guided by the philosophical ideals of a societal aspects like nationalism, patriotism, national unity, economic and industrial development, technological development, social development, international consciousness, respect for all cultures, self-fulfillment, social equality, social responsibility, sound morals, good health, information, communication and environmental protection are given due consideration.

It is view of the aforementioned that the study sought the views of the secondary school principals and teachers in reforming the curriculum and the findings with regard to the extent to which various aspects of societal needs should be emphasized were provided in **Figure: 5.1.1.1**.

Figure: 5.1: Responses by principals and secondary teachers on the extent which the secondary level curriculum should emphasis societal need.



The Figure 5.1.1.1: shows a summary of the most desired societal needs in the order of priority. Patriotism rated highly by the principals and teachers 97%, and 95.73%, followed by economic 92% and 93%, Environmental protection 93.8% and 90.4%, social development 92.9% and 91.30%, technological development at 91.9% and 90.30% respectively.. These societal needs were overall rated at 92.15% by all respondents.

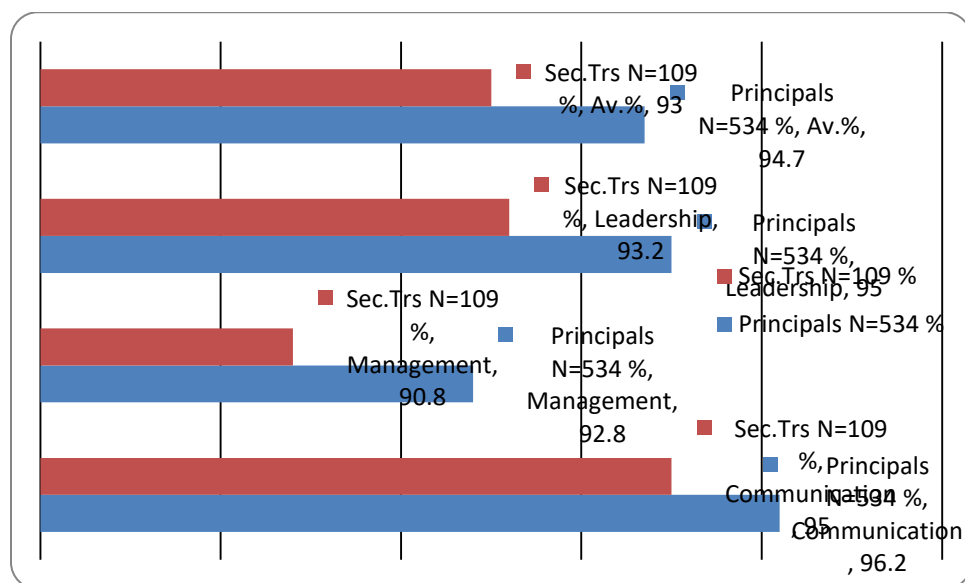
5.2.1 Competencies

Learning and innovation skills have been recognized as skills that define learners who are well prepared to face increasing complex life and work environment in the 21st century. There is a directed focus on creativity; critical thinking, communication and collaboration are essential means of preparing learners for future. For coherence in analysis twenty (21) competencies were classified under the 4Cs of the 21st C.

The secondary school principals and teachers were required to give their responses in regard to the extent to which societal needs should be emphasized in the curriculum. They were asked to indicate the extent to which the identified societal needs should be emphasized in the school curriculum using a five-point Likert scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=some extent' and 'G= Great extent'. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further

derived. The principals and teachers' responses on each identified competencies which constituted the average percentage rating are presented in Figure 5.1.2.1 below.

Figure 52 Summary distribution of responses by Secondary principals and teachers on desired competencies classified under Communication

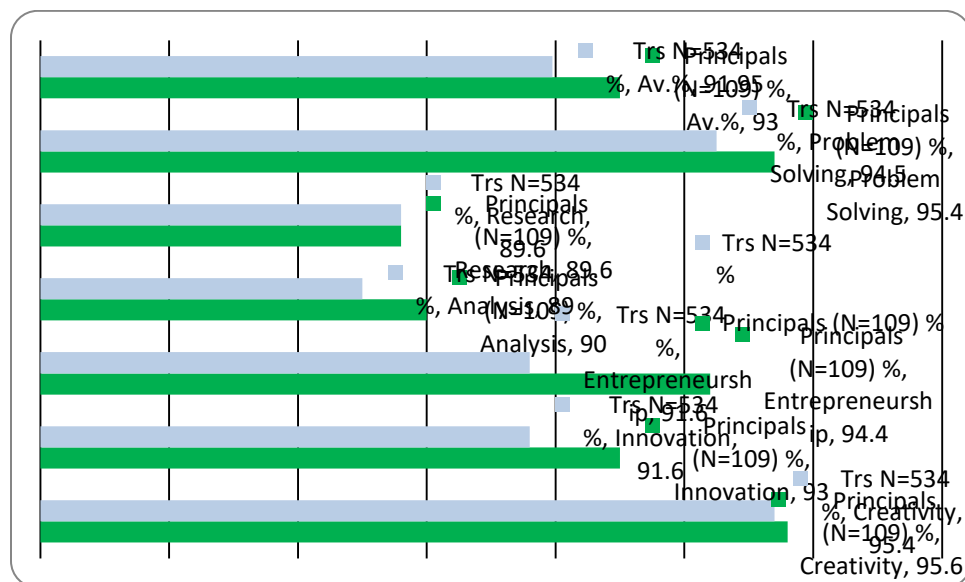


Based on the distribution of the results in **Figure 5.1.2.1**, by the secondary school principals and teachers they were in agreement with the extent to which communication, management and leadership competencies should be incorporated into the curriculum. These competencies are key because the learners in the 21st C, are expected to find multiple answers to challenges, choose what fits their schools and environments, for them to be successful in meeting the future challenges education must foster creative leadership, communication and management in classroom.

5.2.2 Competencies classified under Creativity

The principals and head teachers sampled randomly across the nation were expected to state the extent to which the creativity and related competencies should be emphasized into the curriculum reform. The results were tabulated in the Figure 5.1.2.1 below.

Figure 5.3: Shows a range of responses on competencies classified under Creativity, by secondary Principals and teachers.



The Figure 5.1.2 .2: provides a summary of various respondents' views on the skills, knowledge, attitudes and values that can be achieved through innovation, creativity, entrepreneurship, problem solving analysis and research. There were no significant variations with regard to competencies desired with the least preferred competencies being analysis rated at 89.6% and the highest being creativity 95.6%.

Figure: 5.4 Secondary school principal and teacher responses on collaboration

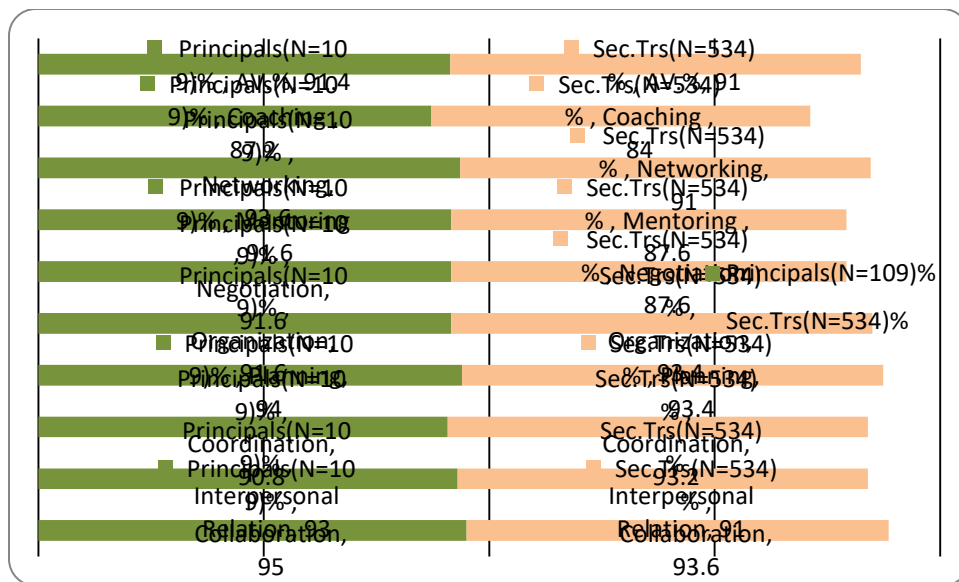
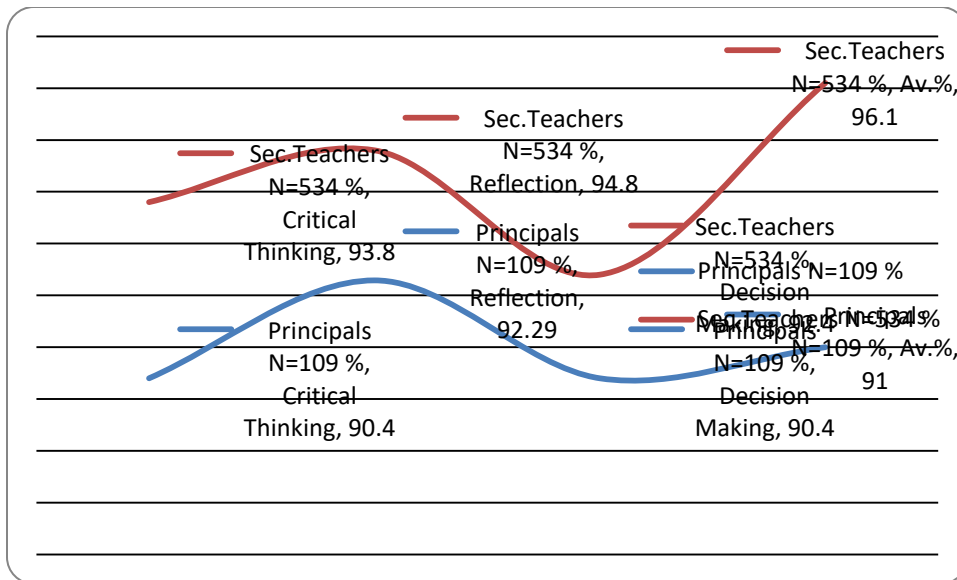


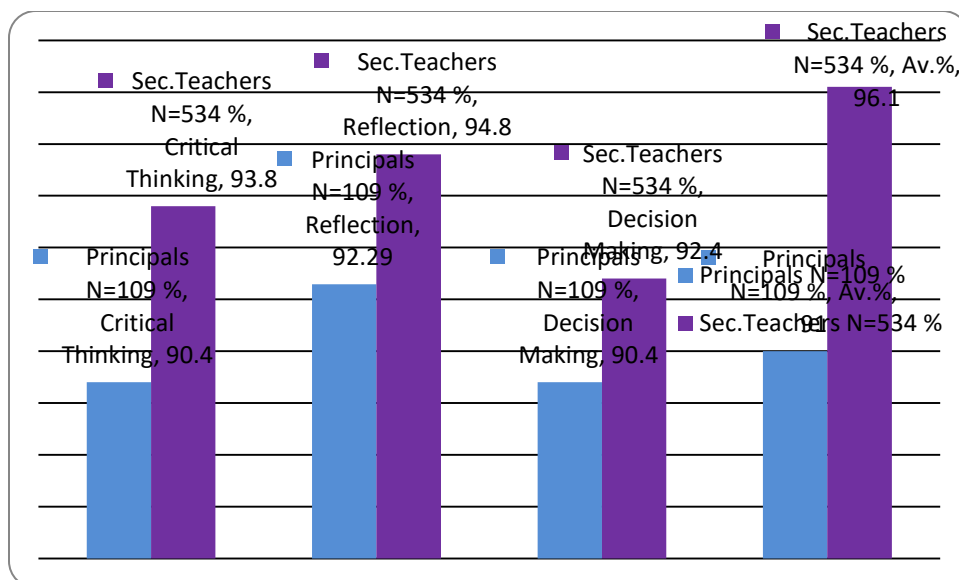
Figure : 5.1.2.3: Shows distribution on responses by teachers and principals who seem to agree to a great extent at 91.4% and 91% that collaboration and inter related competencies such as interpersonal relationship, coordination, planning, networking among others should be embedded into the curriculum reforms. However coaching was relatively rated lower compared to other competencies. Today, much success lies in being able to network, organize, plan, share, and use information to solve complex problems, in being able to adapt and innovate in response to new demands and changing circumstances, in being able to command and expand the power of technology to create new knowledge.

Line Graph : 5.5 Analysis of Secondary Principals and Teachers views on desired competencies classified under Critical Thinking.



Line Graph: 5.1.2.4 represents the views of the secondary school principals and teachers who were in agreement at 91% and 96.1% that critical thinking and its related competencies should be emphasized into curriculum reforms. The results show a strong consensus among different respondents on the aspect of critical thinking, reflection and decision making, presumably learners to develop critical thinking skills and the ability to adapt to new ideas.

Figure 5.6: Percentage rating on critical thinking and related competencies



The results depicted in Figure 5.1.2.4: shows that the secondary school curriculum should be tailored decision making, reflection and critical thinking to a great extent. The teachers rated much higher reflection (94.8%) and critical thinking (93.8%) than principals in the same competencies, however principals rated higher decision making (92.4%). These responses demonstrate schools must be transformed in ways that will enable students to acquire the critical thinking, flexible problem solving, reflection and innovative decision making skills.

5.2.3 Additional information on competencies

The acquisition of the above four 21st century skills will be pivotal in reforming the curriculum based on the competency based curriculum modules of instruction. The term 21st century skills refers to a broad set of knowledge, skills, work habits, and character traits that are believed by educators, school reformers, researchers, employers, and others to be critically important to success in today's world, particularly in college programs and contemporary careers and workplaces. Generally speaking, 21st century skills can be applied in all academic subject areas, and in all educational, career, and civic settings throughout a student's life.

These demonstrates that competencies clustered under communication, critical thinking, collaboration and creativity should be emphasized in tandem with the vision 2030 and Sustainable Millennium Development Goals (SMDGs) critical for development of this country in

Science and technology. The envisioned curriculum review will embrace the above skills in its content with the express objectives of producing functional products of our education system.

5.2.4 Talent Identification and Development

The secondary school principals and teachers were required to give their responses in regard to the extent to which talent identification and development should be emphasized in the curriculum. They were asked to indicate the extent to which the identified societal needs should be emphasized in the school curriculum using a five-pointer likert scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. The principals and teachers’ responses on each identified talent identification and development which constituted the average percentage rating are presented in Table 5.1.4.1 below.

Table 5.1 Findings on Nurturing the Potential and Talents of Learners According to Secondary School Principals and Teachers

Strategies	Principals(N=109)	Trs(N=534)
	%	%
Games and sports	96	94.8
Curriculum enrichment	93.4	94.6
Clubs and societies	91.6	91.2
Cooperative learning, competition among schools & academic conferences	89.7	90.4
Ability grouping & mentorship	89.4	90
Special schools for G&T	89.2	89
Special needs classes	88.2	88
Accelerated learning and advanced placement	78.2	87.8
Early admissions to school	67.8	88.9

The results in **Table 5.1.4.1** the secondary principals and teachers were in agreement with nurturing learners talents and potential through curriculum enrichment and games and sports, clubs and societies which were rated highly from 96.0% , 94. %, 93.4, 94.6%, 91.6% and 91.2% respectively. The respondents also considered cooperative learning, competition among schools and academic conferences (89.7% and 90.4%), ability grouping and mentorship programs (89.4% and 90%), special schools for gifted and talented (89.2% and 89%), special needs classes (88.2% and 88%) , accelerated learning and advanced placement (78.2% and 87.8% as key strategies that should emphasized into the curriculum. The least ranked strategy was early admission (67.8% and 74.6%).

Renzulli and Ries (2009) noted that curriculum enrichment is the most preferred strategy enhances the mastery of the curriculum by providing a series of planned activities which support the curriculum content, enrich the learning environment, learning experiences and teaching approaches.

5.2.5 Content/Learning Areas/Pathways

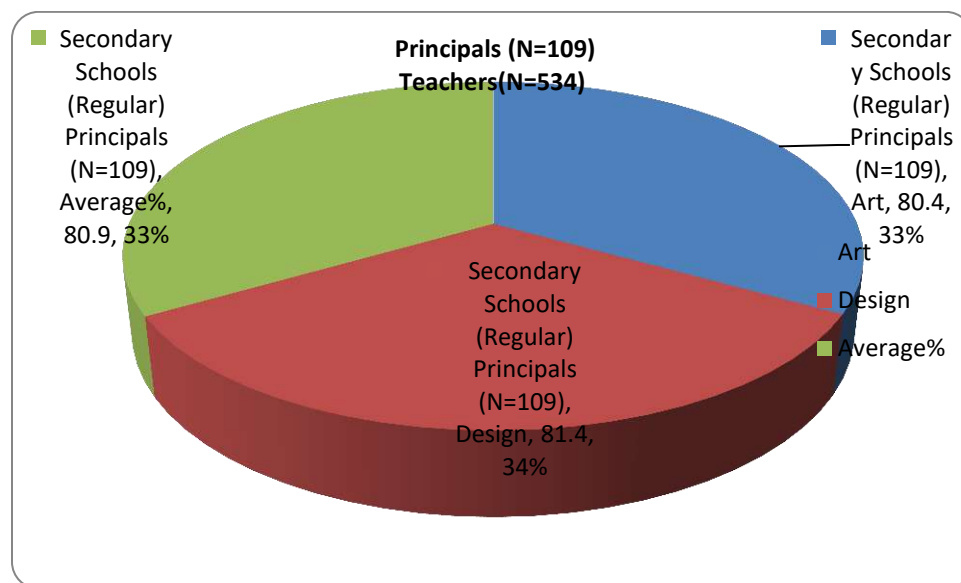
The secondary school principals and teachers were required to give their responses in regard to the extent to which societal needs should be emphasized in the curriculum. They were asked to indicate the extent to which the identified Content/activity/learning areas should be emphasized in the school curriculum using a five-pointer likert scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. The principals and teachers’ responses on each identified learning areas which constituted the average percentage rating are presented in Figure 5.1.5.1 below.

5.2.5.1 Extent to which Learning Areas should be emphasized in the Secondary school curriculum.

Desired outcomes within 21st century learning frameworks include learning traditional school subject and contemporary content themes in combination with the interdisciplinary 21st century themes. The core subjects and themes that frame 21st century learning include traditional core subjects while emphasizing civic literacy, global awareness, financial literacy, health literacy, and environmental literacy. For the purpose this study subjects were clustered under various sub-themes.

5.2.5.2 Extent to which Art and Design should be emphasized in the secondary school curriculum

Chart : 5.7 Presents Principals and Teachers Responses on the extent to which Art and Design should be emphasized in the school curriculum



Pie Chart: 5.1.4.1 shows the extent to which Art and Design were rated by principals and teachers (81.2% and 82.8% respectively). A similar situation was noted in secondary schools which mean that while designing the curriculum art and design should be highly considered.

5.2.5.3 Extent to which Agriculture, technology, vocational and technical subjects should be emphasized in the secondary school curriculum

Figure: 5.8 Principals and Teachers Percentage Responses on the extent to which Agriculture, technology, vocational and technical subjects should be emphasized in the school curriculum

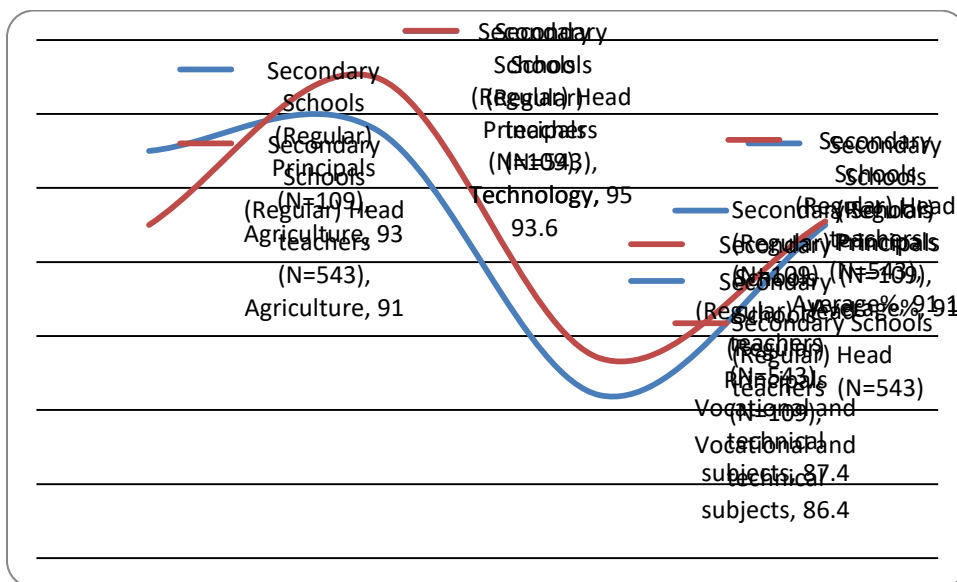


Figure: 5.1.5.3, Shows principals and teachers would like technology to be emphasized in the school curriculum was rated highly in secondary schools. The principals (93.6%) and teachers (95.0%) were in favour of inclusion of technology in the envisaged secondary school curriculum a similar situation to that in primary school.

In reference to Agriculture, technology, vocational and technical subjects, ratings for the subjects across all the selected levels were high. The ratings indicated strong support for the inclusion of

these subjects in the curriculum. This is in tandem with Vision 2030 that lays importance on Agriculture as a major contributor to the country's GDP (RoK, 2007). The Vision 2030 also echoes the importance of technology and indicates that by 2012 it should be one of the areas that should be mainstreamed in the school curriculum (Vok, 2007). The high ratings on technology as learning area that should be entrenched in the curriculum are in line with a study conducted at South Korea, which found that technological skills are most sought after (Soomyung Jang, et al, 2004).

5.2.5.4 Extent to which Physical Education should be emphasized in the secondary school curriculum

The principals and teachers rated the extent to which Physical Education should be emphasized in the secondary school curriculum. Their findings are presented in **Table 5.1.5.4**

Chart 5.9: Principals and Teachers Mean Percentage Responses on the extent to which Physical Education subjects should be emphasized in the school curriculum

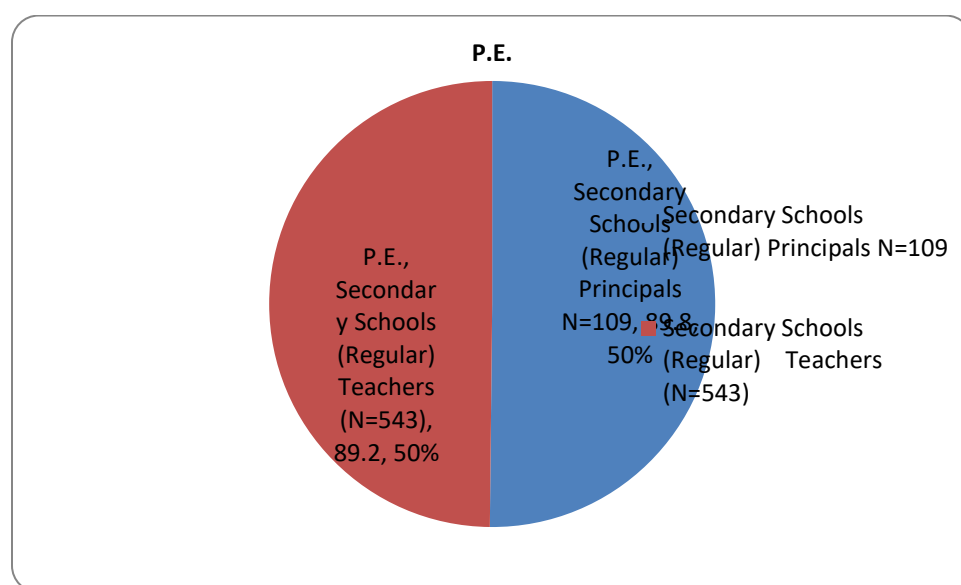


Chart 5.1.5.2: indicates views of principals (89.8%) and teachers (89.2%) on the extent to which P.E should be incorporated in the secondary school curriculum.

5.2.5.6 Extent to which Humanities should be emphasized in the school curriculum

Figure 5.10: Principals and Teachers Mean Percentage Responses on the extent to which Humanities subjects should be emphasized in the school curriculum

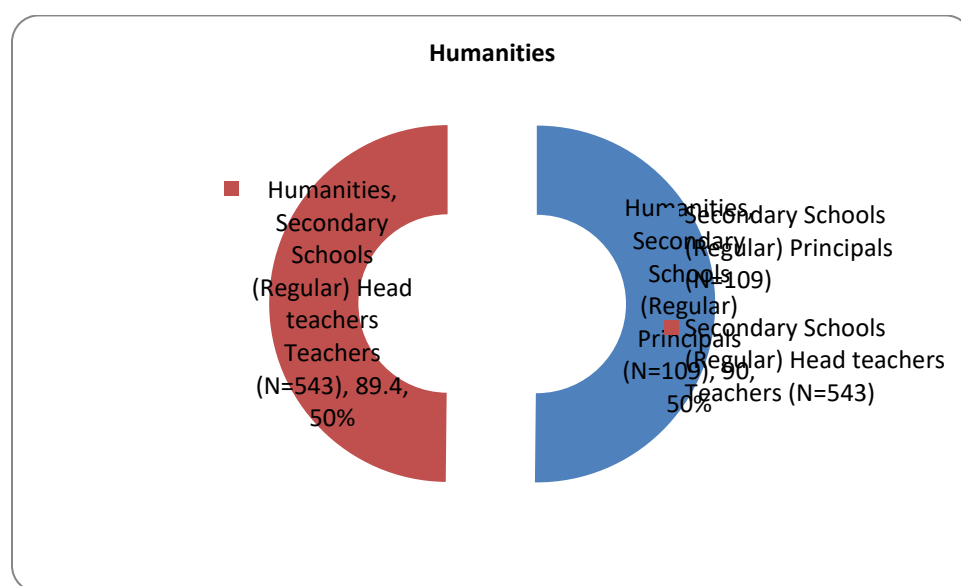


Figure 5.1.5.1: Shows how principals and teachers rated humanities subjects between (90.0%) and (89.4% respectively). The genesis and social existence of mankind is intertwined with our History, Geography and religion among all the other humanities and so become indispensable areas of human endeavour.

5.2.5.7 Extent to which Environment and Climate Change Aspects should be emphasized in the secondary school curriculum

The principals and teachers rated the extent to which environment and climate change aspects should be emphasized in the school curriculum in Figure 5.1.6.1.

Figure 5.11: Principals and Teachers Mean Percentage Responses on the extent to which Environment and Climate Change subjects should be emphasized in the school curriculum.

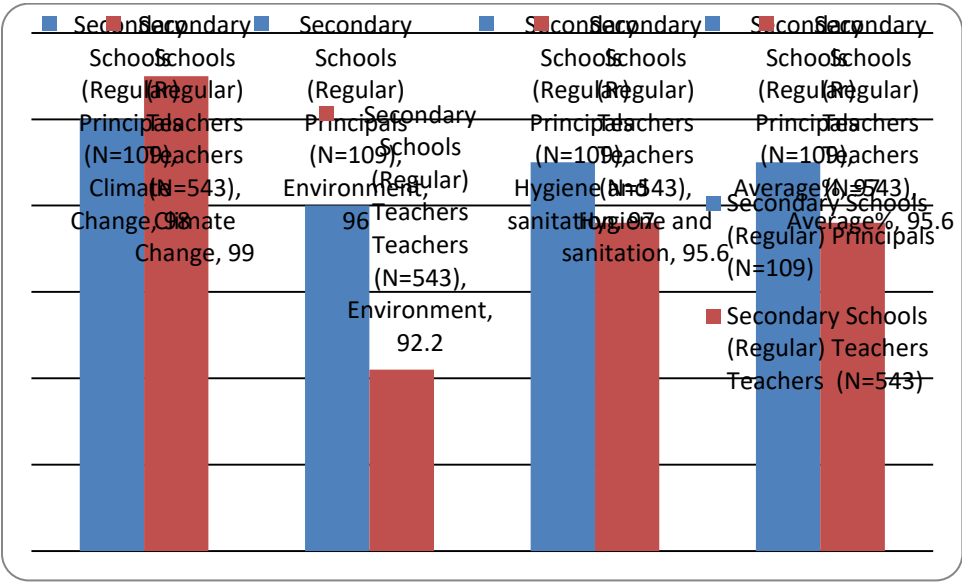


Figure 5.1.5.6: Illustrates the emphasis by the principals and teachers on magnitude to which climate, environment hygiene and sanitation subjects whose percentage rating was between 92% and 99%, should be envisaged into the curriculum.

5.2.5.8 Extent to which Financial Subjects should be emphasized in the school curriculum

The principals and teachers rated the extent to which financial subjects should be emphasized in the school curriculum. This was illustrated in Figure 5.1.5.7.

Figure 5.12: Principals and Teachers Mean Percentage Responses on the extent to which Financial subjects should be emphasized in the school curriculum

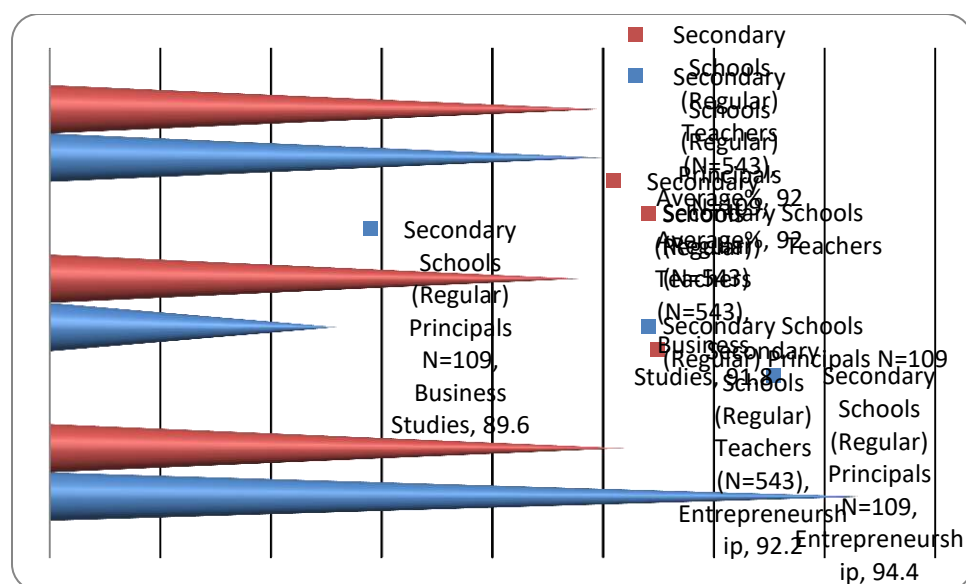


Figure 5.1.5.7.1: provides key findings which reveal that business studies and entrepreneurship tied in percentage rating (92.0%). The importance of these subjects is universal as the world becomes more businesslike in nature and the economic well being of countries determines the quality of life for its citizens.

5.2.5.9 Extent to which 21st Century subjects should be emphasized in the school curriculum

The principals and teachers rated the extent to which mathematics; languages and sciences subjects should be emphasized in the school curriculum. Their findings are presented in **Table 5.2.5.10.:** Principals and Teachers Mean Percentage Responses on the extent to which 21st Century subjects should be emphasized in the school curriculum

Figure 5.13.: Summary of principals and teachers responses on Mathematics, languages and sciences

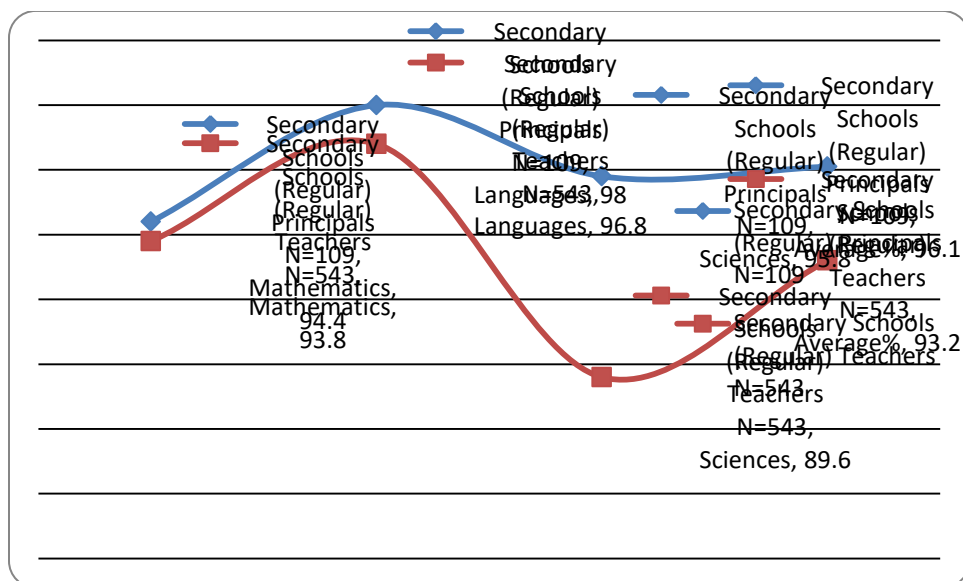


Figure 5.1.5.8, emphasizes the importance of mathematics, Sciences and Languages to the assimilation and acquisition of the 21st century skills is obvious. Furthermore, the country's Blue- print for economic development flags the teaching of mathematics, languages and sciences as being vital to the country's development. Studies have also shown that countries like Singapore and Malaysia with high technological development have put great emphasis on mathematics and sciences as a foundational requirement for their technological advancement.

5.2.5.11.: Extent to which Home Science subjects should be emphasized in the secondary school curriculum

Figure: 5.14: Principals and Teachers Mean Percentage Responses on the extent to which Home Science and core subjects should be emphasized in the school curriculum

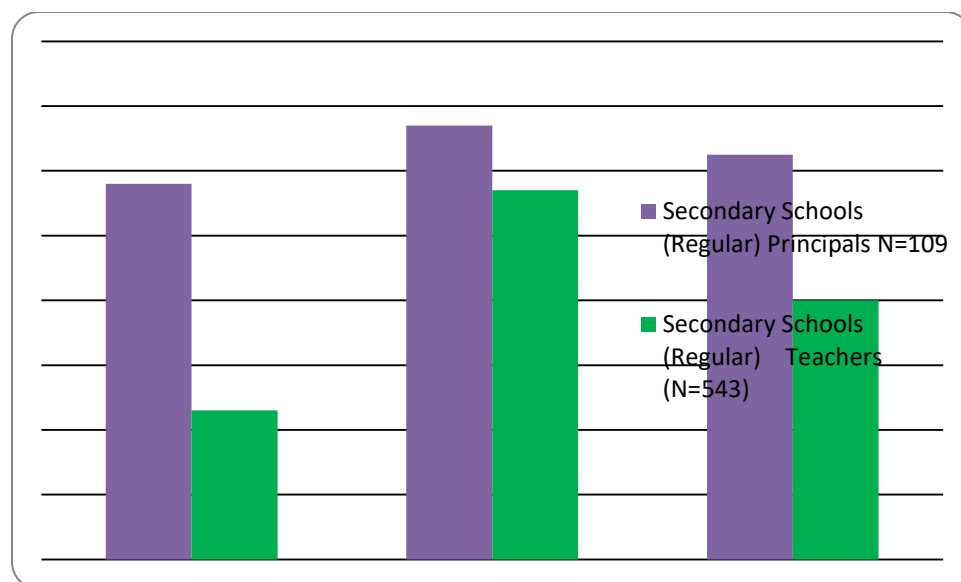


Figure 5.1.5.9. shows results from principals and teachers that health and nutrition should be emphasized to a great extent rated at 95.4% and 93.4% respectively.

5.2.6 Pedagogical approaches

The secondary school principals and teachers were required to give their responses in regard to the extent to which learning approaches should be emphasized in the curriculum. They were asked to indicate the extent to which the identified societal needs should be emphasized in the school curriculum using a five-pointer likert scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=some extent’ and ‘G=Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. The principals and teachers’ responses on each learning approach which constituted the average percentage rating are presented in figure 5.1.6.1 below.

Figure 5.15: Summary on responses for 21st Century Teaching Strategies

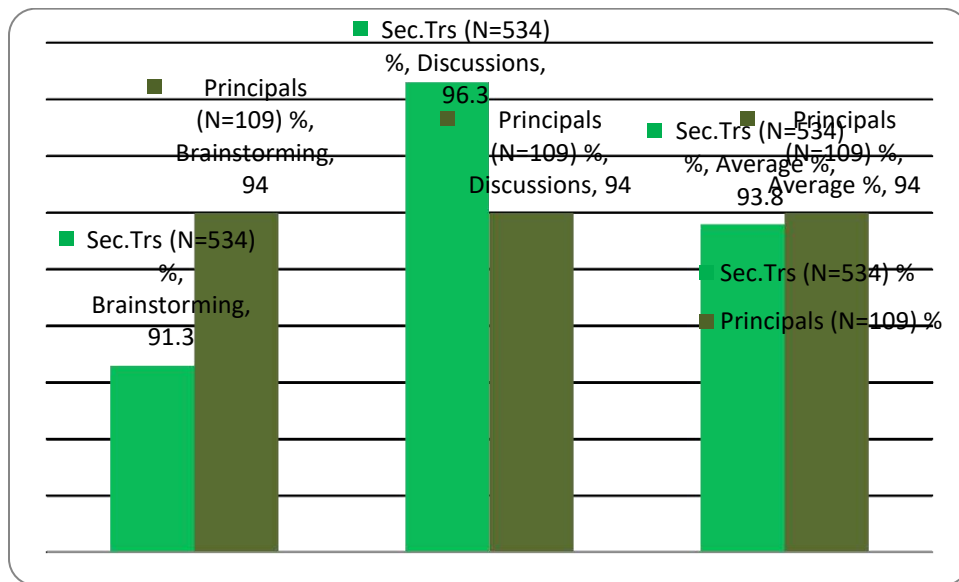
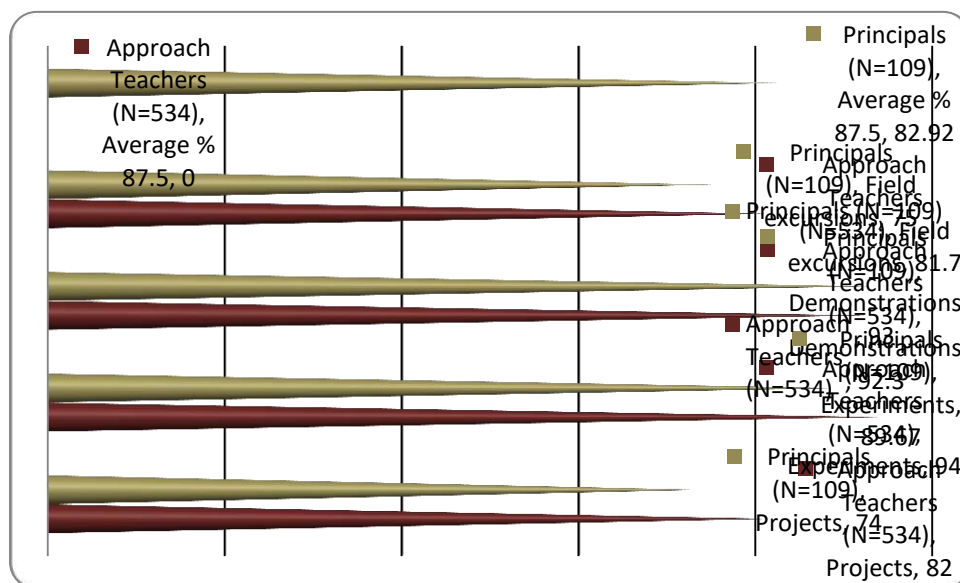


Figure 5.1.6.1 provides various responses with discussion method of instruction being preferred by secondary school principals and teachers with a rating of 96.30%. This therefore dictates that in the pedagogical design of the new curriculum, the discussion method should be visibly positioned. Furthermore discussion method is one way of enhancing collaboration among the learners, an aspect of the 21st Century skills. Brainstorming is an approach that trains learners to accept different views and perspectives on the path of knowledge construction and received a rating of 91.80%. In general, the composite mean for the cluster of 21st Century teaching strategies is 93.30% therefore urging us to use these strategies in delivering the secondary school curriculum.

5.2.6.1 Practical methods of teaching

The principals and teacher rated practical methods of teaching as tabulated in the figure 5.1.6.2 below.

Figure 5.16 Principals and Teachers' responses on the extent to which various practical strategies should be used in delivering the secondary school curriculum.



From the percentage ratings displayed in **Figure 5.1.6.2** , most respondents (94.00%) preferred the use of experiments during the delivery of secondary school curriculum. Use of demonstrations was also rated highly by the respondents at 92.80%. Project work was rated at 82.00% while field excursions were the least rated in this category with a value of 81.70%. The average percentage for this cluster was 87.63% and this can be translated to mean that there is need to use practical methods in the delivery of the curriculum. The enhancement of practical methods in the instruction of the new curriculum will lead to acceptable levels of skills acquisition.

5.2.6.2 Learners' activity-based strategies

Figure 5.17: Principals and Teachers' responses on the extent to which various learners activity-based strategies should be used in delivering the Secondary school curriculum.

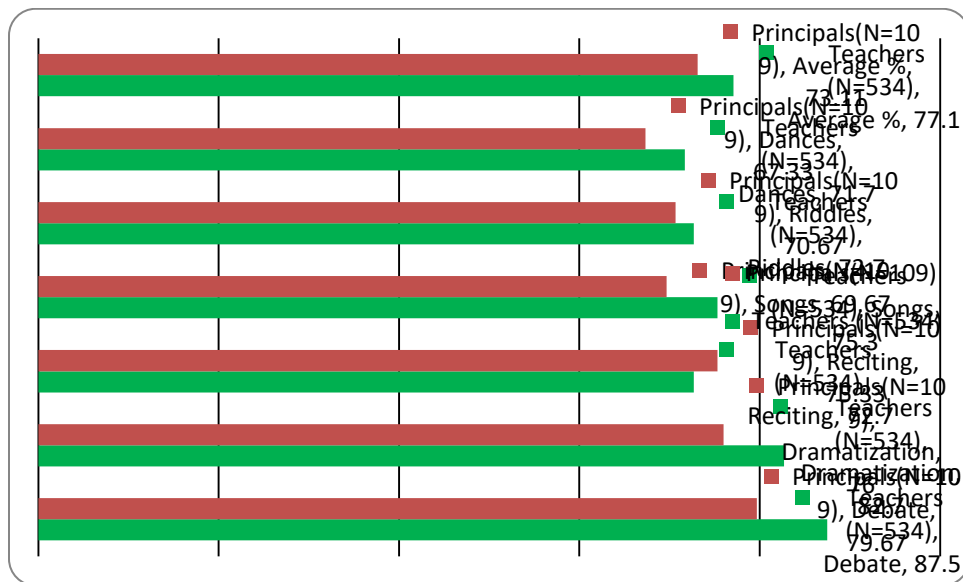


Figure 5.1.6.3: Illustrates that most of the respondents (87.50%) preferred debate as a strategy of delivering the secondary school curriculum. Through debate, learners practice on how to communicate and by so doing, they acquire communication skills which are part of the 21st Century skills. Dramatization followed debate closely with a percentage rating of 82.70. Through dramatization, some talents may be revealed, nurtured and eventually lead to job creation. This can lead to production of learners who are great communicators. Songs had a percentage rating of 75.3. Reciting and use of riddles followed and each of them had a percentage of 72.70. The last one in this category was 'dance' with rating of 71.70%. Compared to the other learning approaches, the average percentage for this cluster was the lowest at a rating of 77.10.

5.2.6.3 Experiential learning strategies

Figure 5.18: Secondary Principals and teachers' responses on experiential learning strategies

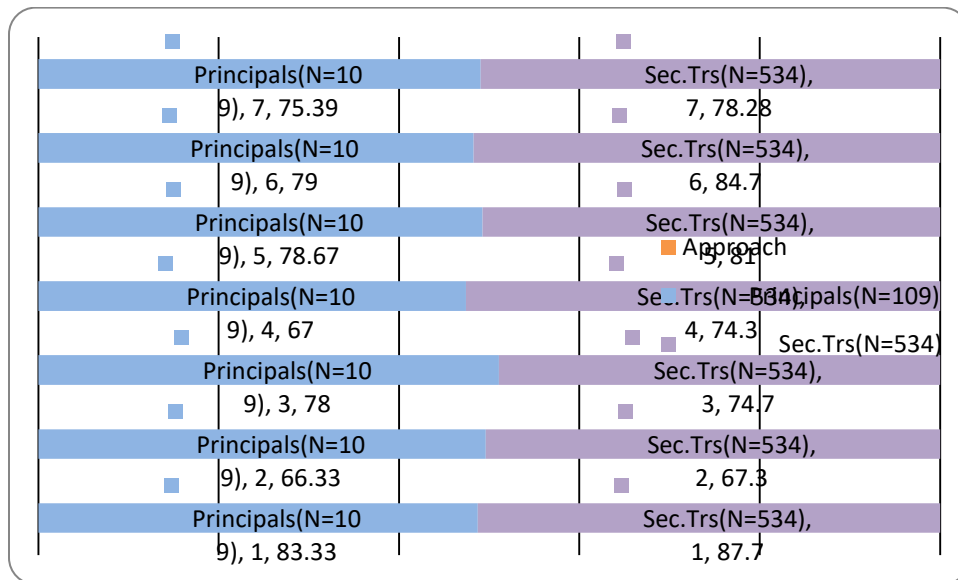
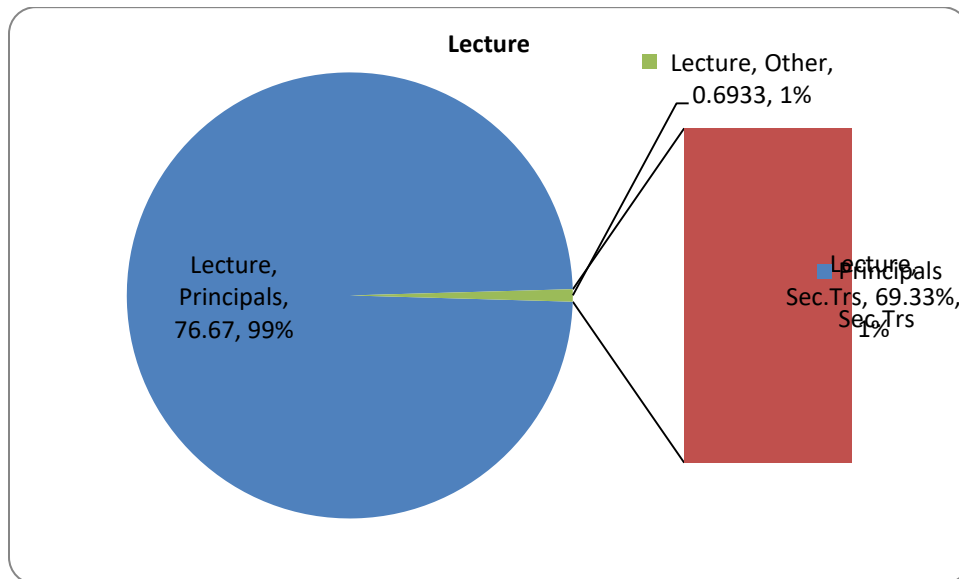


Figure 5.1.6.4, shows responses of both principals and teachers with regard to experiential learning teaching strategies, experiential learning was ranked highly with a percentage rating of 87.70. It was followed closely by simulations with a percentage rating of 84.70. This indicates that experiential learning and simulations should be among the preferred methods of delivering the curriculum. The drills, story-telling nature-walk and role play had percentage ratings were relatively low from 67.30%, 74.70%, 74.30% to 81.00% respectively.

5.2.6.4 Lecture method

Figure 5.19 Principals and Teachers responses on lecture method



The sampled teachers and principals rated this method of teaching very low at (69.33%) and 76.67% implies that it should be used sparingly given that 21st C focuses more on creativity, critical thinking, communication and collaboration is essential to prepare students for the future and cannot be achieved through lecturing.

5.2.6.5 Other learning approaches

Other learning approaches as given by the principals include apprenticeship, asking questions and answering, assignment approach, research, benchmarking, case studies, use of resource persons, computer game play, note making, use of the library, use of ICT gadgets like mobile phones, peer teaching and problem solving approach.

5.2.7 Teaching and Learning Resources

School resources are geared towards enhancing learning, teaching and content delivery. Educational resources are the teaching and learning items, structure materials and human resources that assist the teacher to effectively and efficiently deliver content. In recent years there has been a shift among educationists from the traditional teacher-centered learning to

student-cantered learning. It has been established that effective instruction is more allied to active participation in the teaching learning process (as in laboratory work) than to passive participation (as during a lecture). This shift in pedagogy calls for use of different strategies to effectively engage learners to acquire requisite knowledge, skills and attitudes.

In line with the Education for All (EFA) initiatives, Millennium Development Goals (MDG's), Sustainable Development Goals (SDG), Education for Sustainable Development (ESD), the Constitution of 2010, Sessional paper no 1 of 2015, the realization of Kenya's Vision 2030, of providing a globally competitive quality education, training and research for development, will be achieved through adoption of pedagogy that emphasizes exploration, collaboration, experimentation, creativity, critical thinking and innovation. This calls for the provision of relevant resources that promote these 21st century skills and competencies.

The observation schedule sought to establish the availability and adequacy of resources which are important in implementing and actualizing a competency based curriculum. Information was sought by researchers observing the available resources in the educational institutions at secondary educational institutions. These are provided in Table 5.1.7.1.

Table 5.2: Percentage rating of resources observed in secondary level learning institutions

Teaching and learning resource	Not Available (%)
Art room	92.1
Music room	90.8
Technical subject	86.5
Home science lab	84.8
Biology ,chemistry and physics	63
Library	76.2
Models	68.2
Photographs/ photos	44.6
Charts	62.1
Sports equipments	41.8
Agriculture farm	16.8
Syllabus	8.9
Text books	47.3
Classrooms	56.9

Table 5.1.7.1. From analysis, the data obtained shows that art room (92%), music rooms (90.8), technical subjects (86.5%), home science (84.8%) and science laboratory (63%) were observed and rated highly as unavailable in the sampled institutions.

In the provision of a globally competitive quality education and training this will be possible through adoption of pedagogy that emphasizes exploration, collaboration, experimentation, creativity, critical thinking and innovation. This calls for the provision of relevant resources that promote these 21st century skills and competencies.

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5.2.8 Assessment

Secondary principals and teachers were sampled randomly from the entire country and were asked to respond to the effectiveness and validity of the various assessment forms used in our school system on learners' outcomes. The different forms of assessment were clustered into formative and summative and composite means for each of them calculated. The responses were constructed in the form of a likert scale with "level of extent" being the construct of measurement. Their responses were presented as follows:

Figure 5.20: Principals and Teachers' responses on Formative assessment contribute to effective measurement of learners' achievements at Secondary level.

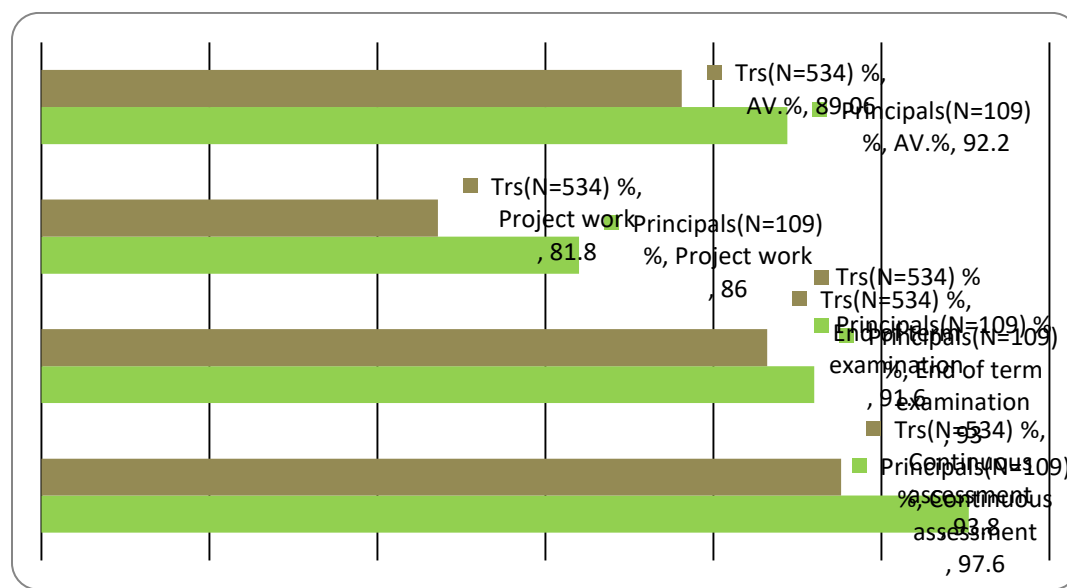


Figure 5.1.8.1: depicts secondary principals and teachers' responses on various forms of assessment, there is more preference for formative assessment (87.8%) than summative assessment (85.45%). Further analysis showed that continuous assessment was the preferred mode and was rated highest at (93.8%); end of term examination (91.6%); end of year examination and project work (81.8%). The existing scenario of having National examinations was the least preferred form of assessment receiving a rating of 79.0%. An inspection of responses by the primary school teachers reveals a high level of congruence with the results documented for the secondary school teachers on examination assessment modalities. The preferred form of evaluation is the formative type and this is encouraging considering that the proposed form of curriculum construction under the upcoming reform is the Competency Based Curriculum. Other forms of assessment suggested by teachers included talent assessment, moral and values assessment, observation and practical assessment.

5.2.8.1 Secondary principals and teachers responses on the various forms of assessment

The principals and teachers at secondary level ratings on summative assessment as indicated in Figure 5.1.8.2.

Figure 5.21: Secondary Principals and teachers responses on Summative assessment contribute to effective measurement of learners' achievements at Secondary level.

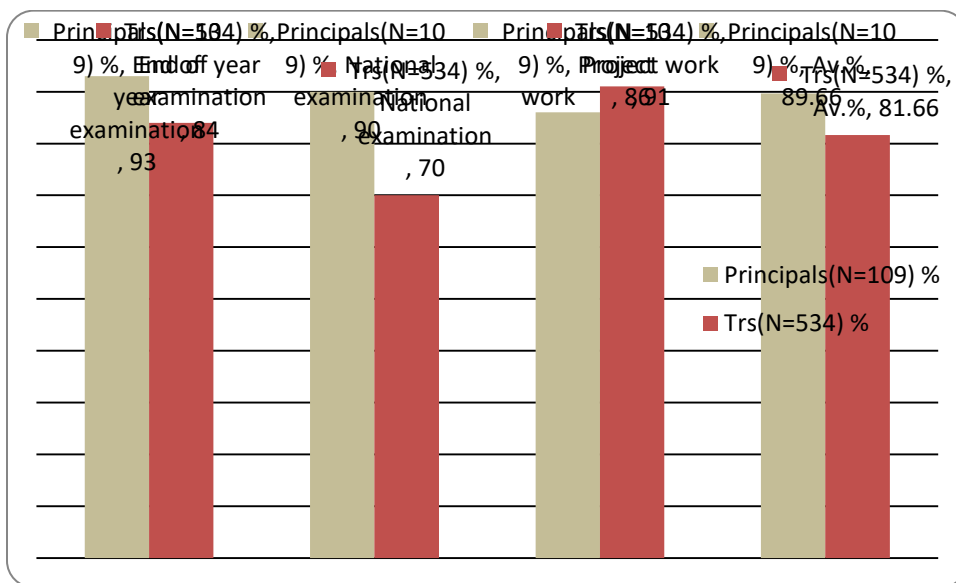


Figure 5.1.8.2 There principals were not in agreement with the teachers with regard to national examinations as the principals rated highly national examinations with 90% as opposed to

teachers whose rating was 70%. There were also slight deviations with rating of end year and projects, seemingly teachers prefer projects to all other forms of summative evaluation.

5.2.8.2 Other suggested modes of assessment

The principals and teachers suggested that; aptitude test, Assessment of research, Co-curricular assessment, Observation and Oral assessment should be developed as effective modes of assessment.

5.2.9 Pertinent and Emerging /Cross Cutting Issues.

The secondary school principals and teachers were required to give their responses in regard to the extent to which Pertinent and Emerging /Cross Cutting Issues should be incorporated into the curriculum. They were asked to indicate the extent to which the identified societal needs should be emphasized in the school curriculum using a five-pointer likert scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=some extent' and 'G= Great extent'. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. The principals and teachers' responses on each Pertinent and Emerging which constituted the average percentage rating are presented in Figure 5.1.9.1.

Figure 5.22: Secondary Teachers' responses on extent to which various cross-cutting issues should be addressed in the Secondary school curriculum.

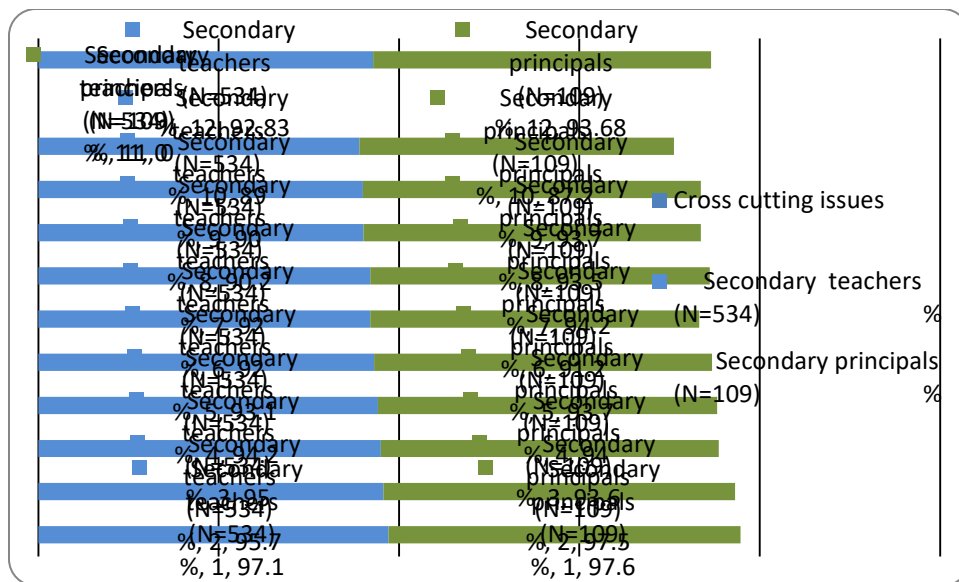


Figure 5.23: indicates that 92.8% of secondary teachers affirmed the need to have cross-cutting issues addressed by the curriculum. For individual cross cutting issues the respondents agreed that the following should be incorporated in the curriculum: good governance/integrity(97.1%),life skills which includes guidance and drug abuse(95.7%),health education which include hygiene, HIV/AIDS (94.2%),disaster risk management which includes security issues(93.1%),gender issues(92%),climate change(90.2%) and financial literacy(90.0%).

There notable consistency by 93.7% of Secondary Principals who affirmed the need to have cross-cutting issues addressed by the curriculum. These issues responses were as follows in order; integrity at 97.6% ,drug and substance abuse at 97.5% , gender issues at 94.2%,financial literacy at 93.8% ,security and safety at 93.7% , health education which includes other aspects such as HIV/AIDS, sexuality education, hygiene and health at 94% ,technology at 93.6%,environment which includes climate change at 93.5% , disabilities (91.2%) and the Child rights slightly low at 87.2%.

5.1.2 SNE Secondary level Societal Needs

SNE secondary school principals and teachers were required to give their responses in regard to the extent to which Societal Needs should be incorporated into the curriculum. They were asked

to indicate the extent to which the identified societal needs should be emphasized in the school curriculum using a five-pointer likert scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. The principals and teachers’ responses on each Societal Need which constituted the average percentage rating are presented in various Figures.

5.1.2.1 SNE Secondary School principals and teachers Responses to the extent the secondary level Curriculum should emphasise Societal Needs.

Responses of SNE secondary school principals and teachers on societal needs were presented in Figure 5.1.2.1.

Figure 5.24: Summary of secondary principals and teachers responses on societal needs.

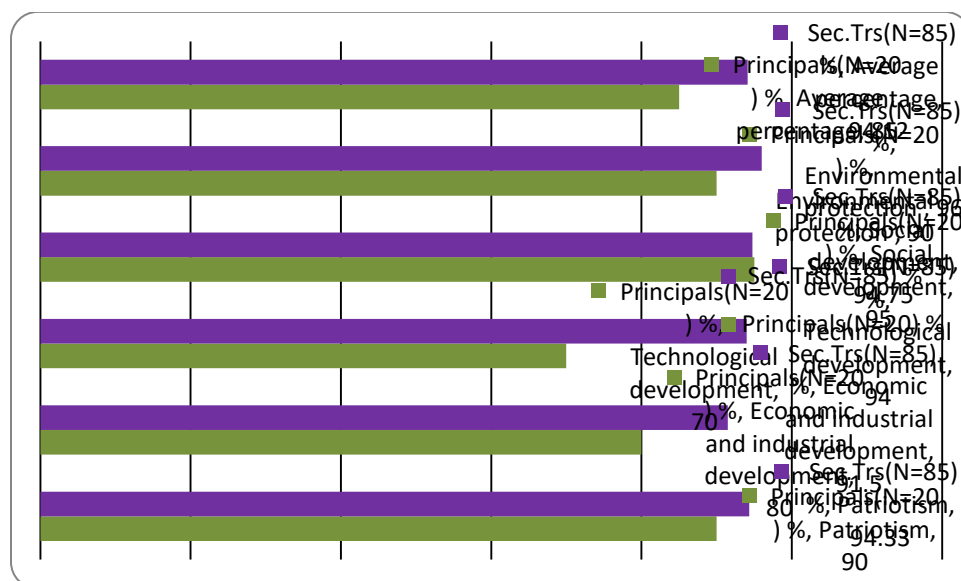


Figure 5.1.2.1, shows respondents views with regards to the extent to which societal needs should be emphasised in the curriculum and on average all teachers were in agreement at 94.12% while head teachers were at 85%. The teachers rated environmental protection highest at 96.00% followed by Social development at 94.75%, Patriotism at 94.33%, technological development at 94.00%, and economic and industrial development at 91.50%.The principals were almost at bar with teachers in rating social development,patrotism and environmental protection. There was

disagreement with the latter on technological development, economic and industrial development.

5.1.3. Special Needs Level Competencies on communication

Summary distribution of responses by SNE secondary Principals and teachers on desired competencies classified under Communication were tabulated and presented as follows:

Figure 5.25: Responses by SNE secondary Principals and teachers on desired competencies classified under Communication

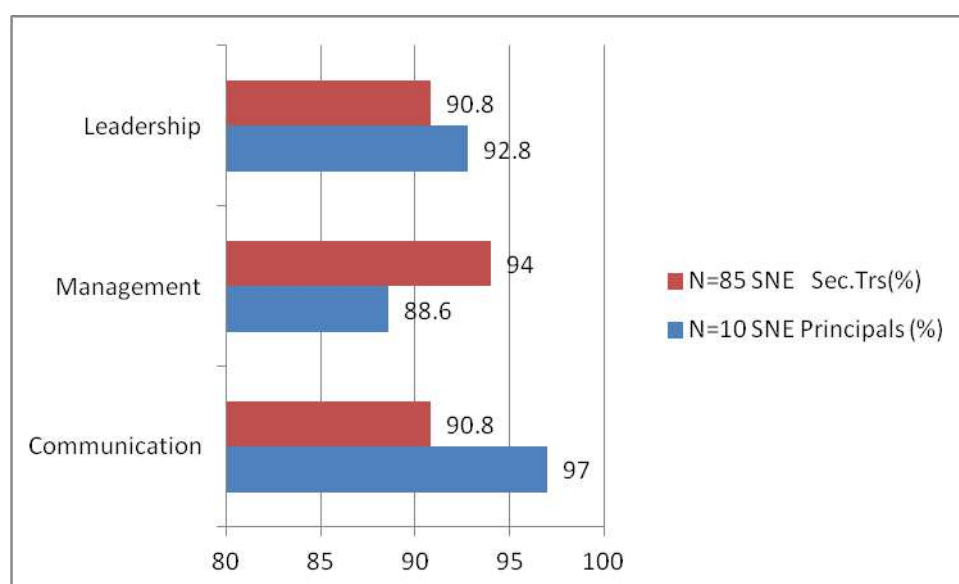


Figure 5.1.3.1, provides findings on knowledge, skills, values and attitudes which should be attained through communication, management and leadership. The responses of SNE teachers and principal at secondary level were 90% on the aspects of communication, management and leadership. These competencies are considered critical path in promoting the acquisition of key competencies to be achieved through curriculum reforms. The Constitution affirms equitable,

quality and efficiency in provision of education to all learners including SNE which seem to be a desire for teachers and head teachers across all levels.

These competencies were highly rated as they will enable students to be prepared to face these challenges and seize the opportunities brought about by new forces locally and internationally. Similar studies carried out in Singapore by Soland et al. 2013, and Voogt&Roblin 2012), indicated that features of their framework for 21st C, such as creative and critical thinking, communication and collaboration, social and cultural skills were core values that the Singapore education system hoped to cultivate in all its students.

5.1.3 Special Needs Level competencies on creativity

Responses of SNE secondary school principals and teachers views competencies classified under Creativity for learners with special need were presented as indicated below.

Figure 5.26: Shows a range of responses on Competencies classified under Creativity, by the SNE Secondary and teachers from Public and Private schools.

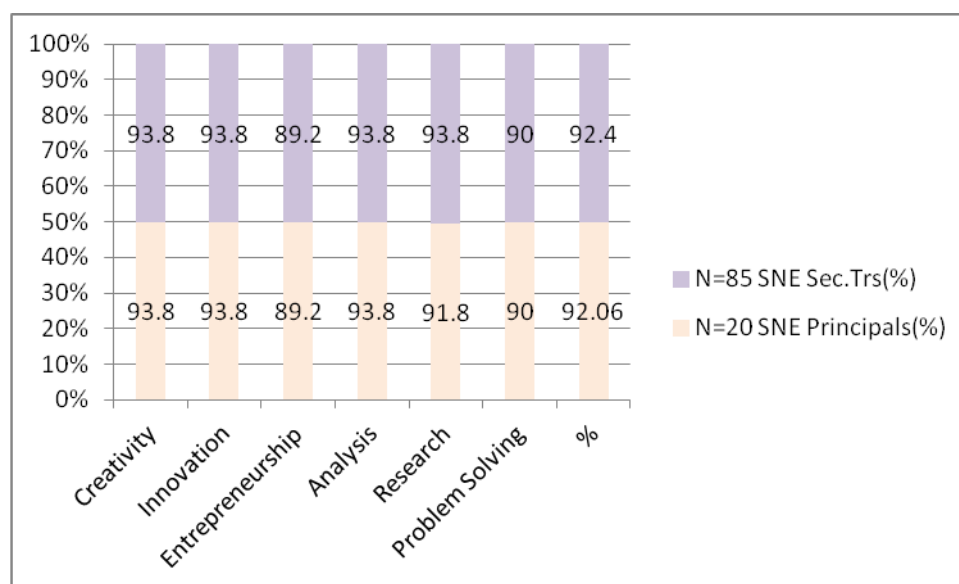


Figure 5.1.3.2: Provides a summary of various respondents' views on the skills, knowledge, attitudes and values that can be achieved through innovation, creativity, entrepreneurship, problem solving analysis and research. The percentage range from the lowest was 89.2% and highest 93.8%. These responses can be closely linked to a study carried out by Rychen D.S. and Salganik L.H (eds.) (2001) which revealed that a creative person should have divergent thinking, problem solving skills, originality, and ability to see or create new values. Considering the convergence on the need to nurture creativity in the curriculum and the literature encountered, constructs of problem solving, divergent thinking, research and innovation will find their place in the content of the proposed curriculum.

5.1.3. Special Needs Level competencies on creativity

Summary of Principals and teachers views at secondary level on the skills, knowledge, attitudes and values that should be attained by learners through creativity. The results were collated in Figure 5.1.3.3

Figure 5.27: Illustrates SNE secondary school principals and teachers rating on creativity and related competencies.

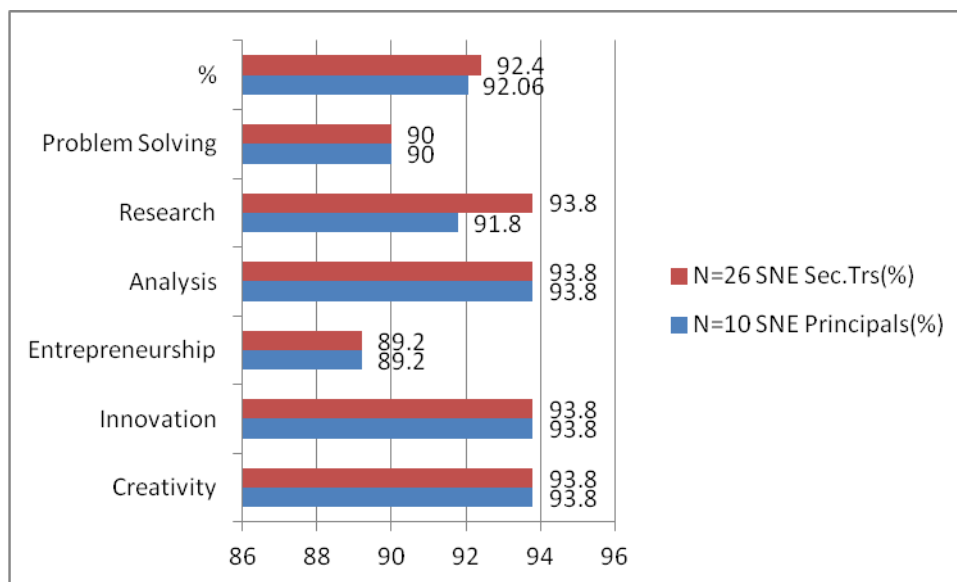


Figure 5.1.3.3: The findings reveal the degree to which the stated competencies should be incorporated into the curricula with competencies such as creativity, analysis problem solving and entrepreneurship tying in percentages.

5.1.3.4 SNE Competencies on collaboration

The study sought information from principals and teachers teaching in secondary school with regard to the extent to which collaboration and related competencies should be emphasized into the curriculum reforms. The analysis of their views were summarized in the Figure 5.1.2.4.

Figure 5.28. :SNE Secondary Principals and Teachers Responses on Collaboration

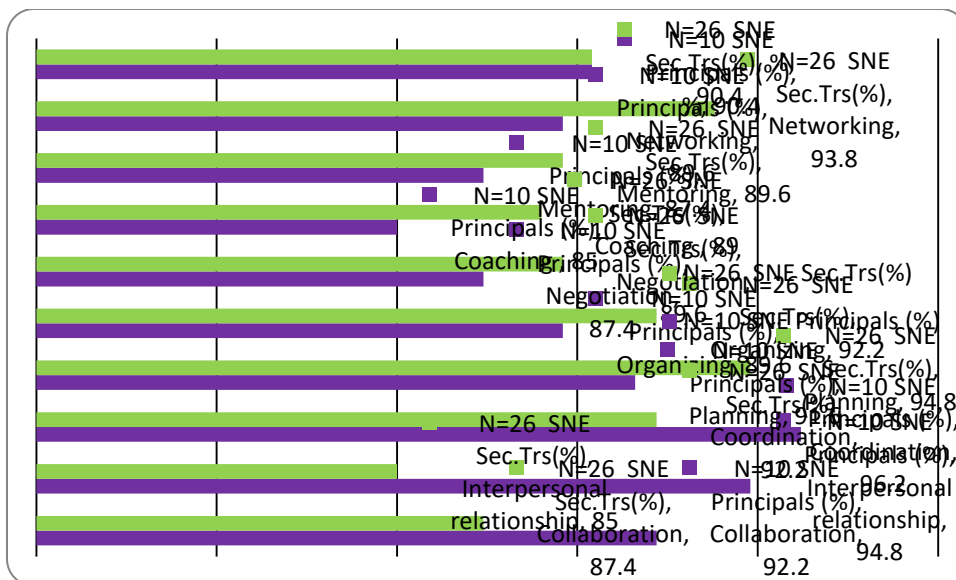


Figure 5.1.2.4, depicts that collaboration, coordination, interpersonal relationship and planning should be emphasized more into the curriculum. This critical because if knowledge is learned to support the performance of skills then learners will satisfactorily excel in aspects of knowledge, skills and values (Soland et al. 2013, and Voogt&Roblin, 2012). However, competencies such as

networking, organising, coaching and negotiated were rated slightly lower but they are of great significance to learners.

5.1.3.5 SNE Competencies on Critical Thinking

The study sought information from principals and teachers teaching in secondary school with regard to the extent to which critical thinking and related competencies should be emphasized into the curriculum reforms. The analysis of their views were summarized in the figure 5.1.3.5.

Figure 5.29: Analysis of SNE secondary principals and teachers views on desired competencies classified under Critical Thinking

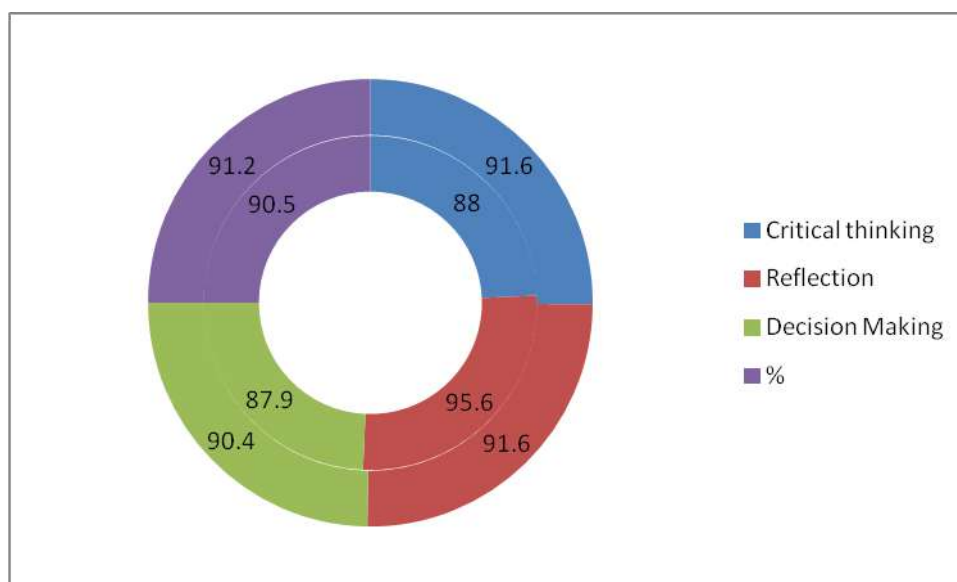


Figure 5.1.3.5: Shows the overall % rating for critical thinking was 91.6 %.The principals preferred most reflection, followed by critical thinking at 88% and decision making rated at 87.9%,this was slightly different from who considered that all the three competencies were essential and all the percentage ratings were almost at bar. Key evidence show a consensus among on the aspect of critical thinking, reflection and decision making, presumably learners to develop critical thinking skills and the ability to adapt to new learning situations as they transit from one sub sector of education to another.

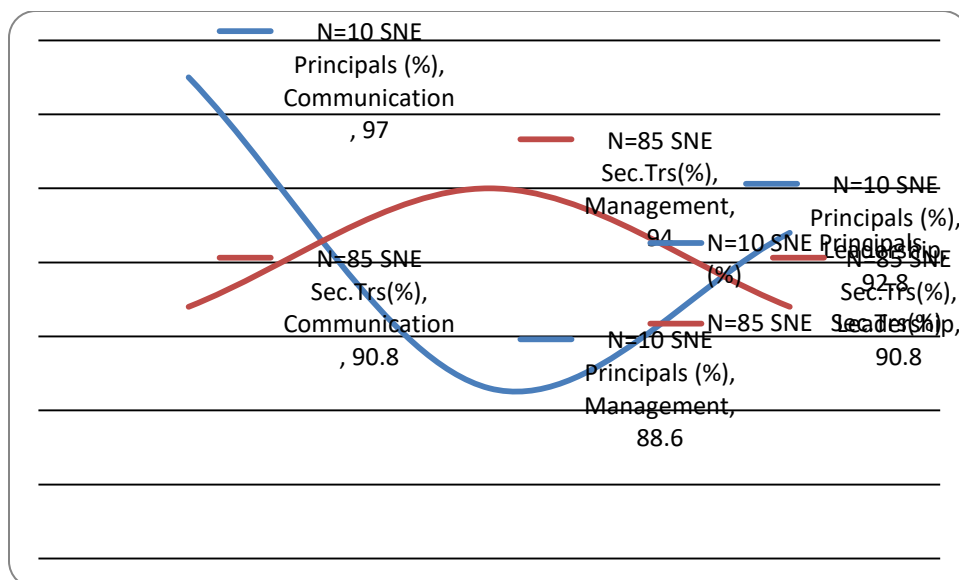
5.1.3.5 Responses from principals and teachers in SNE secondary level on communication.

The study sought information from principals and teachers teaching in secondary school with regard to the extent to which and related competencies should be emphasized into the curriculum reforms. The analyses of their views were summarized in the 5.1.3.4.

5.1.3.5 Responses on communication as a competency by SNE principals and teachers.

The respondents from secondary schools were required to give their responses in regard to the extent to which Communication and underlying competencies should be emphasized in the curriculum. Their responses are presented in Line graph 5.1.3.1.

Line graph 5.30: Comparison on percentage ratings competencies classified under communication



Line graph 5.1.3.4: SNE schools teachers and principals rated above 90% the competencies of communication and leadership. However, principals rated management slightly below 90%. These competencies will enable SNE students to be prepared to face these challenges and seize the opportunities brought about by new forces locally and internationally.

The Constitution puts emphasis on equitable, quality and efficiency in provision of education to all learners including SNE which seem to be a desire for teachers and principals across all levels.

5.1.4 Nurturing the potential and Talents of learners

SNE secondary school principals and teachers were required to give their responses in regard to the extent to which should nurturing the potential and talents of learners be embedded into the curriculum. They were asked to indicate the extent to which the identified societal needs should be emphasized in the school curriculum using a five-pointer likert scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. The

principals and teachers' responses on each talent and potential development which constituted the average percentage rating are presented in Table: 5.1.3 below.

Table: 5.3 Responses on nurturing the potential and Talents of learners according to SNE Secondary principals and Teachers

Strategies	Trs (N=85)	Principals (N = 20)
	%	%
Games and sports	95.0	97.2
Curriculum enrichment	93.4	95.6
Clubs and societies	91.4	95.0
Cooperative learning, Competition among schools and academic conferences	90.6	94.6
Ability grouping and mentorship programs	89.4	93.0
Special schools for G&T	88.2	90.4
Special needs classes	88.2	83.8
Accelerated learning and advanced placement	78.2	87.0
Early admissions to school	67.8	75.4
Average percentage	86.9	90.2

Table: 5.1.3.1 shows the degree to which SNE secondary principals and teachers desired strategies such as; games and sports rated (95% 97.2%), curriculum enrichment (93.4% and 95.6%), clubs and societies(91.4% and 95.%), cooperative learning, competition among schools, academic conferences(90.6% and 94.6%) as prominent strategies. This is consistent with ratings of secondary principals and teachers. They also preferred ability grouping and mentorship programs (89.4%, 93%), special schools for gifted and talented 88.2%, 90.4%), special needs classes (88.2% and 83.8%) and accelerated learning and advanced placement (78.2% and 87.0%).

Early admission to schools (67.8% 75.4%) was least preferred strategy both the principals and teachers.

5.1.4 Learning areas

5.1.4 .1 Extent to which Art and Design should be emphasized in the SNE Secondary school curriculum.

The principals and teachers responses were weighted averages and percentage mean ratings. The principals and teachers' responses on each subject area which constituted the average percentage ratings were presented below in chart 5.1.4.1.

Chart 5.31: Principals, and Teachers Mean Percentage Responses on the extent to which Art and Design should be emphasized in the school curriculum

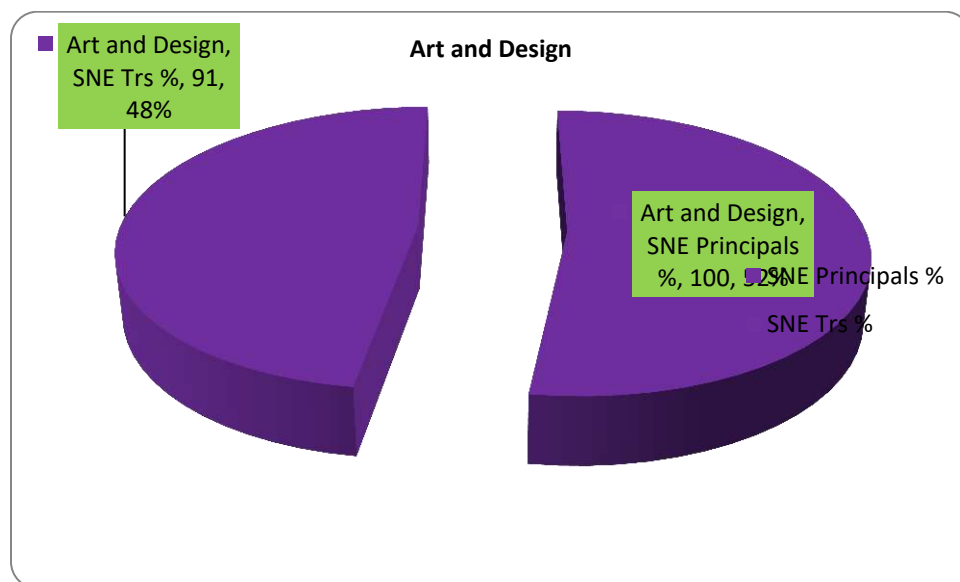


Chart 5.1.4.1: The principals and teachers were in agreement with regard to teaching of Art and Design subjects which were rated highly at 100% and 91% respectively.

5.1.4.1: Extent to which Agriculture, technology, vocational and technical subjects should be emphasized in the SNE Secondary school curriculum.

The respondents from secondary schools were required to give their responses in regard to the extent to which should Agriculture, technology, vocational and technical subjects should be emphasized in the SNE Secondary school curriculum as indicated in Figure 5.1.4.1.

Figure 5.32: Principals of SNE Secondary Schools, Teachers and EARC Officers Mean Percentage Responses on the extent to which Agriculture, technology, vocational and technical subjects should be emphasized in the school curriculum

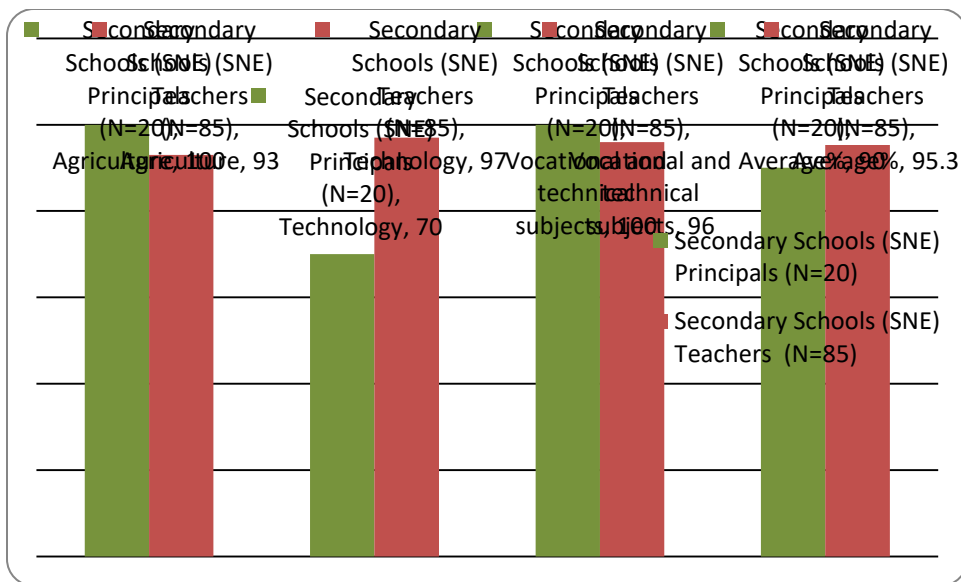


Figure 5.1.4.1: shows that most principals preferred vocational and technical subjects while (97.0%) of the secondary school teachers were highly in favour of technology. This is important relevant to the attainment of vision 2030 which positions technology as having a critical role in transforming Kenya into a middle level country.

5.1.4.2 Extent to which Physical Education should be emphasized in the SNE Secondary school curriculum

Responses on the extent to which Physical Education should be emphasized in the school curriculum were sought from heads of SNE institutions, teachers and EARC Officers. The findings are presented **Figure 5.1.4.2.**

Figure 5.33: Principals of SNE Secondary Schools and Teachers Mean Percentage Responses on the extent to which Physical Education subjects should be emphasized in the school curriculum

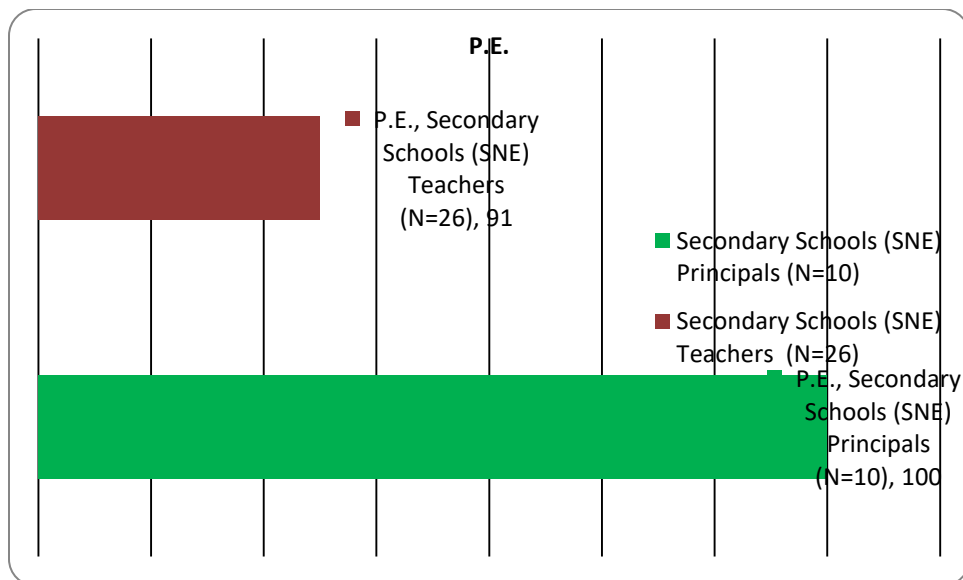


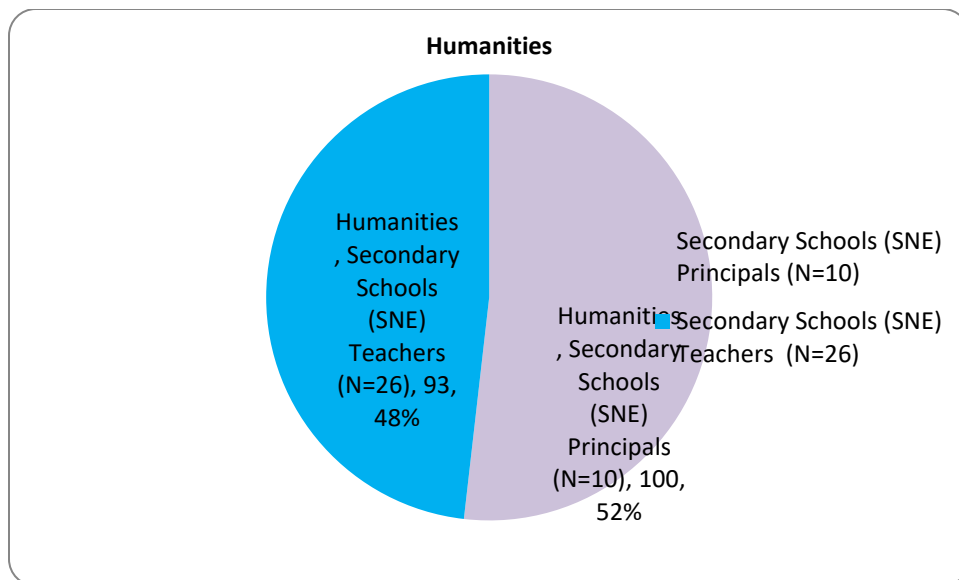
Figure 5.1.4.2: All the secondary school principals indicated that physical education should be emphasized in the school curriculum. However, fewer (91.0%) of the secondary school teachers indicated that physical education should be emphasized in the school curriculum.

5.1.4.3 Extent to which Humanities should be emphasized in the SNE Secondary school curriculum

Responses on the extent to which humanities should be emphasized in the school curriculum was sought from heads of SNE institutions, teachers and EARC Officers. The findings are presented in Figure 5.1.4.3.

5.1.4.3. Principals of SNE Secondary Schools, Teachers and EARC Officers Mean Percentage Responses on the extent to which Humanities subjects should be emphasized in the school curriculum

5.34 .Principals of SNE Secondary Schools, Teachers and EARC Officers Mean Percentage Responses on the extent to which Humanities subjects should be emphasized in the school curriculum



All the secondary school principals indicated that humanities subjects should be emphasized in the school curriculum and 93.0% of the secondary school teachers' indicated the subjects should be emphasized in the school curriculum.

5.1.4..4 Extent to which Environment and Climate Change Aspects should be emphasized in the SNE Secondary school curriculum.

Responses on the extent to which Environment and Climate Change Aspects should be emphasized in the school curriculum were sought from heads of SNE institutions, teachers and EARC Officers. The findings are presented in Figure: 5.1.4.4.

Figure: 5.35 Principals of SNE Secondary Schools, Teachers responses on the extent to which Environment and Climate Changes subjects should be emphasized in the school curriculum.

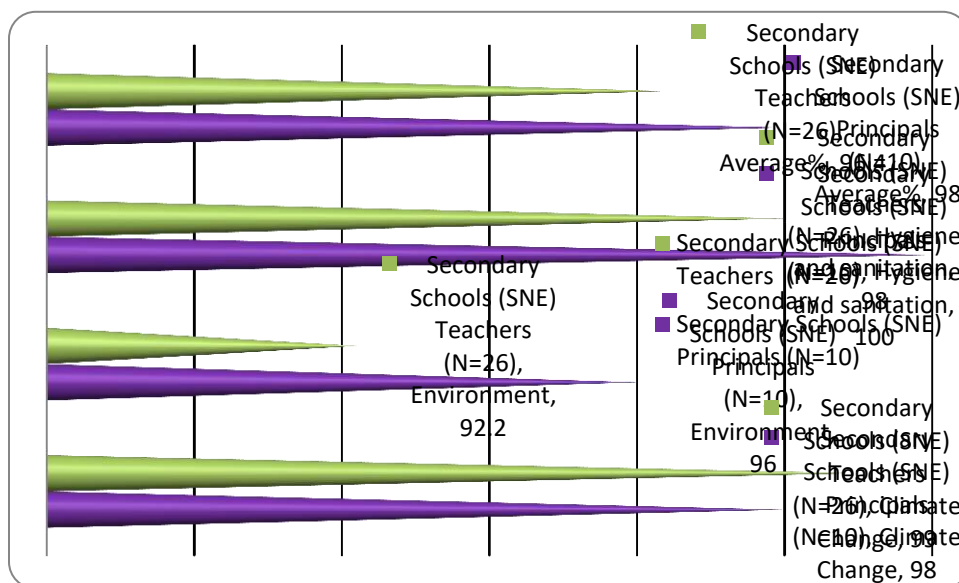


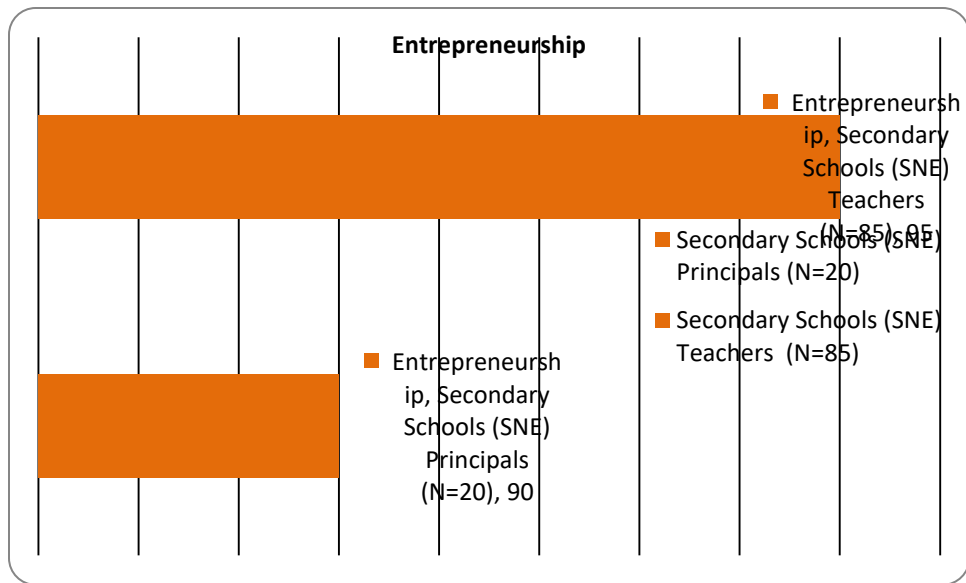
Figure: 5.1.4.4 Majority of the principals (98.0%), teachers (96.4%) indicated that climate change, environment, hygiene and sanitation should be emphasized in the school curriculum. This indicates that the subjects should be highly emphasized in the envisaged curriculum.

5.1.4.5 Extent to which Financial Subjects should be emphasized in the SNE Secondary school curriculum.

Responses on the extent to which Environment and Climate Change Aspects should be emphasized in the school curriculum were sought from heads of SNE institutions, teachers and EARC Officers. The findings are presented in Figure 5.1.4.6.

5.1.4.6: Principals of SNE Secondary Schools and Teachers Mean Percentage Responses on the extent to which financial subjects should be emphasized in the school curriculum

Figure 5.36 : Principals of SNE Secondary Schools and Teachers on financial subjects



Majority of the SNE secondary school principals (90.0%) and teachers (95.0%) indicated that entrepreneurship subjects should be emphasized in the school curriculum.

5.1.4.7: Extent to which 21st Century subjects should be emphasized in the SNE Secondary school curriculum

Responses on the extent to which mathematics, languages and sciences subjects should be emphasized in the school curriculum were sought from heads of SNE institutions and teachers

in Figure 5.1.4.7.

Figure 5.37: Responses from SNE principals and Teachers mathematics, languages and sciences subjects

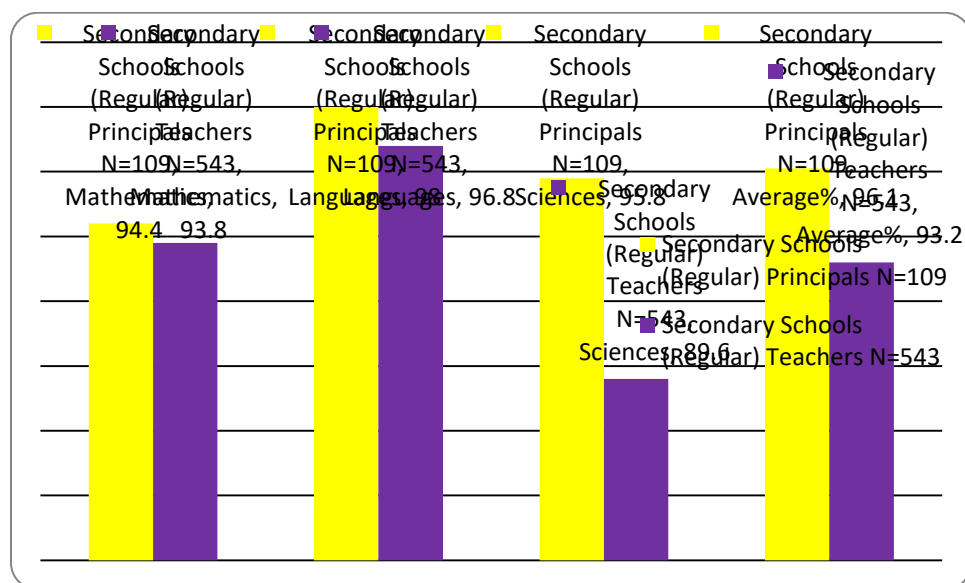


Figure 5.1.4.7, All the principals indicated that all the 21st century subjects should be emphasized in the school curriculum. The average ratings from the teachers were also high (above 90%) implying that all the respondents were in favour of inclusion of the subjects in school curriculum.

Figure 5.38: Extent to which Home Science subjects should be emphasized in the SNE Secondary school curriculum

Responses on the extent to which Home Science subjects should be emphasized in the school curriculum were sought from heads of SNE institutions and teachers in Chart 5.1.4.8.

Chart 5.:Principals of SNE Secondary Schools and Teachers responses on the extent to which Home Science Subjects should be emphasized in the school curriculum

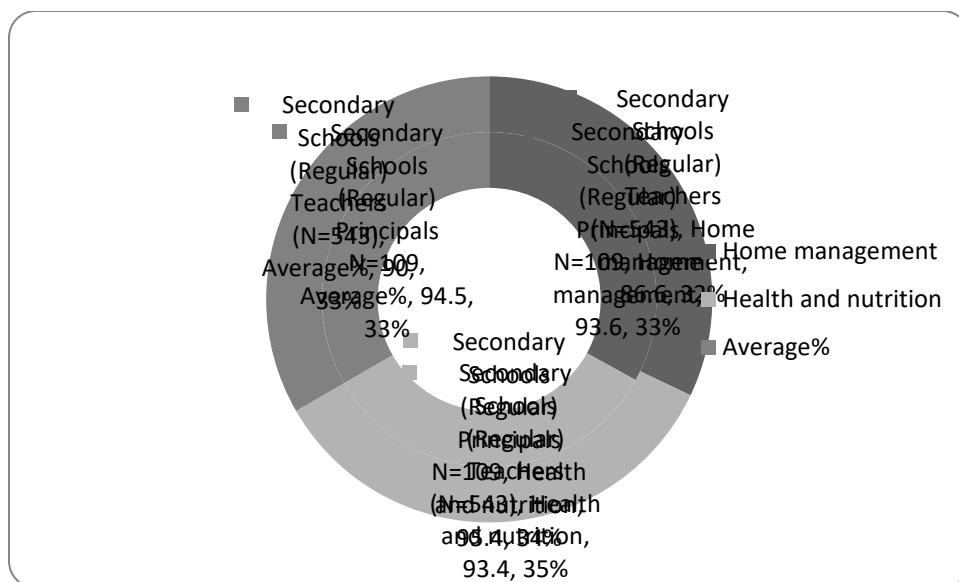


Chart 5.1.4.8.1,All the principals and teachers affirmed the inclusion of home science and health and nutrition into the school curriculum. This implies that the respondents considered these subjects as practical and can empower students after schooling.

5.1.4.9:Extent to which other Special Needs Areas should be emphasized in the SNE Secondary school curriculum

The principals, teachers and EARC officers rated the extent to which other special needs areas should be emphasized in the school curriculum. Their findings are presented in **Table5.1.4.19**

5.1.4.10 :Principals of SNE Secondary Schools and Teachers Mean Percentage Responses on the extent to which other Special Needs Areas should be emphasized in the school curriculum

Figure 5.1.4.10 .1: Principals of SNE Secondary Schools and Teachers views learning areas

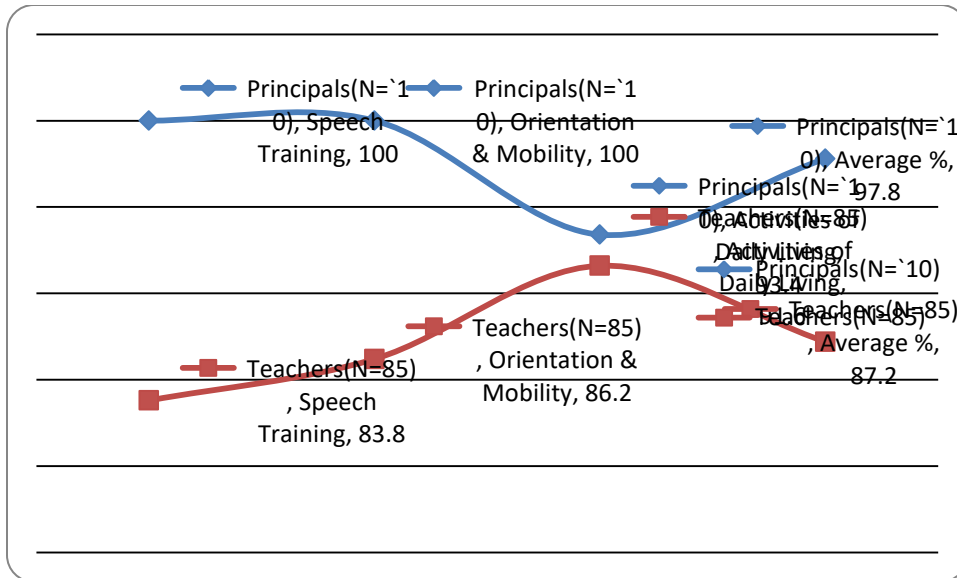


Figure 5.1.4.10 .1,All the secondary school principals supported inclusion of speech training and orientation and mobility learning areas in the envisaged curriculum. Overall, the mean rating of the other special learning areas was very high (above 85%) implying that these areas are critical for learners with special needs and thus should be embedded in the envisaged school curriculum. The secondary school principals also rated the extent to which society as learning area should be emphasized in the curriculum and all of them were in support

5.1.5 Learning approaches

In the course of this study, 85 secondary school teachers and 20 secondary school principals in special schools were approached to give their responses. Their responses are presented in the following figures.

Figure 5.1.5.1 Analysis of SNE secondary teachers and principals' responses on learning Approaches

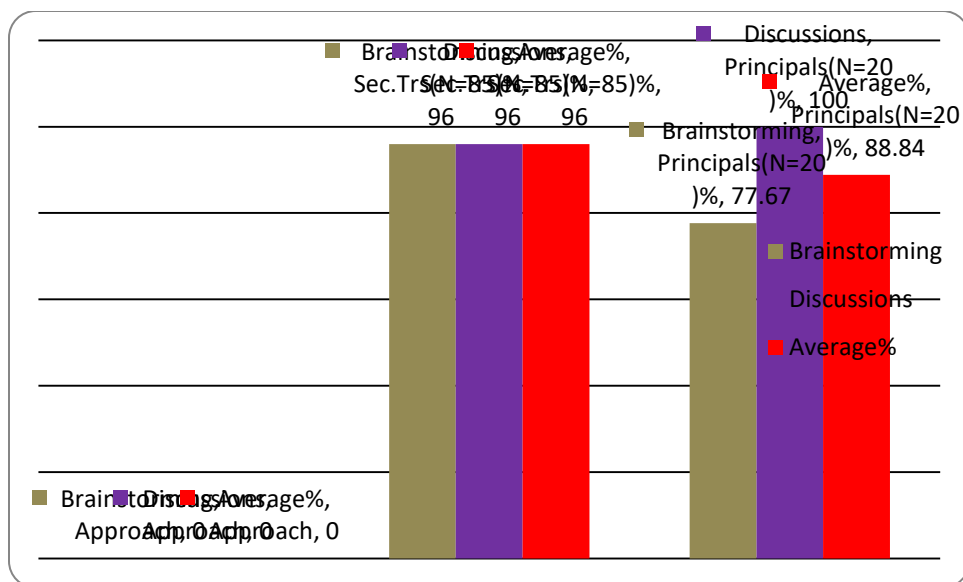


Figure 5.1.5.1 From both groups, discussion approach is rated very highly at 100% and 96.00% by SNE secondary school principals and SNE secondary school teachers respectively. SNE principals rated brainstorming lower at 77.67%. The discussion approach is fit for use in competence based curriculum going by the high ratings indicated by the respondents.

5.1.5.2 Practical methods of teaching

SNE teachers and principals at secondary school level responded to a set of items in a questionnaire regarding the extent to which they would want to use practical based methods for learning purposes.

Figure 5.1.5.2 SNE teachers and SNE principals' responses on practical methods of teaching

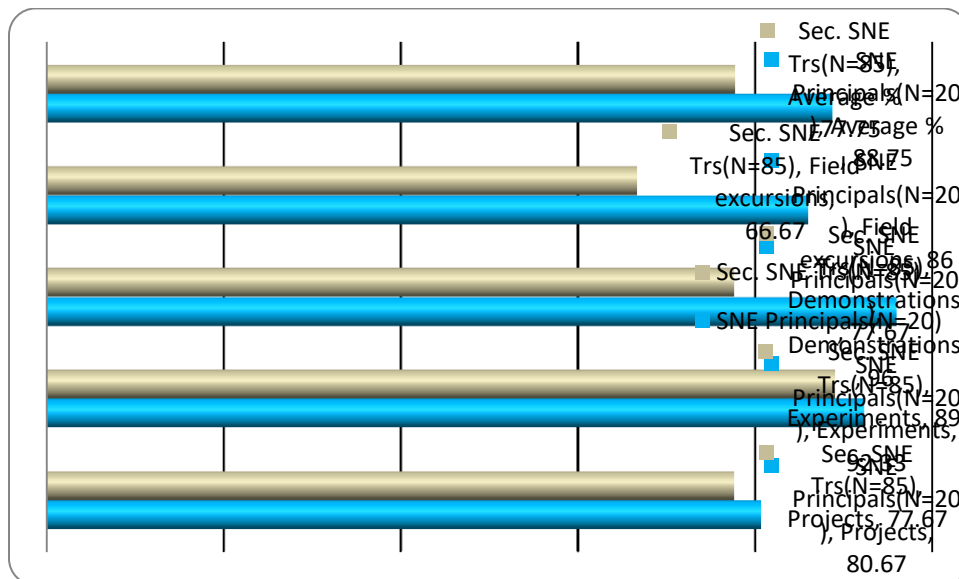


Figure 5.1.5.2.secondary school SNE principals and teachers rated use of experiments and demonstrations very highly both at 92.33% and 96.00% as approaches to be used while delivering the adapted secondary school SNE curriculum. SNE secondary school principals gave experiments the highest rating (89.00%) among the other approaches in this cluster. Learners with special needs have their specific learning styles just like any other learner. We have auditory, visual, tactile and kinaesthetic learners and all styles of learning should be catered for while instructing the different categories of learners with special needs.

5.1.5.2.3 Learner activity based strategies

Figure 5.1.5.2.3,SNE secondary school teachers and principals' responses on the extent to which various learner activity based strategies should be used in delivering the SNE secondary school curriculum

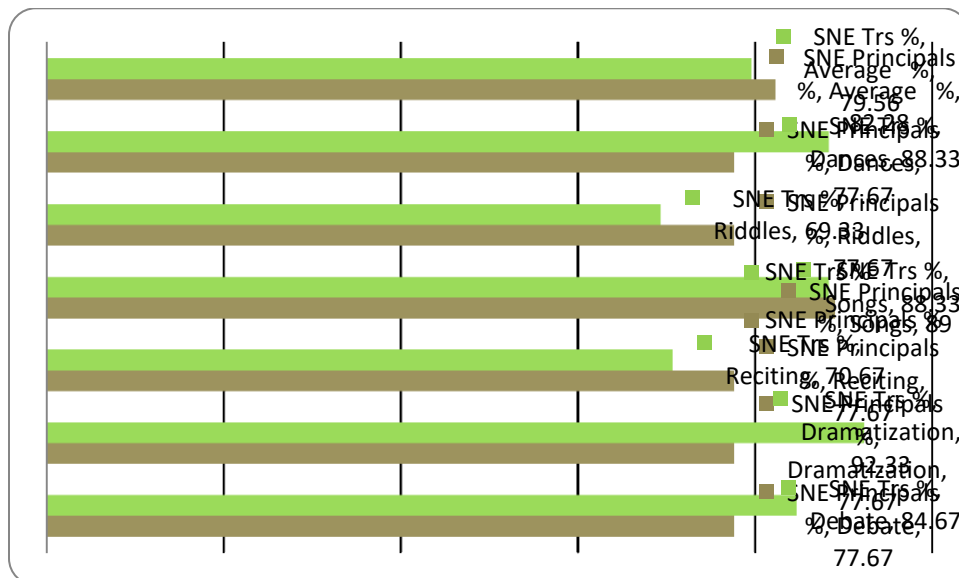
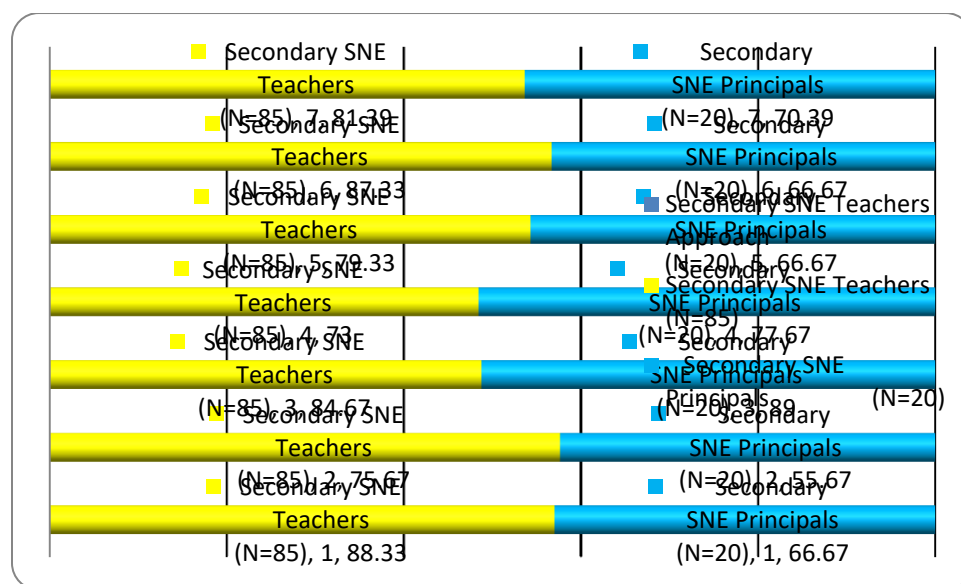


Figure 5.1.5.2.3, Secondary school SNE teachers preferred dramatization more as opposed to the other approaches with a rating of 92.33%. Secondary school principals also rated songs the highest with a percentage rating of 89.00% while for the other approaches i.e. debate, dramatization, reciting, riddles and dances, they gave a rating of 77.67% to each.

5.1.5.2.4 Experiential Learning Strategies

Secondary school SNE teachers and principals responded to a set of items in a questionnaire regarding the extent to which they would want to use experiential learning approaches of teaching.

Figure 5.1.5.2.4 SNE teachers and SNE principals' responses on experiential learning strategies



From the findings displayed in Figure 5.1.5.2.4, secondary school teachers gave experiential learning the highest rating of 88.33% followed by simulations with a rating of 87.33%. It is also evident that storytelling is highly preferred by the secondary school SNE head teachers with a rating of 89.00% followed by nature walk at 77.67%.

5.1.6 Learning Resources

The data collectors observed the availability of resources that will assist the nurturing of SNE learner potentials. The availability of learning resources was key to other variable in the observation schedule that condition, adequacy and utilization. The observers rated in percentage the availability or none availability of the resources to be used to assist the hearing impaired and **Mental handicapped** learners in the learning process.

Figure 5.1.6.1: Observation schedule of availability of Hearing impaired SNE Teaching and Learning resources

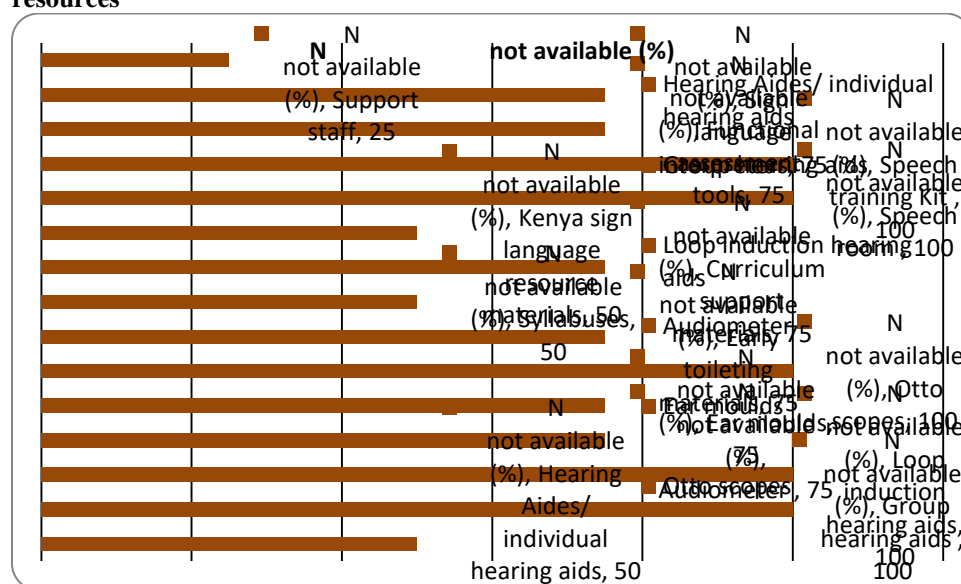


Figure 5.1.6.1: Availability of Hearing impaired SNE Teaching and learning resources such as speech room, early toiletting materials, loop induction hearing aids among others were not available at all in SNE schools. Most of the resources available were inadequate by a margin of 75% across the country. It was also difficult to determine adequacy and utilization where no resources could be found.

Table: 5.1.6.1: Observation schedule of availability of Mental Handicapped SNE Teaching and Learning resources

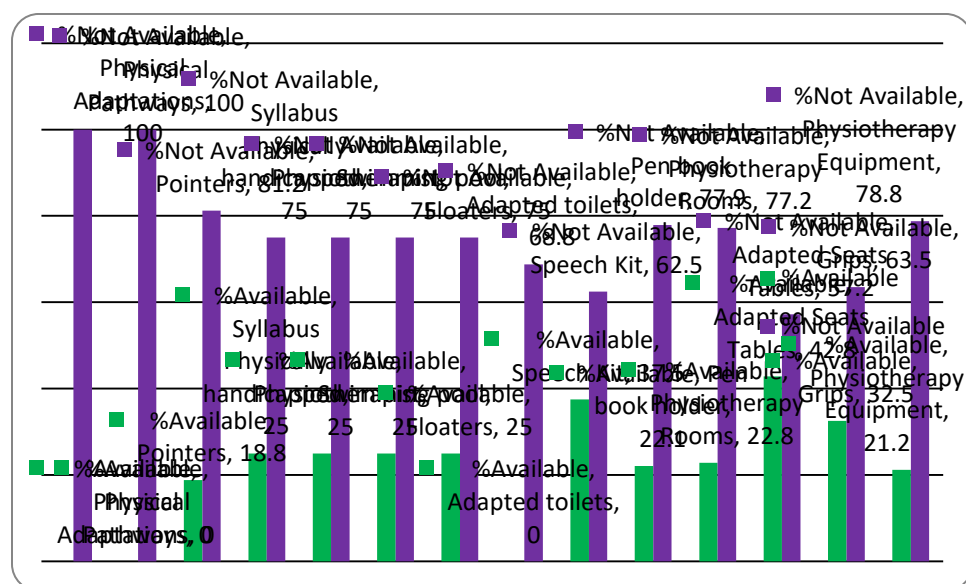
Mental handicapped area / autism – Resources	Not available (%)
Syllabuses	94.2
Curriculum support materials	87.5
Vocational workshops, materials, tools, equipment	71.4
Perceptual training materials	74.4
Daily living skills training materials & equipment	68
Adapted seats	88
Communication devices	85
Musical instruments	98.6
Audio visual materials and equipment	95.7
Adapted P.E material and equipment	37.5
Physiotherapy rooms & equipment	93.3
Physiotherapist	83.3
Support staff & specialized teachers	98.6

Tambourines	91.4
Speech kits	95.7
Swimming pool	100
Floater	100

Table: 5.1.6.1: For mentally handicapped schools there was acute shortages of teaching and learning resources, these included Tambourines, Speech kits, Swimming pool, Floater, Vocational workshops, materials, tools, equipment, Daily living skills training materials & equipment, Communication devices, Physiotherapy rooms & equipment and Physiotherapist. These resources are very critical to assist the already disadvantaged SN learners.

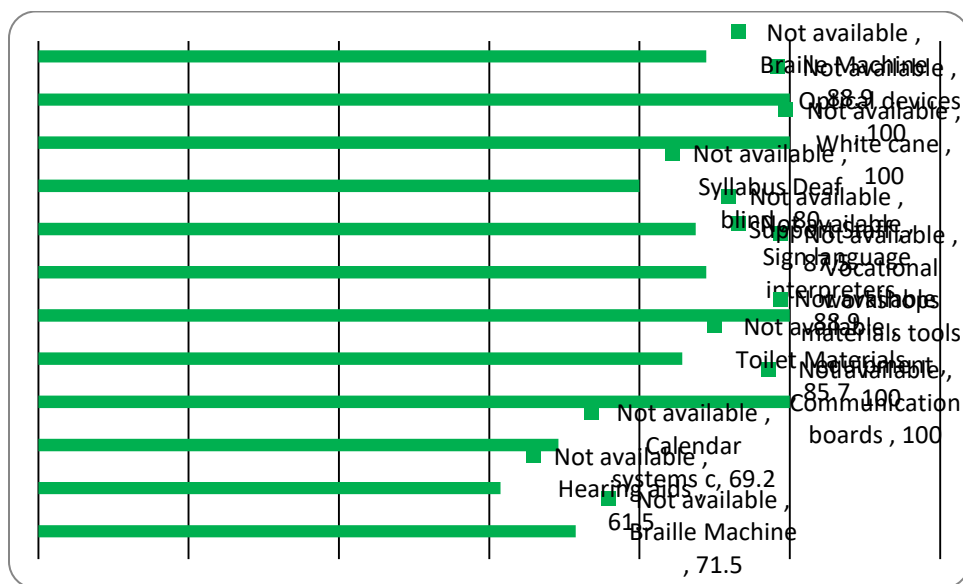
5.1.6.2: Observation schedule by data collectors availability of Teaching and learning resources across SNE schools at secondary level

Figure 5.1.6.2: Physically Handicapped SNE Resources observed



Based on the findings **Figure 5.1.6.2**, physical adaptations, physical pathways, pointers, syllabuses were not available to a great extent, ranging between 100% to 75%, though they are very essential to physically hand capped learners.

Figure 5.1.6.3: Availability of resources for Deaf Blind learners



From **Figure 5.1.6.3**:the observers recorded that optical machine, white cane, sign language interpreters, communication boards,braille machines were among the requisite learning resources lacking in SNE schools for deaf blind.

5.1.7 Assessment

The survey sought to establish the input of the secondary school principals and teachers with regard to different modes of Assessment which were clustered into two; Formative and Summative assessment. The results were tabulated and presented in the following figures below.

Figure 5.1.7 .1: Analysis of SNE Secondary school Principals and teachers responses on Formative Evaluation.

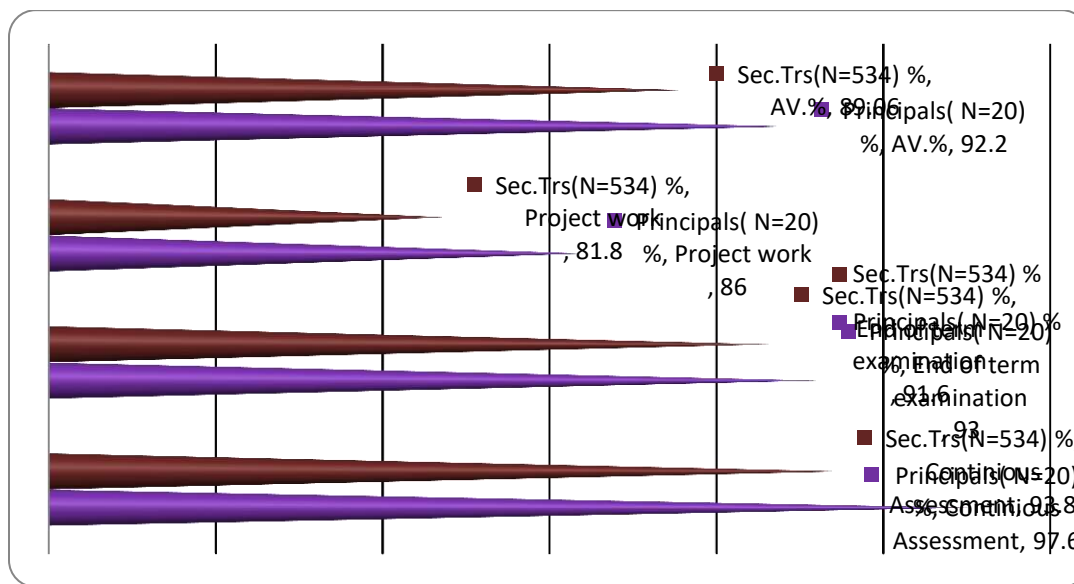
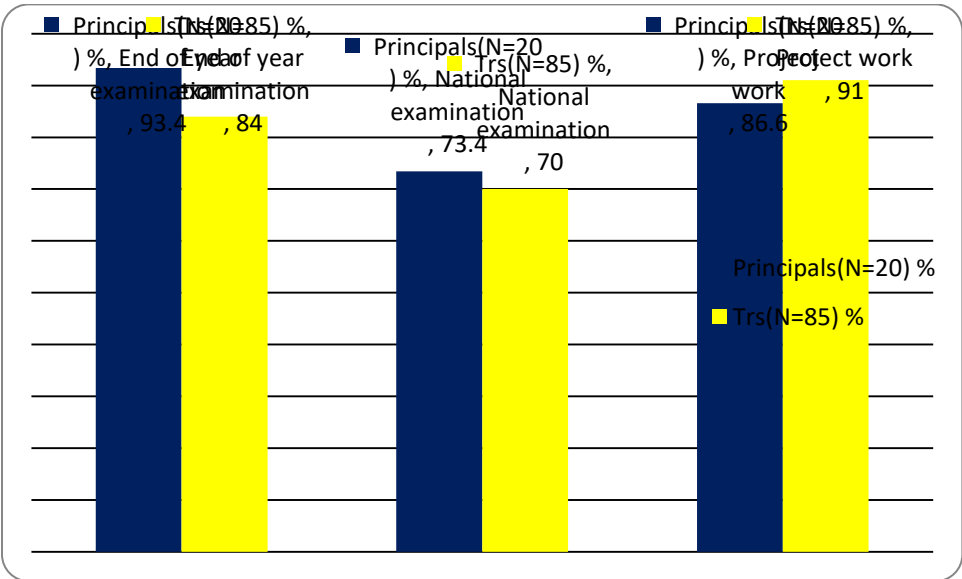


Figure 5.1.7 .1: The responses demonstrate that SNE secondary Principals and teachers, had preference for formative assessment, especially CATs rated at 97.6% and 93.8% by both respondents and end term examinations rated equally high. Comparably projects work was not highly regarded.

5.1.7.2: Analysis of Secondary school Principals and teachers responses on Summative Evaluation

The survey sought to establish the input of the secondary school principals and teachers with regard to Summative assessment. The results were tabulated and presented in figure Figure 5.1.7.2 below.

Figure 5.1.7.2: Summary on summative evaluation by principals and teachers in secondary schools



Based on the results in **Figure 5.1.7.2**, the SNE secondary school principals and teachers strongly agreed that national examinations should not be emphasized in secondary curriculum. This was consistent with secondary schools teachers in regular schools, however contrary to the secondary principals in regular Schools who were of the opinion that national examinations should be emphasized. Teacher considered end of year and project work as effective forms of summative evaluation.

Key results therefore reveal that Formative assessment was most preferred than summative especially National examination which was rated least at 70% by teachers and 73.4% by principals.

5.1.8 Pertinent and Emerging Issues

Teachers and head teachers were asked to what extent provided emerging issues should be included in the curriculum in Figure 5.1.8.1.

Figure 5.1.8.1: SNE Secondary Teachers and Head teachers' responses to pertinent and emerging issues that should be addressed in the curriculum

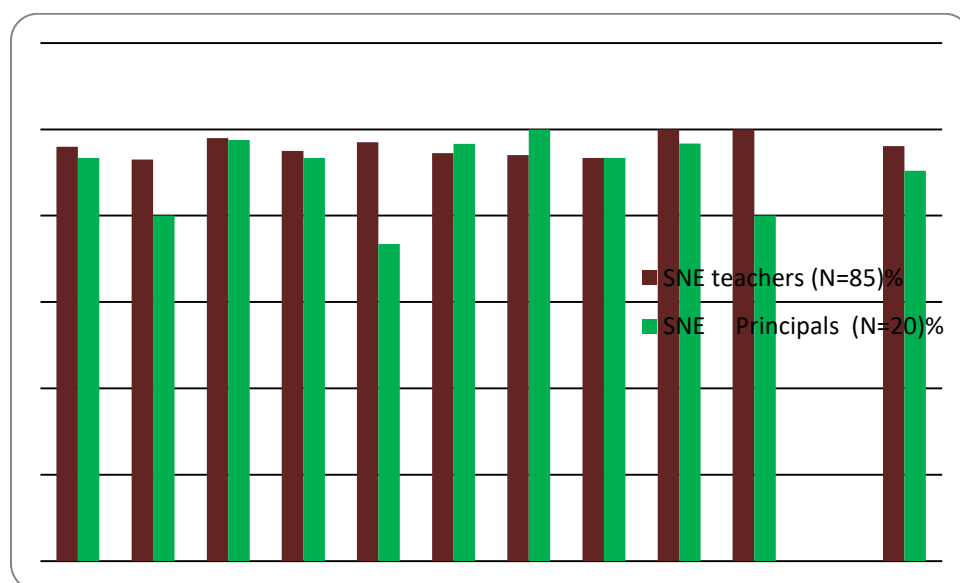


Figure 5.1.8.1: More than 96.0% of teachers of Special Needs Education (SNE) at secondary school level desired greatly that pertinent and emerging issues should be addressed in the curriculum reforms. Based on their responses for specific pertinent and emerging issues in the order of priority integrity(100%),drug and substance abuse(98.1%),financial literacy(94.5%),security and safety (98%),gender issues(93.4%),health education which includes other aspects such as HIV/AIDS, sexuality education, hygiene (96 %),technology (97%),environment which includes climate change(93%) ,child rights(94%) and disabilities(100%).

Similarly, most principals of Special Needs Education (SNE) at secondary school level affirmed the need to have pertinent and emerging issues addressed by the curriculum. The most preferred was integrity (96.7%,followed by ,drug and substance abuse(93.4%),financial literacy at 96.6% ,security and safety at 97.5% ,gender issues at 93.4% ,health education which includes other aspects such as HIV/AIDS, sexuality education, hygiene at 93.4% ,technology at 73.4% ,environment which includes climate change at 80.0% ,child rights at 100% and disabilities at 80%.

This can be linked to the fact that pertinent and emerging issues are continuous occurrences of social issues that have a considerable influence on the well-being of the society. The complexity of these emerging issues and magnitude of their impact cannot be handled without organized learning experiences in both formal and non-formal settings.

5.3 FINDINGS ON TERTIARY LEVEL NEEDS

5.3 .1 Introduction

This study was a needs assessment for curriculum reform in primary curriculum. The study was guided by six themes derived from the objectives of the study. These included society needs, competencies, activity areas, learning approaches, assessment and cross cutting issues. Responses were sought from different teacher training colleges respondents included principals and lecturers.

5.3.1.1 Societal Teacher Training Colleges

Principals and lecturers were required to give their responses in regard to the extent to which societal needs should be emphasized in the curriculum. They were asked to indicate the extent to which the identified societal needs should be emphasized in the school curriculum using a five-pointer likert scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=Some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. Principals and lecturers responses on each identified societal need which constituted the average percentage rating are presented in Figures and tables.

5.3.1.1 Societal needs

Societal needs are considered to be what the people who constitute the population of a country need for their lives to be productive and happy in the local context. Curriculum is a major factor that helps in determining the knowledge and skills that future citizens will possess and hence their capacity to contribute productively to their society. The findings were tabulated in figure 5.3.1.1.

Figure 5.3.1: Teacher Training Colleges Principals and lecturers' Responses on what extent the TTC level Curriculum should emphasis on different Societal Needs

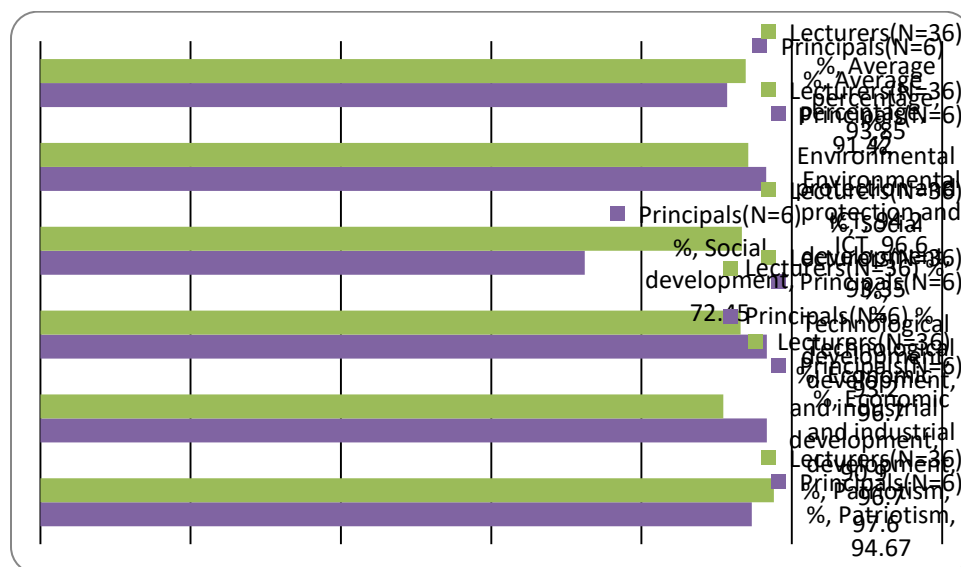


Figure 5.3.1, shows ratings of the principals and lecturers with regard to the extent to which societal needs should be emphasized. For lecturers the most desired societal need was patriotism rated at 97.60% followed by environmental protection at 94.20%, then social development at 93.35%, Technological development was rated at 93.20%. Finally, they rated economic and industrial development at 90.90%.

Figure 5.3.1, Principals in Teacher Training Colleges the most preferred social need was technological development at 96.70% and economic and industrial development, followed by patriotism, environmental protection rated at 94.67%, 96.60% and lastly social development 72.45% respectively. Whereas the lecturers highly regarded social development with a rating of 93.35%, the principals considered it least.

5.3.1.2 Competencies

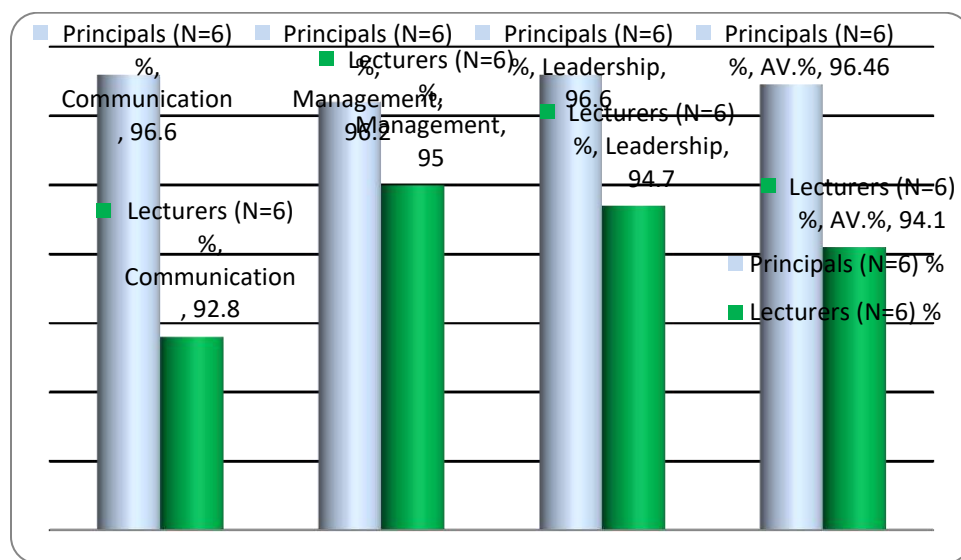
During the curriculum reform, aspirations of the Constitution, dictates of Vision 2030 and the aspects stated in East African Community treaty should be prioritized. It has been proposed that the content for basic education should be designed with a view of equipping learners with relevant knowledge that emphasizes on technology, innovation and entrepreneurship (Vision 2030). Education is also seen as a tool which can lead to production of graduates who are globally competitive. Responses drawn from principals and lecturers of various teacher training

colleges were tabulated and presented i under the 21st century skills known as the 4Cs.This included; Communication,Collaboration,Critical Thinking and Creativity.

5.3.1.3: Responses on communication by TTC Principals and lecturers

The principals and lecturers were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=Some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. Principals and lecturers responses on communication and related competencies which constituted the average percentage rating are presented in Figure 5.3.1.3.

Figure 5.3.1.3:TTCs Lecturers’ and Principals’ Responses on the extent to which communication, management and leadership competencies should be emphasized in the Curriculum

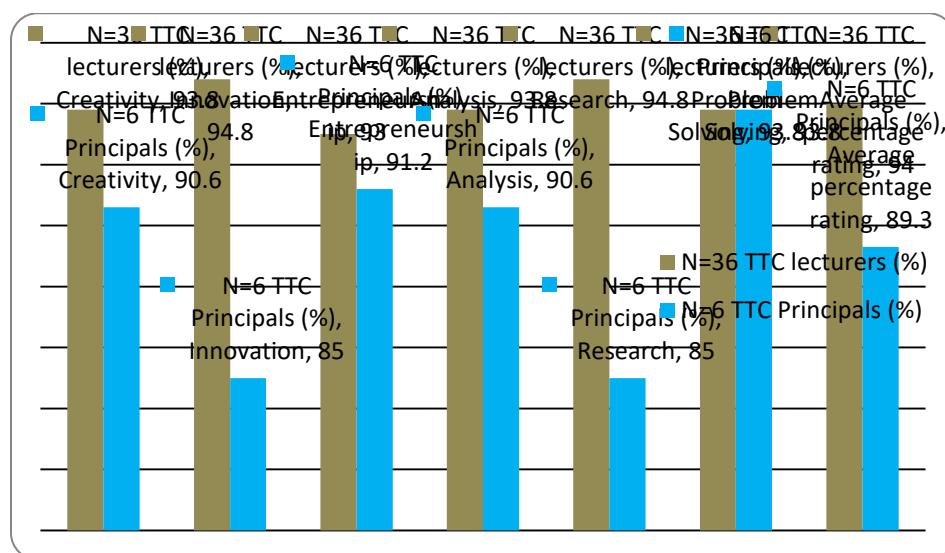


In general, all the three competencies (communication, management and leadership) were rated highly with values of over 90.00% by both TTC principals and lecturers.TTC principals rated communication and leadership highly with the same rating of 96.60%. TTC lecturers rated the competence of leadership higher than communication and management.

5.3.1.3 TTCs Lecturers’ and Principals’ Responses on the extent to which Competencies classified under Creativity should be emphasized in the Curriculum.

The principals and lecturers were expected to give their input with regard to competencies identified under creativity and the results were tabulated as indicated in Figure 5.3.1.4.

Figure 5.3.1.4: TTCs Lecturers' and Principals' Responses on the extent to which Competencies classified under Creativity should be emphasized in the Curriculum

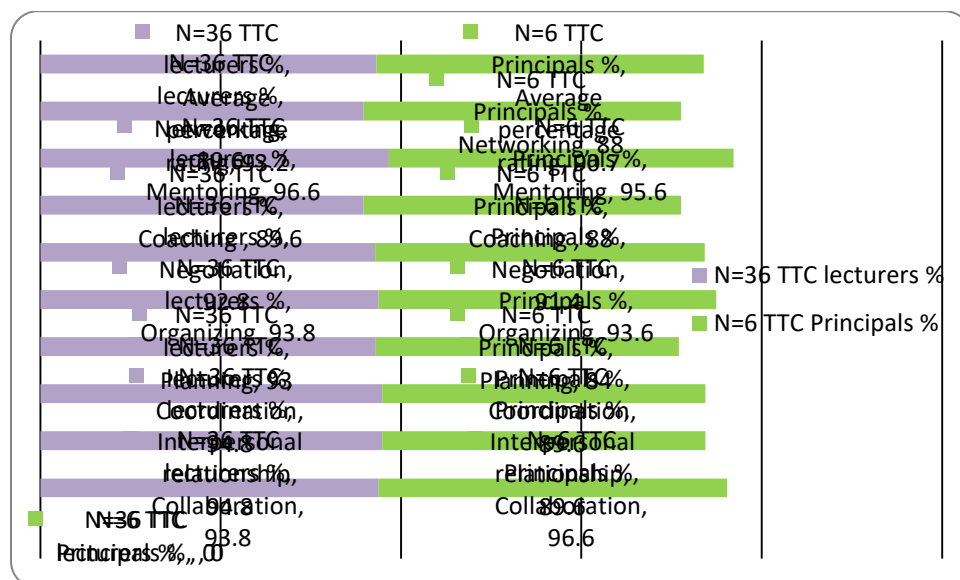


The summary of the results in Figure 5.3.1.4, demonstrate that TTC lecturers rated innovation and research the highest at 94.80% while principals rated problem solving was the most preferred competency with a percentage rating of 93.80. Most desired competencies by lecturers such innovation and research were least desired by principals.

5.3.1.3 TTCs Lecturers' and Principals' Responses on the extent to which Competencies classified under Collaboration should be emphasized in the Curriculum.

The principals and lecturers were expected to give their input with regard to competencies identified under collaboration and the results were tabulated as indicated in Figure 5.3.1.5.

Figure 5.3.1.5: TTC Principals' and lecturers' Responses on the extent to which Competencies under Collaboration should be emphasized in the TTC Curriculum



From the findings displayed in **Figure 5.3.1.5**, TTC principals rated collaboration higher at 96.60% followed by mentoring with a rating of 95.60 while the lecturers highly preferred mentoring the highest at 96.60% followed by coordination (94.80%) and interpersonal relationship (94.80%).

5.3.1.4 TTCs Lecturers' and Principals' Responses on the extent to which Competencies classified under critical thinking should be emphasized in the Curriculum.

The principals and lecturers were expected to give their input with regard to competencies identified under critical thinking and the results were tabulated as indicated in Figure 5.3.1.6.

Figure 5.3.1.6: TTC Principals' and lecturers' Responses on the extent to which Competencies under Critical thinking should be emphasized in the Tertiary Level Curriculum

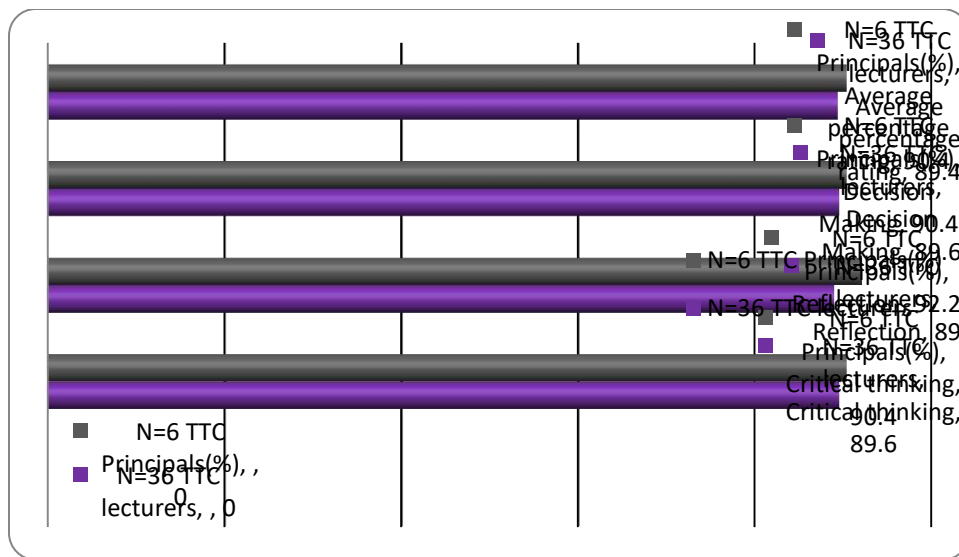


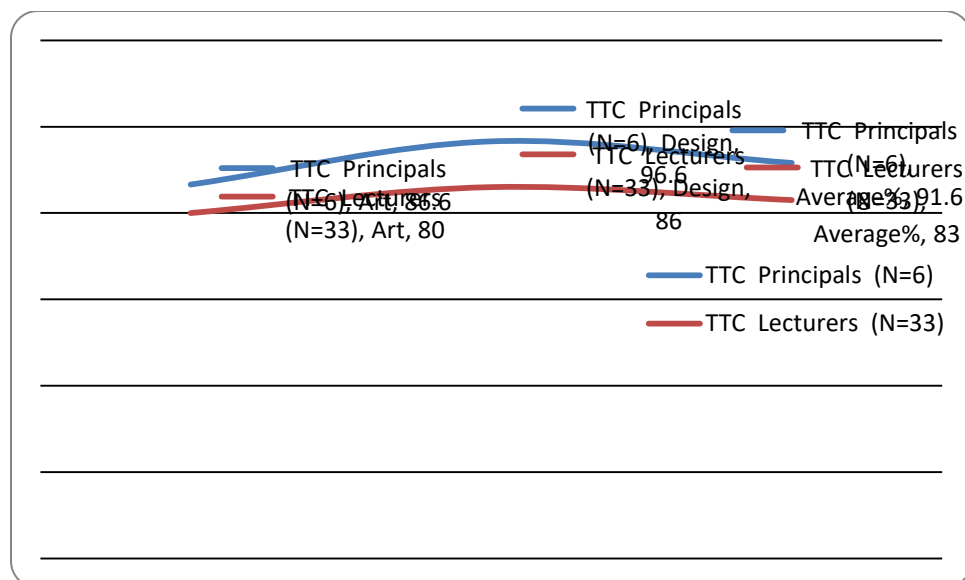
Figure 5.3.1.6 presents that, **TTC** principals preferred reflection more with a percentage rating of (92.20%) as compared to critical thinking (90.40%) and decision making (90.40%). **TTC** lecturers rated critical thinking and decision making the same with a rating of 89.60% .

5.3.1.3 Learning areas

5.3.1.3: Extent to which Art and Design should be emphasized in the Tertiary Curriculum

The principals and lecturers were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=Some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. Principals and lecturers responses on Art and Design subjects which constituted the average percentage rating are presented in Graph 5.3.1.1, shows the findings.

Graph 5.3.1.1: TTC Principals and Lecturers Mean Percentage Responses on the extent to which Art and Design should be emphasized in the Tertiary Curriculum



Graph 5.3.1.1: depicts the preferences by TTC principals for Design subject (96.60%) than Art similarly lecturers desired Design (86.00%) to Art subject. However, the overall percentage rating shows that the two subjects can be included for students with interest in the disciplines.

5.3.1.4: Extent to which Agriculture, technology, vocational and technical subjects should be emphasized in the TTC curriculum

Responses from TTC principals and lecturers on the extent to which agriculture, technology, vocational and technical subjects should be emphasized in the school curriculum are presented in

Figure 5.3.1.7: Responses on the extent to which Agriculture, Technology, Vocational and Technical Subjects should be emphasized in the TTC Curriculum

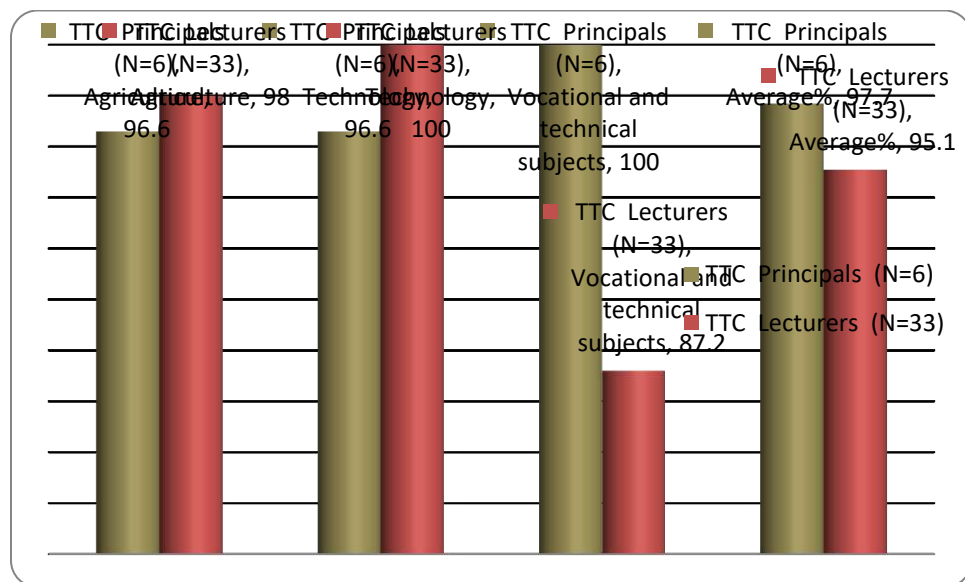


Figure 5.3.1.7, the findings indicate that both TTC Principals and lectures highly regarded the inclusion of Agriculture and technology by giving percentage rating between 98% and 100%. However principals preferred vocational and technical subjects (100%) in the TTC curriculum than the lecturers.

5.3.1.5: Extent to which Physical Education should be emphasized in the TTC curriculum

Responses from TTC principals and lecturers on the extent to which agriculture, technology, vocational and technical subjects should be emphasized in the school curriculum are presented in

Figure 5.3.1.7,

TTC Principals and Lecturers Mean Percentage Responses on the extent to which Physical Education should be emphasized in the TTC Curriculum

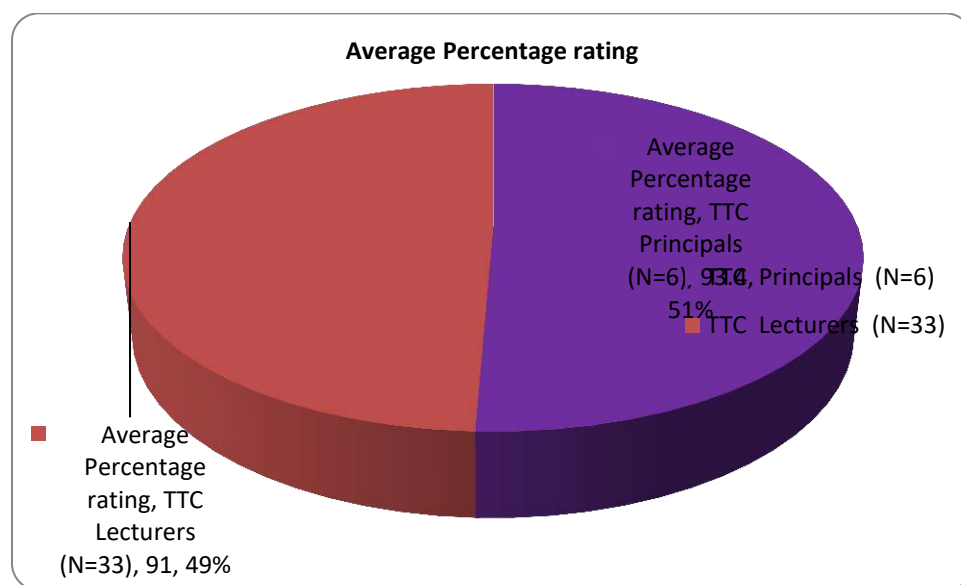


Figure 5.3.1.7, The findings indicate that most of the TTC Principals (93.40%) and lecturers (91.00%) were in favour of inclusion of physical education the TTC curriculum.

5.3.1.5: Extent to which Humanities should be emphasized in the TTC curriculum

Responses from TTC principals and lecturers on the extent to which humanities subjects should be emphasized in the school curriculum are presented in Figure 5.3.1.8.

Figure 5.3.1.8: TTC Principals and Lecturers Mean Percentage Responses on the extent to which Humanities should be emphasized in the TTC Curriculum

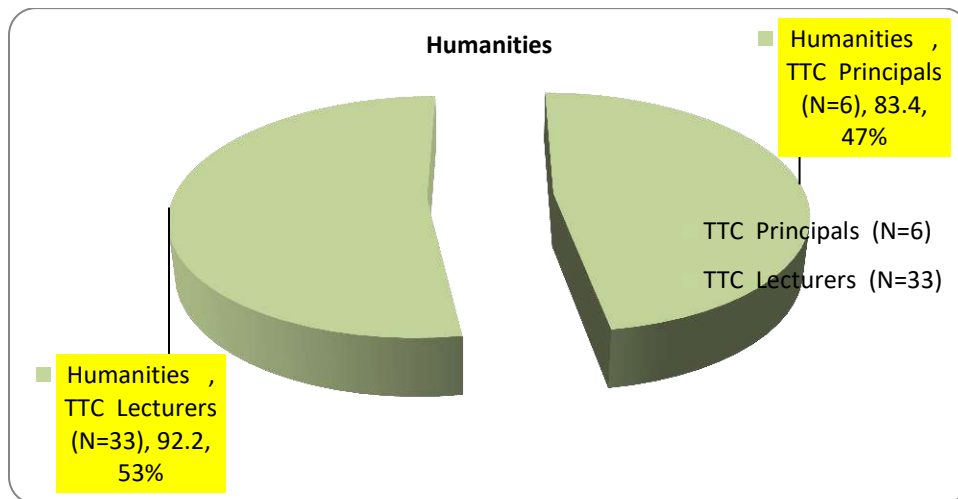


Figure 5.3.1.8, illustrates the views of principals and lecturers with regard to humanities subjects at TTC level. The findings indicate that most of the lecturers (92.20%) and TTC Principals (83.40%) indicated that humanities subjects should be emphasized in school curriculum.

5.3.1.6: Extent to which Environment and Climate Change Aspects should be emphasized in the TTC curriculum

Responses from TTC principals and lecturers on the extent to which environment and climate change subjects should be emphasized in the school curriculum are presented in Figure 5.3.1.9.

Figure 5.3.1.9: TTC Principals and Lecturers Mean Percentage Responses on the extent to which Environment and Climate Changes should be emphasized in the TTC Curriculum

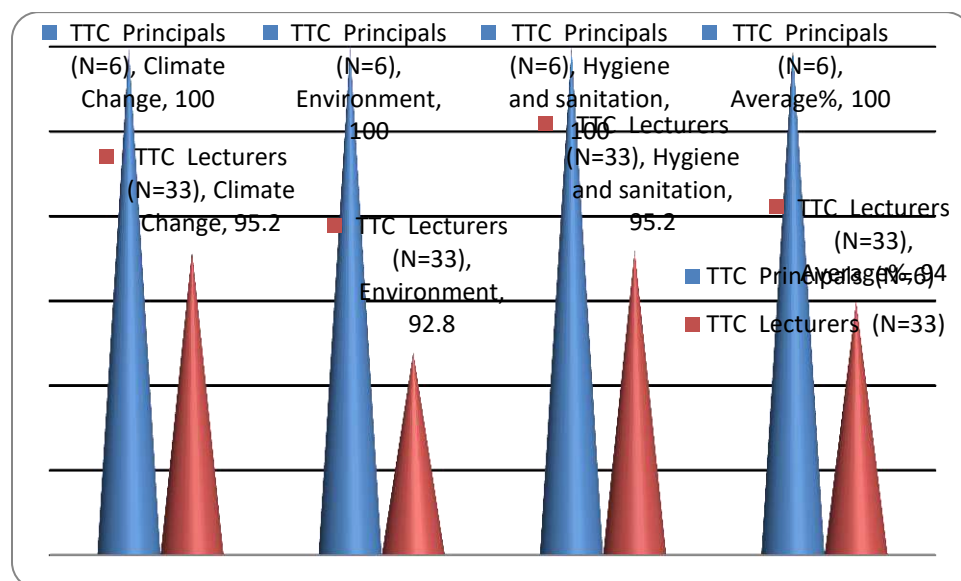
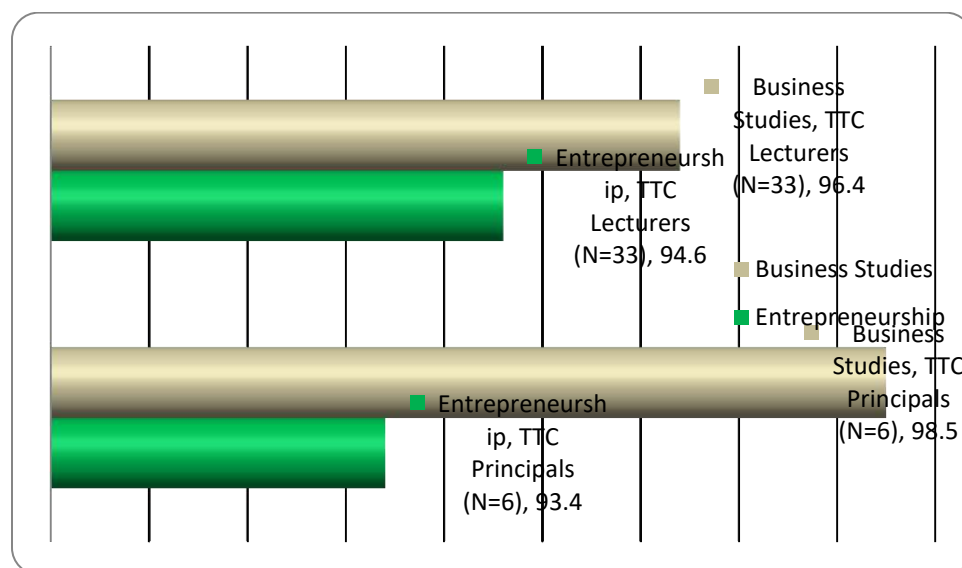


Figure 5.3.1.9, findings indicate that TTC Principals highly valued the inclusion of the environment (100%) and climate change (100%) subjects in the school curriculum. TTC lecturers' ratings were relatively lower compared to those of heads of these institutions.

5.3.1.6: Extent to which Financial Subjects should be emphasized in the TTC curriculum

The heads of institutions, teachers and lecturers rated the extent to which financial subjects should be emphasized in the school curriculum. Their responses were presented in Figure 5.3.1.10.

Figure 5.3.1.10: TTC Principals and Lecturers Responses on the extent to which Financial Subjects should be emphasized in the TTC Curriculum.



The results in Figure 5.3.1.10 indicate that majority of the TTC principals (98.5%) and lecturers (96.4%) were in support of inclusion of business studies. Their support for inclusion of entrepreneurship in the school curriculum at was also high with a rating of above 90%.

5.3.1.6: Extent to which 21st Century subjects should be emphasized in the TTC curriculum

The heads of tertiary institutions and lecturers rated the extent to which mathematics; languages and sciences subjects should be emphasized in the school curriculum. Their findings are presented in Table 5.3.1.1.

Responses from TTC principals and lecturers on the extent to which mathematics, languages and sciences subjects should be emphasized in the school curriculum are presented in Table 5.3.1.1.

Figure 5.3.1.11.: TTC Principals and Lecturers Responses on the extent to which 21st Century subjects should be emphasized in the TTC Curriculum

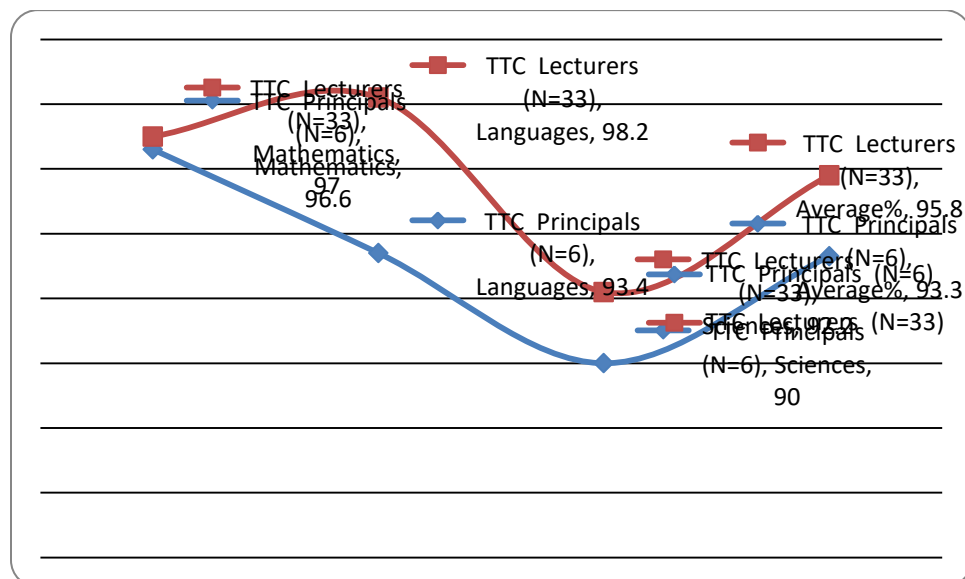
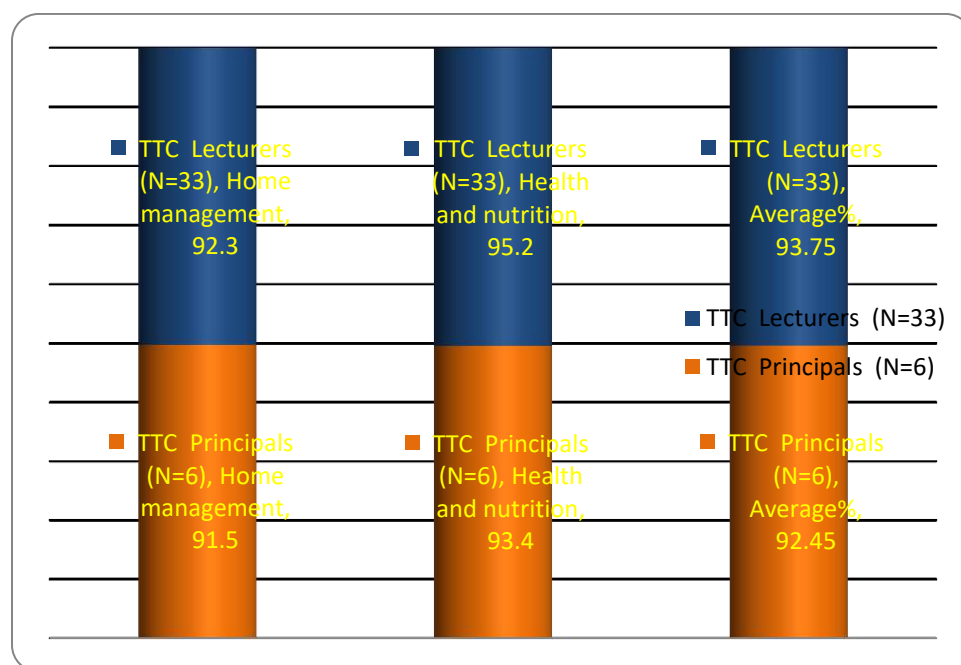


Figure 5.3.1.11, indicates that on average the TTC Principals (93.3%) and the lecturers (95.8%) were in favour of inclusion of mathematics, languages and sciences subjects in TTC curriculum. These subjects are critical for attainment of the Vision 2030 hence justifies the high rating.

5.3.1.6: Extent to which Home Science subjects should be emphasized in the school curriculum

Responses from TTC principals and lecturers on the extent to which mathematics, languages and sciences subjects should be emphasized in the school curriculum are presented in Figure 5.3.1.11.

Figure 5.3.1.11. TTC Principals and Lecturers Mean Percentage Responses on the extent to which Home Science Subjects should be emphasized in the School Curriculum



In Figure 5.3.1.11, Inclusion of health and nutrition into the curriculum was also rated higher by TTC principals (93.4%) as well as the TTC lecturers rated its inclusion at 95.2%. This implies that for competencies to be attained in the 21st C, health and nutrition should be embraced by all.

5.3.1.4 Pedagogical approaches

A total of 33 teacher training colleges tutors and 6 principals responded to a questionnaire with items on the different learning approaches including 21st century strategies, practical methods, Learners' activity based methods, experiential learning and lecture method. Their responses were analyzed and presented in tables which follow. Likert scale was used to establish the frequency at which they would prefer using the different learning approaches with options of never, rarely and always on the scale. Their responses were analyzed and presented in form of figures and tables with percentage ratings and average percentage ratings per cluster.

5.3.1.4 .1:21st Century teaching strategies

The responses of principals and lecturers were analyzed and presented in form of figures and tables with percentage ratings and average percentage ratings per cluster method as indicated in Figure 5.3.1.4.1 below.

Figure 5.3.1.4.1: TTC Tutors' and Principals' Responses on the extent to which various 21st Century strategies should be used in delivering the Teacher Training Curriculum.

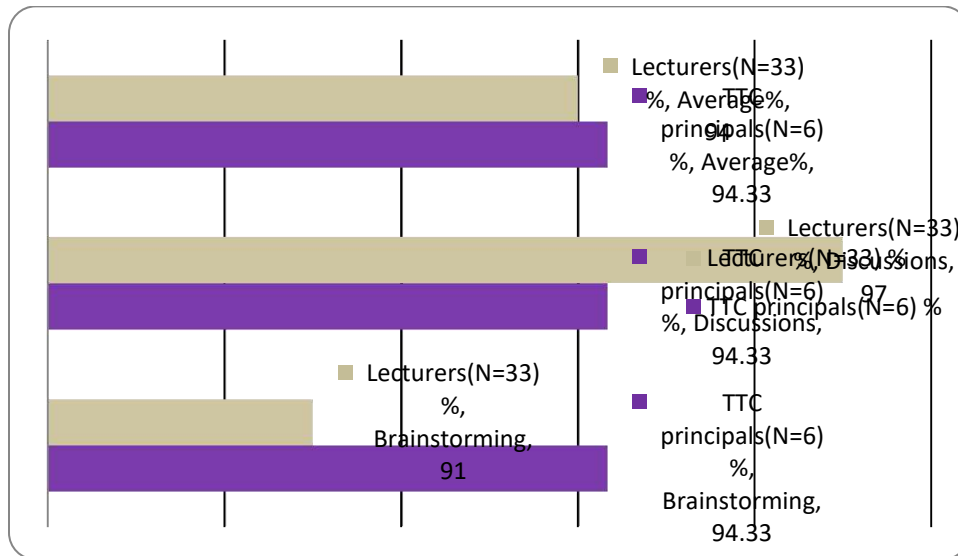


Figure 5.3.1.4.1, provides the calculated percentages show that both teacher trainer and the principals in the teacher training colleges rated these two methods very highly. The percentage ratings for tutors on brainstorming were 91.00 while discussion was rated at 97.00. Principals on the other hand rated both discussion approach and brainstorming at 94.33%. This is informing the curriculum developers and the entire fraternity of educationists that there will be entire to make provision for use of these 21st century strategies while implementing the primary teacher training curriculum.

5.3.1.4.2 Practical methods of teaching

The responses of principals and lecturers were analyzed and presented in form of figures and tables with percentage ratings and average percentage ratings on practical method as indicated in Figure 5.3.1.4.2.

Figure 5.3.1.4.2: TTC Tutors' and Principals' responses on the extent to which various Practical based strategies should be used in delivering the Teacher Training Curriculum.

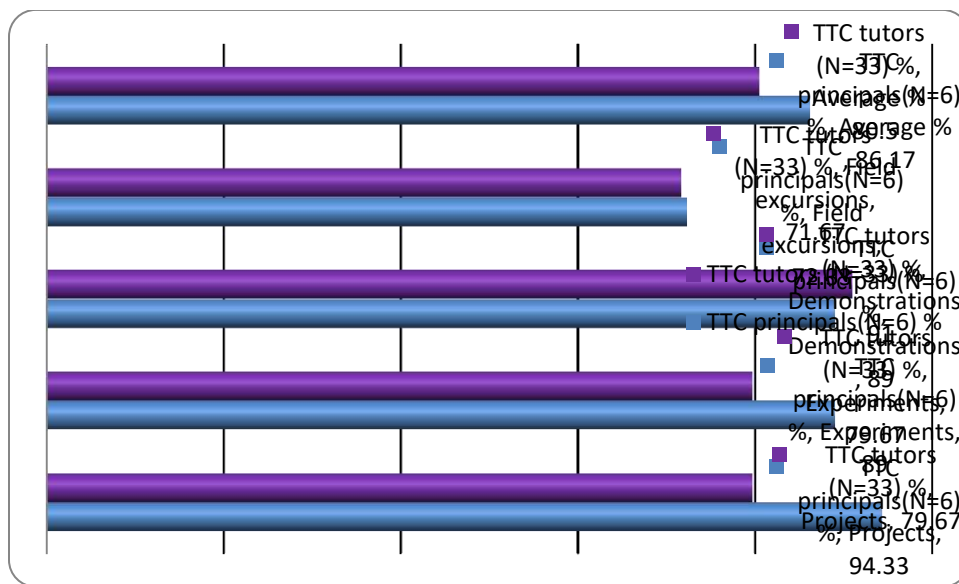


Figure 5.3.1.4.2, Principals in this case rated projects very highly as an approach of learning in primary teacher training colleges at 94.33%. On the other hand, college tutors gave demonstrations the highest rating of 91%.

5.3.1.4.3 Learners' Activity based strategies

5.3.1.4.3 TTC Tutors' and Principals' responses on the extent to which various Learners' activity based strategies should be used in delivering the Teacher Training Curriculum

The responses of principals and lecturers were analyzed and presented in form of figures and tables with percentage ratings and average percentage ratings on practical method as indicated in Figure 5.3.1.4.3.

Figure 5.3.1.4.3 TTC Tutors' and Principals' responses on Learners' Activity based strategies

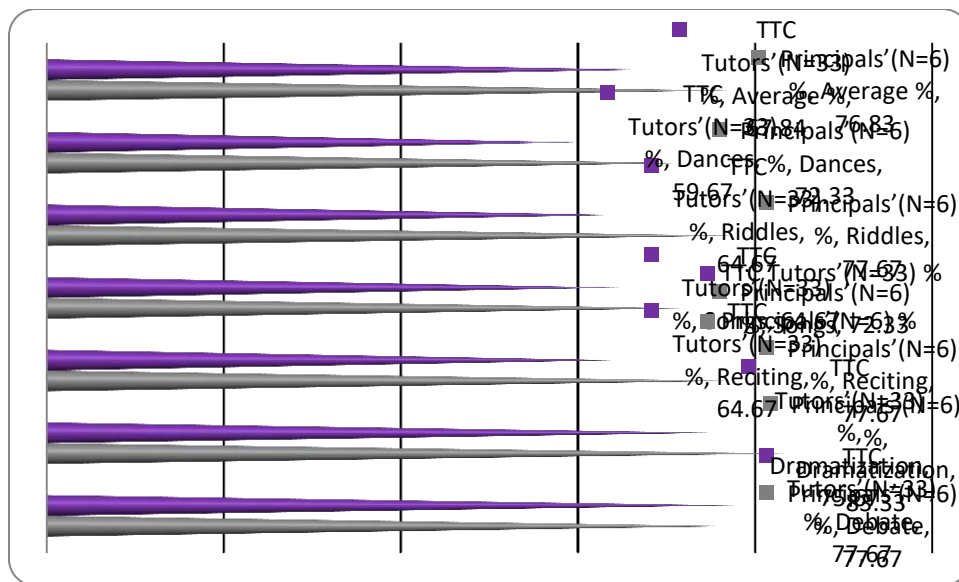
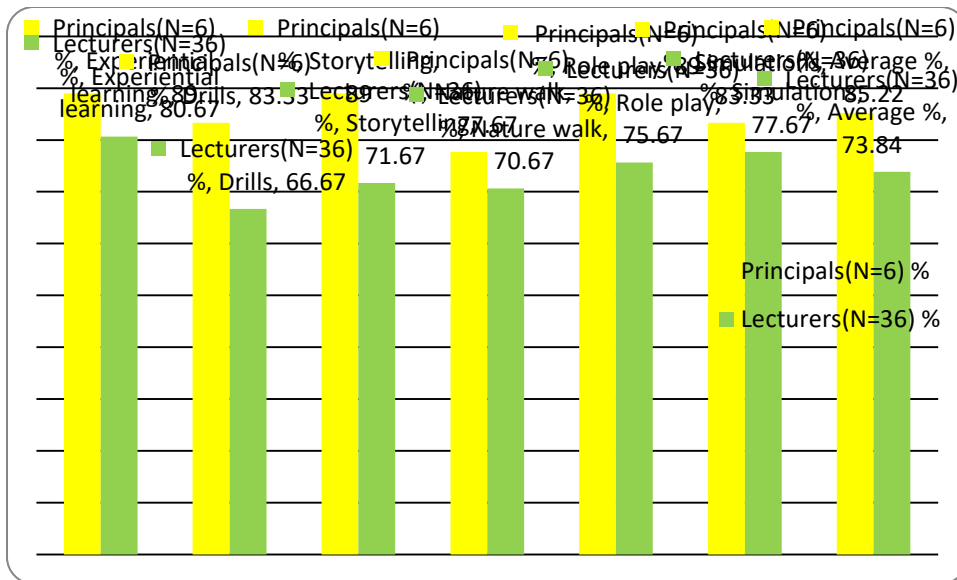


Figure 5.3.1.4.3 , This was the least rated strategy of teaching by both college tutors and principals while tutors rated debate the highest (77.67%) and use of dance the lowest at 59.67%, on the other hand, principals of primary teacher training colleges rated dramatization the highest at 83.33%. Both dance and songs were given the lowest ratings at 72.33% by the principals. It is important to note that from both groups of respondents, debate and dramatization were rated highly. These two approaches should be recommended for use while delivering the teacher training curriculum because besides promotion of communication skills among teacher trainees, they can also be used to nurture their talents.

5.3.1.4.4 Experiential learning strategies

Figure 5.3.1.4.4 TTC Tutors' and Principals' Responses on the Extent to which various Experiential learning strategies should be used in delivering the Teacher Training Curriculum.



From the findings presented in, Figure 5.3.1.4.4 it is evident that experiential learning was the highly rated approach of learning by both primary teacher training tutors and principals. Principals rated role play also highly and therefore, these two approaches should stand a greater chance of being used while delivering the primary teacher training curriculum.

5.3.1.4.4 Lecture method

In the 21st Century, pedagogical approaches should be promoting independence of the learners in terms the means they use while searching for knowledge and constructing new knowledge, the findings were presented in Figure 5.3.1.4.5.

Figure 5.3.1.4.5: Shows responses on Lecture Method by principals and lecturers.

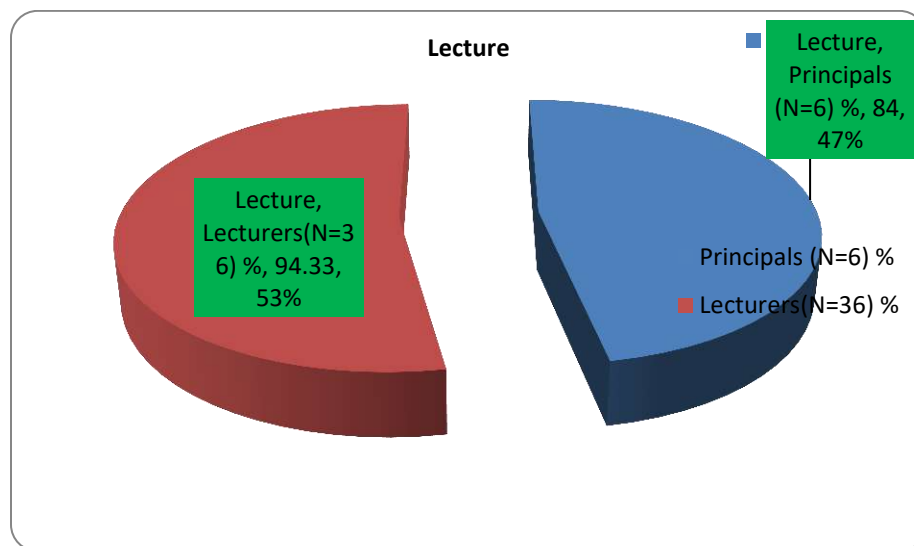


Figure 5.3.1.4.5, Shows that this method was rated relatively low by the principals were 84.00%.

Though the rating of lecturers on this method is relatively high, use of this method should be discouraged because it encourages dependence of the learners on the facilitator.

5.3.1.5 Teaching and Learning Resources

The survey sought to establish the availability and adequacy of resources which are important in implementing and actualizing a competency based curriculum. Information was sought by researchers observing the available resources in the secondary education institutions and presented in Table below.5.3.1.5.

Table 5.3.1.5: Observation of Learning Resources in TTC

Teaching and learning resource	Not Available (%)
Art room	92.1
Music room	90.8
Technical subject	86.5
Home science lab	84.8
Biology ,chemistry and physics	63
Library	46.2
Models	48.2
Photographs/ photos	44.6
Charts	22.1
Sports equipment	21.8
Agriculture farm	16.8
Syllabus	8.9
Text books	7.3

From analysis in Table 5.3.1.5, the data obtained shows that art room (92%), music rooms (90.8), technical subjects (86.5%), home science (84.8%) and science laboratory (63%) were observed and rated highly as unavailable in the sampled institutions.

5.3.1.5 Talent Identification and Development

The study established from TTC principals and Lecturers on talent identification and development .The responses were summarized in Table 5.3.1.6.

Table 5.3.1.6: Findings on Nurturing the Potential and Talents of Learners According to TTC Principals and Tutors

	Principals (N = 6)	Lecturer(N=36)
	%	%
Games and sports	99.40	95.10
Curriculum enrichment	98	94.50
Clubs and societies	98.30	94.30
Cooperative learning, competition and academic conferences	94.70	93.30
Ability grouping & mentorship programs	93.00	93.00
Special schs. for gifted & talented	92.90	89.40
Special Needs classes	91	86.10
Accelerated learning & Advanced placement	83.30	86.50
Early Admission	78.70	74.50
Average %	92.10	89.70

Table 5.3.1.6, shows responses that the TTC principals and tutors rated highly the following strategies of nurturing learners' potential and talents; games and sports (99.4% and 95.1%), curriculum enrichment (98.0% and 94.7%), clubs and societies (98.3% and 94.3%), cooperative learning, competition among and academic conference (94.7% and 93.7%) and ability grouping and mentorship programs (93%). The strategies of special schools for gifted and talented (92.9% and 89.4%) and special needs classes (91.0% and 86.1%) were also rated highly. Accelerated learning (83.3% and 86.5%) was also a preferred strategy by both the principals and tutors with regard to nurturing of the learners potential and talents.

The strategy least preferred by the two categories of respondents was early admission to schools at 78.7% and 74.5% respectively. The TTC principals and Tutors rated most of the strategies at

above 80% and this calls for new curriculum to lay a lot of emphasis on those strategies in a bid to nurture every child potential and talents for the country to realize the dictates of vision 2030.

5.3.1.7 Assessment

5.3.1.7.1: TTC tutors' and principals' responses on the various forms of assessment

A total of 32 teacher training colleges' tutors and 6 principals responded to a questionnaire with items on assessment. The different forms of assessment were clustered into formative and summative and overall mean rating for each of them calculated. The responses were constructed in the form of a likert scale with "level of extent" being the construct of measurement. This was presented in Figure 5.3.1.7.1 below.

Figure 5.3.1.7.1 : TTC Tutors and TTC Principals' Responses on the extent to which various forms of Assessment contribute to effective Measurement of Learners' Achievements at the TTI level.

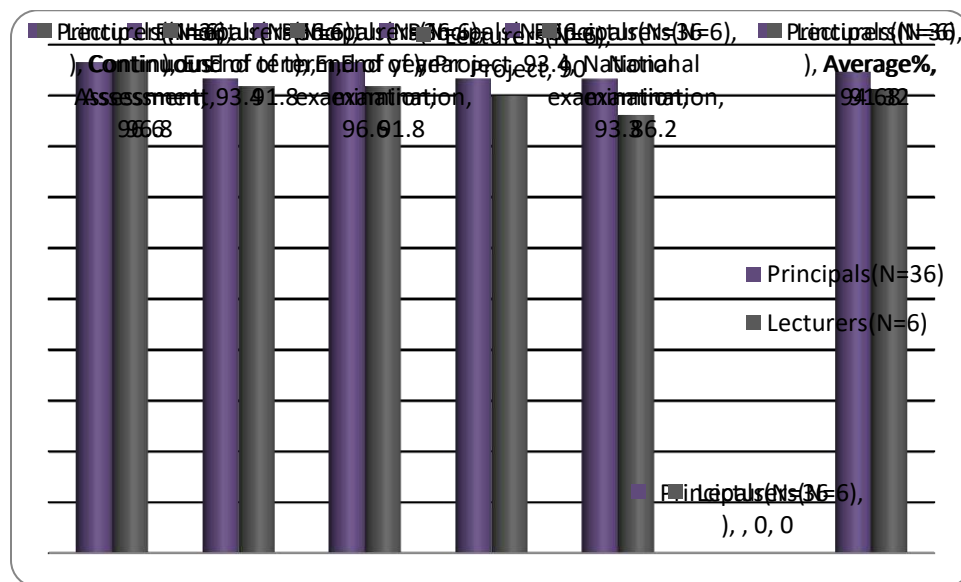


Figure 5.3.1.7.1, shows responses from TTC teachers and principals responses on various forms of assessment, there is more preference for continuous assessment (96.8) than other forms assessment. Continuous assessment was rated highest at (96.8%) in both forms of assessment.

followed closely by end of year rated by principals 93.6%. National examinations was the least preferred form of assessment 86.2 rated by tutors.

5.3.1.8 Pertinent and Emerging Issues

5.3...1.8 .1: Responses on Pertinent and Emerging Issues

Cross cutting issues are matters that touch a number of different aspects of the society, on general principles such as democracy, human rights, good governance, children's rights, gender equality, population and family life education, poverty alleviation, environment and development, to mention but a few. Cross-cutting issues are commonly defined as topics which, by their very nature, have a strong impact on all operations in a given field and, therefore, must receive special attention hence their inclusion in the intended new curriculum. These issues cut across all the levels of education. Hence they need a lot emphasizes in the future curriculum.

To address crosscutting issues and also to make learning meaningful, hence to enable learners develop deep understanding of what they learn, teachers need to use participatory and cooperative teaching methods. Participatory and cooperative teaching methods help learners develop critical thinking, reflect on their own situations and get insights of their own situations.

The survey sought to establish the extent to which various cross cutting issues should be addressed by the future curriculum. Information was sought from lecturers and principals of teacher training colleges.

Figure 5.3.1.8.1: Principals' and Teachers of TTC Responses to Cross-Cutting Issues that should be addressed in the Curriculum

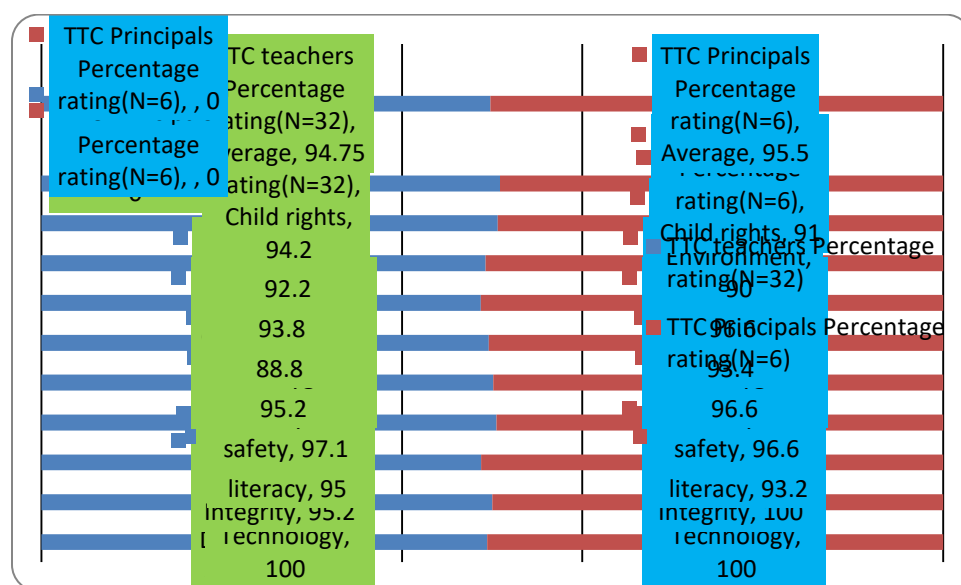


Figure 5.3.1.8.1, Respondents from the TTC institutions were of the opinion that cross cutting issues should be emphasized at a rating of 95.50% for principals and 94.75% for the teachers. For individual cross cutting issues to be included in the curriculum, the responses of the teachers were as follows; integrity at 95.20%, drug and substance abuse at 96.00%, financial literacy at 95.00%, security and safety at 97.10%, gender issues at 88.80%, health education which includes other aspects such as HIV/AIDS, sexuality education, hygiene at 95.20%, technology at 100.00%, environment which includes climate change at 92.20%, child rights at 94.20%, disabilities at 93.80%. For individual cross cutting issues to be included in the curriculum, the responses of the principals were as follows; integrity of 100.00%, drug and substance abuse of 98.10%, financial literacy at 96.60%, security and safety at 93.20%, gender issues at 93.40%, health education which includes other aspects such as HIV/AIDS, sexuality education, hygiene at 91.00%, technology at 96.60%, environment which includes climate change at 90.00%, child rights at 96.60% and disabilities at 100.00%.

5.3.2 Technical Training Colleges Level Needs

5.3.2.1 Responses on societal Needs from TTI principals and lecturers

Responses were sought from different technical training colleges respondents pertaining to the societal needs, competencies, learning areas, learning approaches, nurturing of talents, assessment and cross-cutting issues and the findings are presented as follows.

Figure 5.3.2.1: Technical Training Institutions Lecturers' Responses on what extent the TTI level Curriculum should emphasize Societal Needs

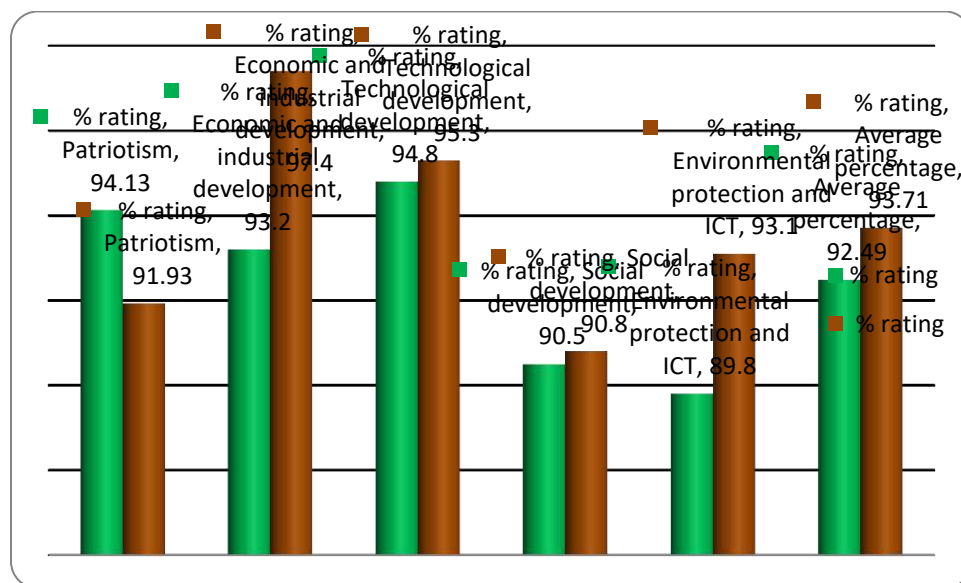


Figure 5.3.2.1: Respondent's rated technological development highest at 94.80% followed by patriotism at 94.13%, Economic and Industrial development at 93.20%, Social development at 90.50% and Environmental protection at 89.80% .

Figure 5.3.2.1: shows the percentage ratings on the extent to which TTI principals thought certain societal needs should be emphasized in the curriculum. Economic and Industrial development had the highest rating at 97.40% followed by Technological development at 95.30%. Environmental protection and patriotism followed at 93.10% and 91.93% respectively. Finally, social development was rated at 90.80%.

5.3.2.2 Competencies

The principals and lecturers responded to various identified societal needs and the findings were tabulated in the figure below.

Figure 5.3.2.2: TTIs Lecturers' and Principals' Responses on the extent to which communication, management and leadership competencies should be emphasized in the Curriculum

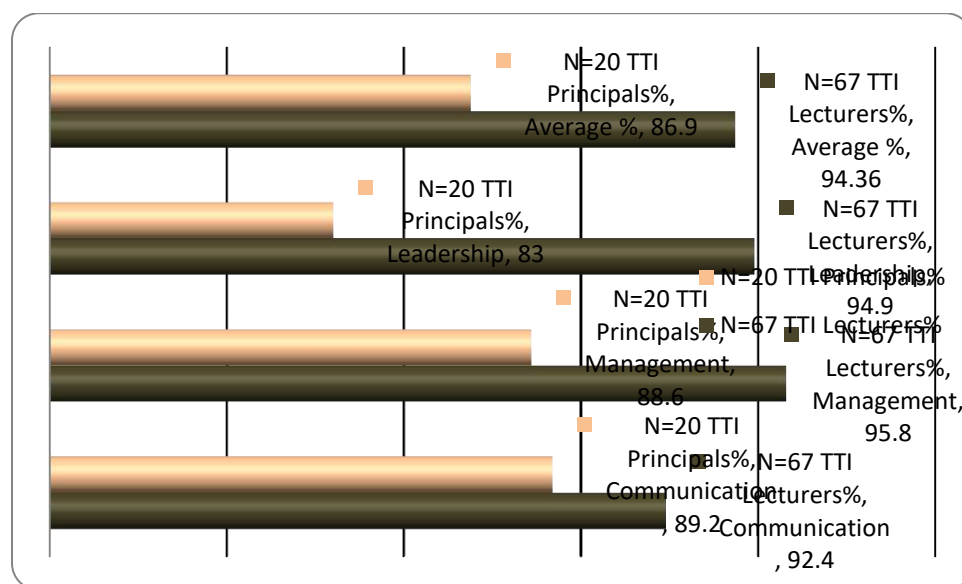
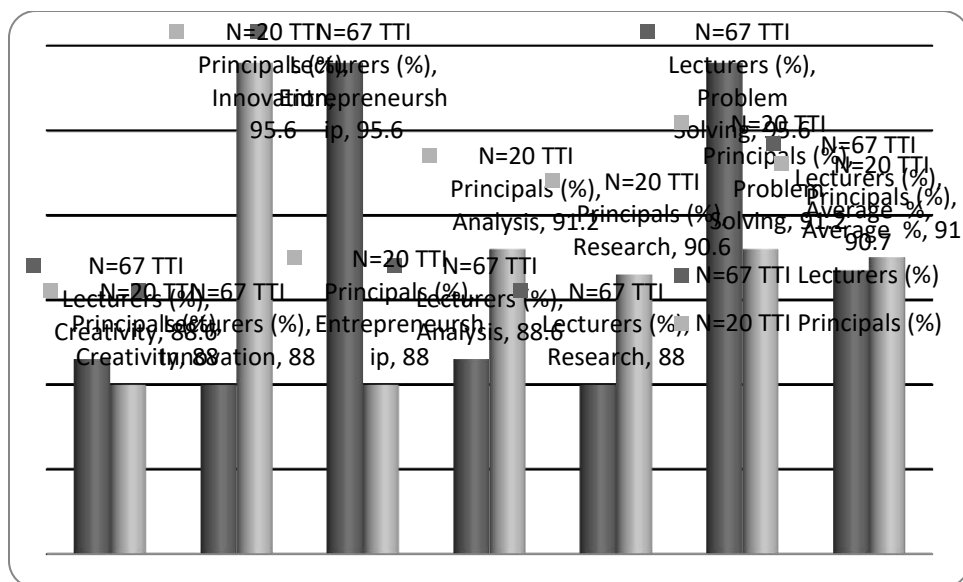


Figure 5.3.2.2, shows responses from TTI lecturers and principals sampled across the country who responded to competencies such as communication, management and leadership with ratings of 89.20%, 88.60% and 83.00% respectively.

Figure 5.3.3.1 : Responses on Competencies classified under Creativity by TTI Lecturers and Principals

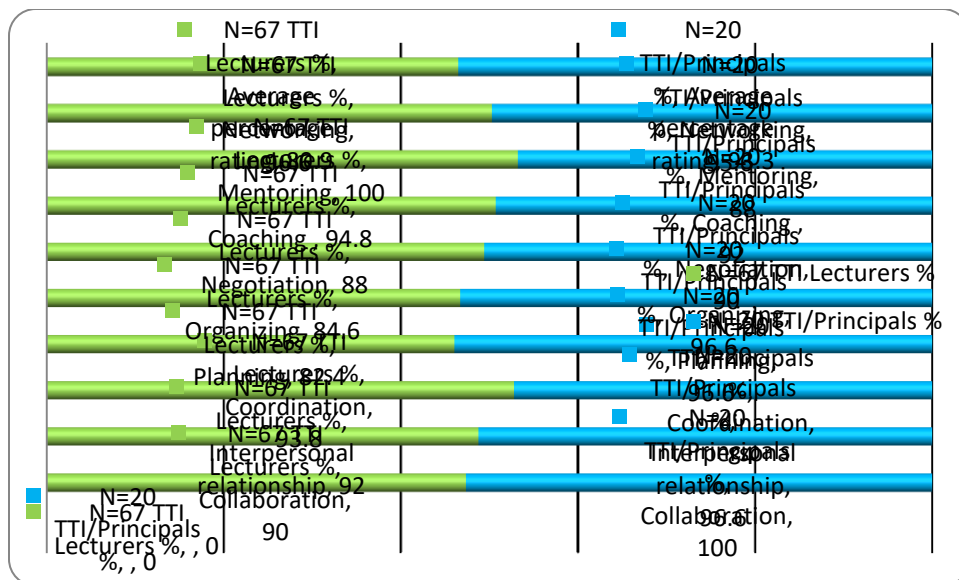


The results in **Figure 5.3.3.1** reveal consistency among the respondents on creativity, innovation, analysis, entrepreneurship, research and problem solving with percentage ratings of 88.60%, 88.00%, 95.60%, 88.60%, 88.00%, and 95.60% respectively for TTI lecturers. The TTI principals rated these competencies highly with the lowest having 88.00%.

5.3.2.3 : Responses by TTI Principals and lecturers on collaboration competency

There several competencies under collaboration which TTI principals and lecturers were required to determine the extent to which collaboration should be emphasized into the curriculum.

Figure 5.3..1.4: Responses by TTI Principals and lecturers on collaboration competency



From Figure 5.3.1.4 responses by TTI principals reveal that collaboration is highly required in TTIs. They rated collaboration at 100.00% and this was followed by interpersonal relationship and organizing with both having a percentage rating of 96.60%. Lecturers teaching in the TTIs on the other hand rated mentoring highly at 100.00% and it was followed by networking with a rating of 96.60%.

Figure 5.3.2.5 Responses on the extent to which Critical Thinking and related Competencies should be emphasized in the TTI Curriculum

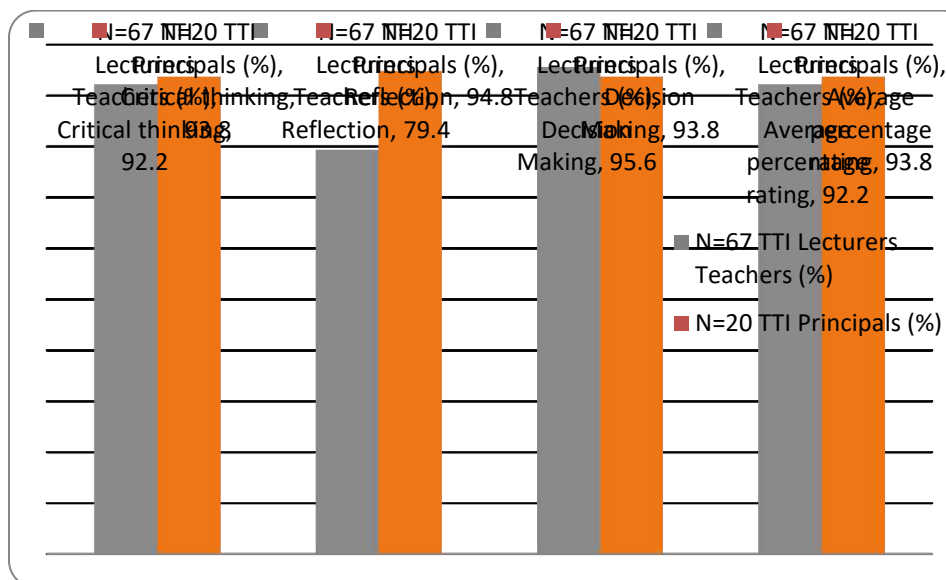


Figure 5.3.2.5 From the findings, TTI lecturers rated decision making higher than the other competencies related to critical thinking. They rated critical thinking at 92.20% and the least rated was reflection at 79.40%. On the other hand, the principals preferred reflection more as compared to the other methods. They rated both decision making and critical thinking equally at 93.80%.

5.3.2.3 Learning areas

5.3.2.3 Extent to which Art and Design should be emphasized in the TTI Curriculum

Responses on the extent to which art and design should be emphasized in the school curriculum were sought from TTI principals.

5.3.2.3.1: TTI Principals and Lecturers Mean Percentage Responses on the extent to which Art and Design should be emphasized in the Tertiary Curriculum

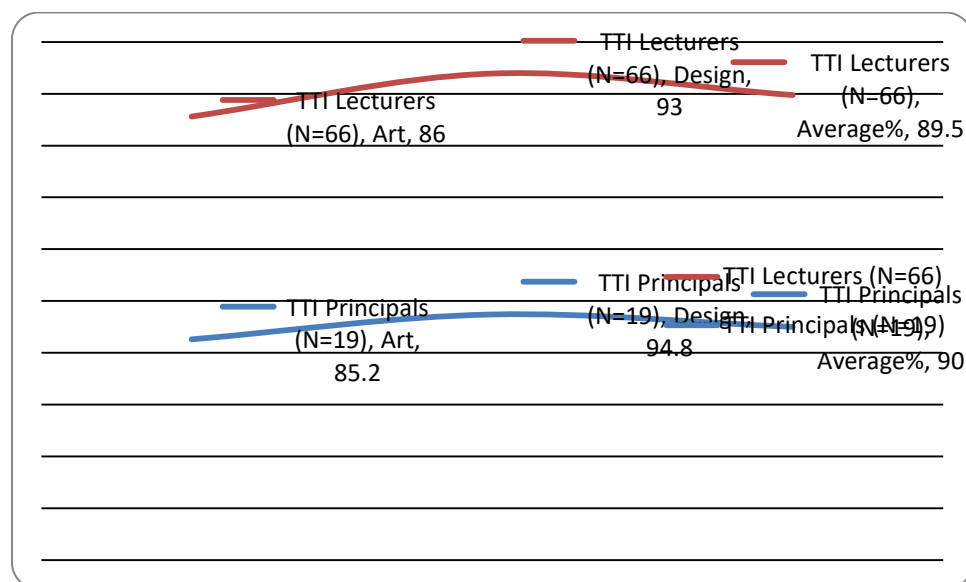


Figure 5.3.2.3.1 refers to inclusion of design into the curriculum was rated highly by TTI principals (94.8%) and TTI lecturers rated it at 93.0%). Principals rated Art at 85.20% while lecturers rated it at 86.00%.

5.3.2.4: Extent to which Agriculture, technology, vocational and technical subjects should be emphasized in the TTI curriculum

Responses from TTI principals and lecturers on the extent to which agriculture, technology, vocational and technical subjects should be emphasized in the TTI curriculum.

Figure 5.3.2.3.2, Responses on the extent to which Agriculture, Technology, Vocational and Technical Subjects should be emphasized in the TTI Curriculum

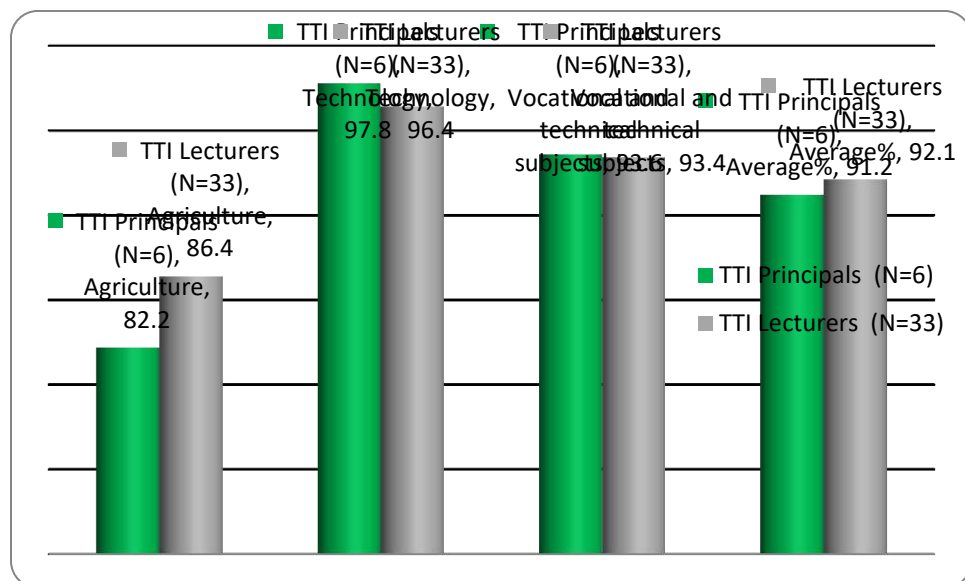
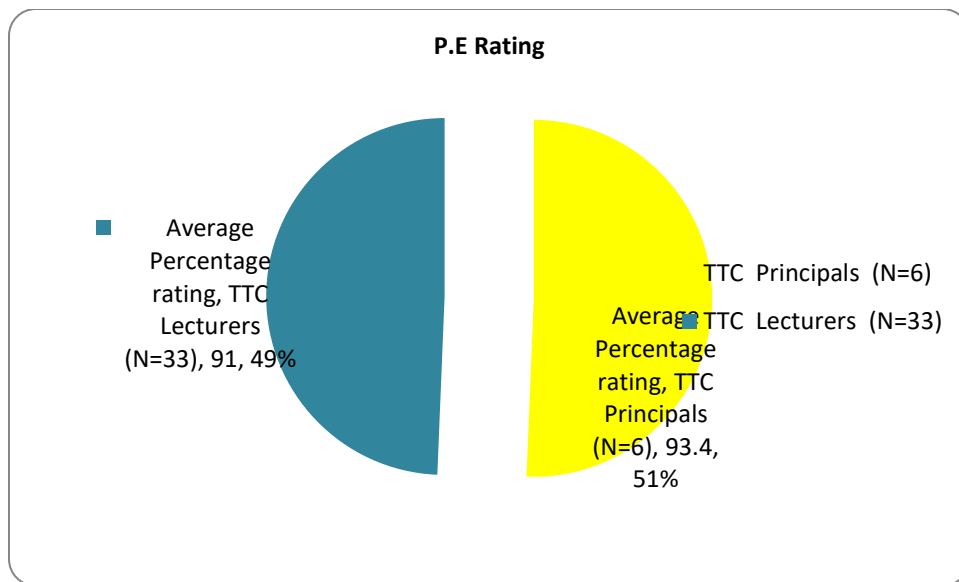


Figure 5.3.2.3.1 shows that a majority of the TTI principals (97.8%) and lecturers (96.4%) were of the idea of including technology in the TTI curriculum.

5.3.2.5 Extent to which Physical Education should be emphasized in the TTI curriculum

Responses from TTI principals and lecturers on the extent to which agriculture, technology, vocational and technical subjects should be emphasized in the school curriculum.

Figure:5.3.2.5, TTI Principals' and Lecturers' Mean Percentage Responses on the extent to which Physical Education should be emphasized in the Tertiary Curriculum



The findings displayed in Figure 5.3.2.5 show that TTI principals and TTI lecturers rated inclusion of physical education in the TTI curriculum highly with percentage ratings 97.8% and 96.4% respectively.

5.3.2.5: Extent to which Humanities should be emphasized in the TTI curriculum

Responses from TTI principals and lecturers on the extent to which humanities subjects should be emphasized in the school curriculum are presented in figure 5.3.2.5.

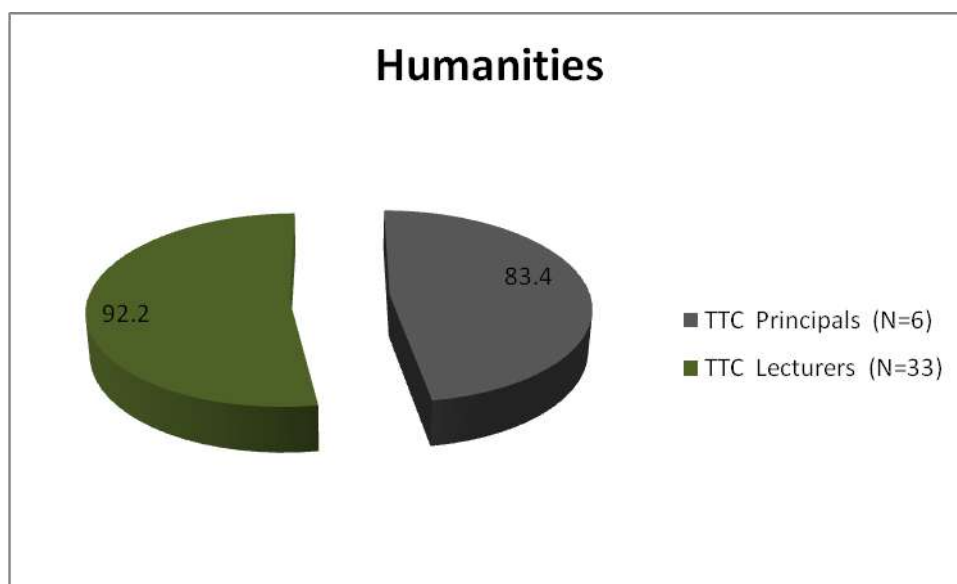


Figure 5.3.2.6 indicates that,TTI principals rated the inclusion of humanities at 80.0% and lecturers rated its inclusion in the TTI curriculum at 76.6%.

5.3.2.7 Extent to which Environment and Climate Change Aspects should be emphasized in the TTI curriculum

Responses from TTI principals and lecturers on the extent to which environment and climate change subjects should be emphasized in the school curriculum.

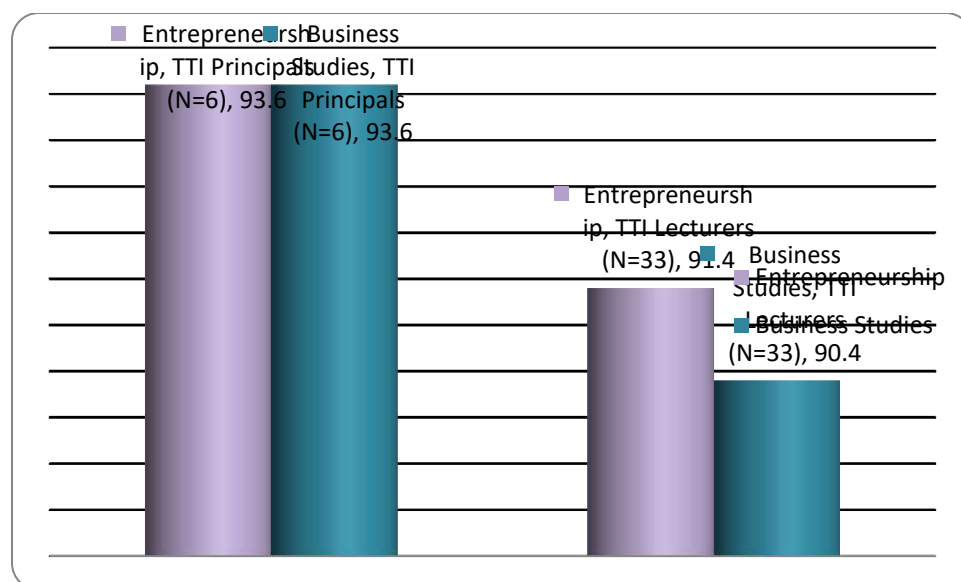
5.3.2.7:TTI Principals and Lecturers Mean Percentage Responses on the extent to which Environment and Climate Changes should be emphasized in the Tertiary Curriculum.

The findings indicate that all the TTI Principals support inclusion of the environment and climate change subjects in the school curriculum with ratings of 92.80% and 91.20% respectively. The lecturers rated inclusion of environment at 92.60%.

5.3.2.8 Responses on the extent to which Financial Subjects should be emphasized in the TTI Curriculum.

The results obtained from TTI principals and lecturers were tabulated in the figure below.

Figure 5.3.2.8 TTI Principals' and Lecturers' Mean Responses on the extent to which Financial Subjects should be emphasized in the TTI Curriculum



The findings indicate that majority of the TTI principals (93.60%) and lecturers (90.40%) were in support of inclusion of business studies. Their support for inclusion of entrepreneurship in the school curriculum at was also high with a rating of above 90%.

5.3.2.9: Extent to which 21st Century subjects should be emphasized in the TTI curriculum

The heads of TTIs and lecturers rated the extent to which mathematics; languages and sciences subjects should be emphasized in the school curriculum. Responses from TTI principals and lecturers on the extent to which mathematics, languages and sciences subjects should be emphasized in the school curriculum are presented in Figure 5.3.2.9.

Figure 5.3.2.9: TTI Principals and Lecturers Responses on the extent to which 21st Century subjects should be emphasized in the TTI Curriculum

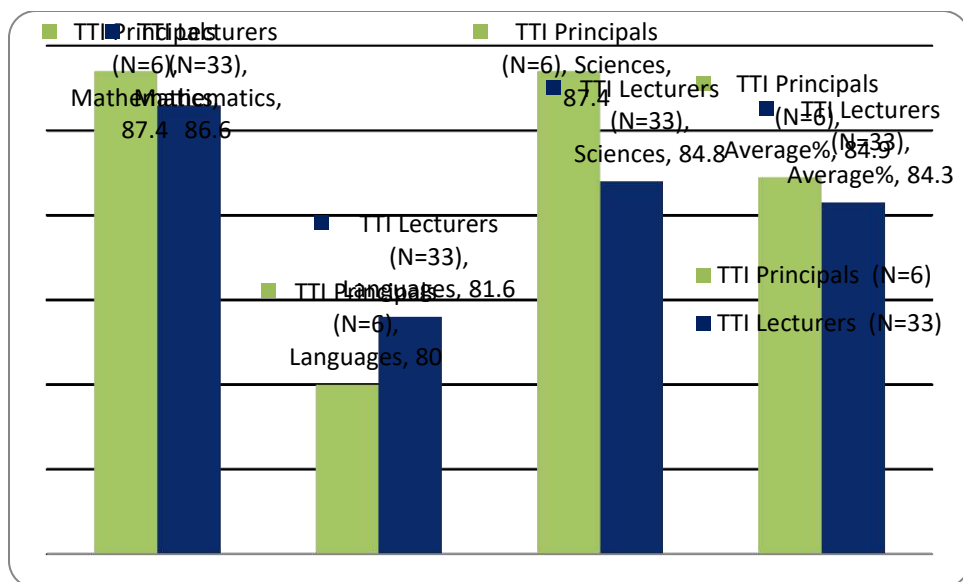


Figure 5.3.2.9, the findings indicate that on average, the TTI Principals (84.90%) and the lecturers (84.30%) were in favour of inclusion of mathematics, languages and sciences subjects in school curriculum.

5.3.2.10 : Extent to which Home Science subjects should be emphasized in the school curriculum

Figure 5.3.2.10 : TTI Principals and Lecturers Responses on the extent to which Home Science Subjects should be emphasized in the Curriculum

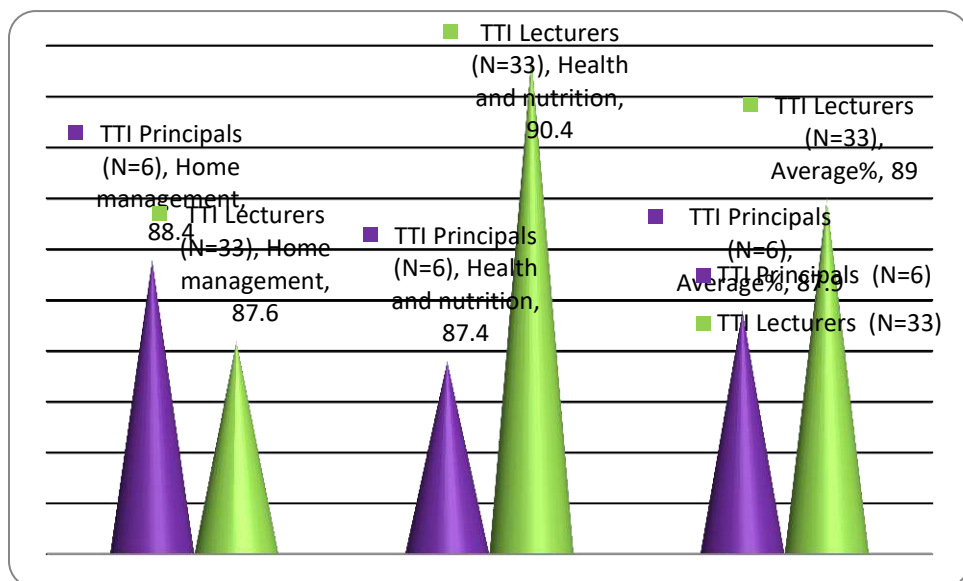


Figure 5.3.2.10 Inclusion of health and nutrition into the curriculum was rated by TTI principals at 87.90% and lecturers rated it at 90.40%. TTI principals rated inclusion of home management in the TTI curriculum at 88.40 and the lecturers rated it at 87.60%.

5.3.2.4 Pedagogical approaches

The researchers conducting this survey also sought the views of technical training institutes' teachers and principals regarding the teaching approaches to be used while delivering the technical training institutes. The collected responses are presented in the tables which follow.

5.3.2.4 .1 21st Century teaching strategies

The study sought to determine which strategies should be emphasized in delivering the 21st century competencies. The responses of principals and lecturers were as indicated in Figure 5.3.2.4.1

Figure 5.3.2.4 .1: TTI Teachers' and TTI Principals' responses on the extent to which various 21st Century teaching strategies should be used in delivering the Technical Training Curriculum

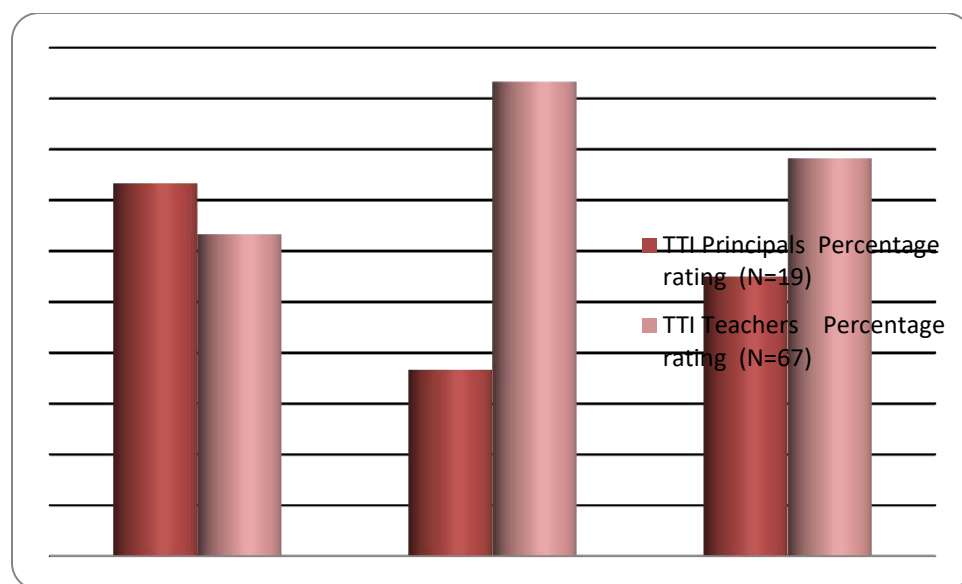
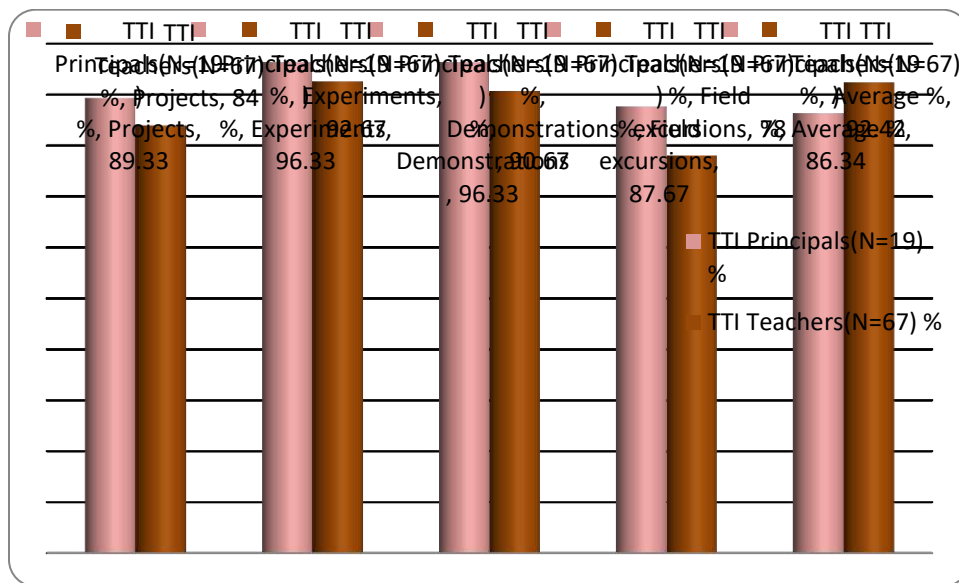


Figure 5.3.2.4 .1, shows Teachers of technical institutions rated discussions highly at 93.33% while principals of the same institutions gave brainstorming the highest rating at 91.33%. Both approaches to learners were given a high rating by both groups though.

5.3.2.5 Practical methods of teaching

Figure 5.3.2.4 .2 , TTI Teachers' and Principals' Responses on the Extent to which various Practical based strategies should be used in delivering the Technical Training Curriculum



Based on the findings in Figure 5.3.2.4 .2, demonstrations and experiments are rated highly. Training at this level requires a lot of practicals and therefore the need to emphasize on these practical based learning approaches.

5.3.2.6 Learners' Activity based strategies

TTI Teachers' and Principals' Responses on the Extent to which various Learners' activity based strategies should be used in delivering the Technical Training Curriculum were presented in the figure.

Figure 5.3.2.5 :TTI Teachers' and Principals' Responses on the Extent to which various Learners' activity based strategies should be used in delivering the Technical Training Curriculum

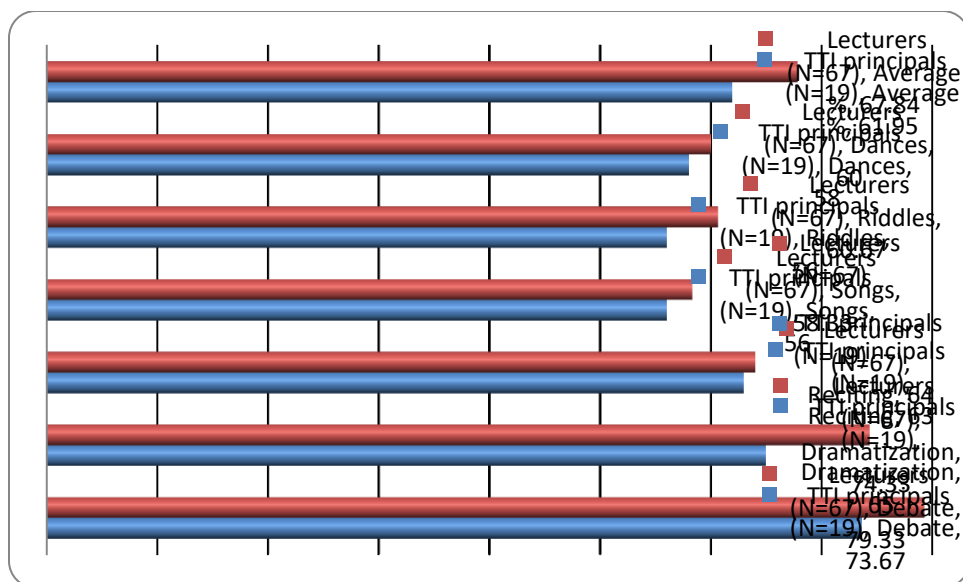


Figure 5.3.2.5 shows that both TTI teachers and principals of the technical institutes gave debate the highest ratings at 79.33% and 73.67% respectively. This implies that this method needs to be used at a higher frequency since trainees at this level need communication skills for the job market.

5.3.2.7 Experiential learning strategies

Figure 5.3.2.6: TTI Teachers' and Principals' Responses on the Extent to which various Experiential Learning Strategies should be used in delivering the Technical Training Curriculum

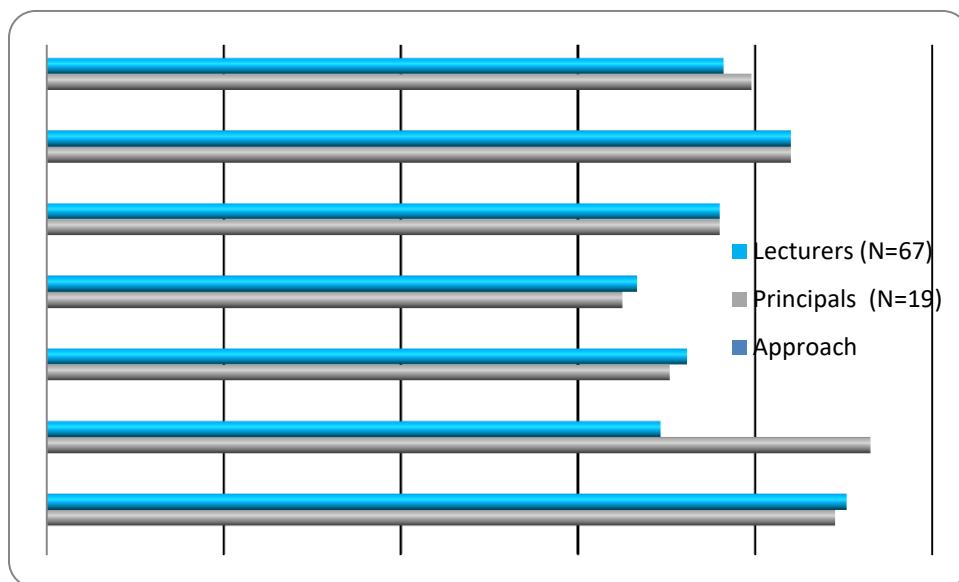


Figure 5.3.2.6: respondents preferred Experiential learning which was highly rated by TTI teachers with percentage rating of 90.33, however, TTI Teachers and principals rated nature walk the least at 66.67% and 65.00% respectively.

5.3.2.8 Lecture method

The ratings for TTI teachers and TTI principals on this pedagogical approach were 84.67% and 82.33% respectively. Though the ratings are relatively high, this is an approach to be highly discouraged while training learners at this level of training.

5.3.2.9 Talent identification and nurturing

Table 5.3.6: Findings on Nurturing the Potential and Talents of Learners according to TTI Principals and Teachers

Strategies	Principals N= 19 %	Teachers N= 65 %
Special schools for gifted and talented	94.8	92.9
Games and sports	93.6	92.8
Curriculum enrichment	92.6	91.8
Special needs classes	91.6	89.7
Clubs and societies	90.6	89.3
Cooperative learning, academic conferences and completion among the schools	88.4	88.4
Accelerated learning and advanced placement	87.4	85.8
Ability grouping and mentorship programs	82.2	79.8
Early admissions to school	78.1	74.1
Average percentage	88.8	87.2

Table 5.3.6 indicates that, 19 principals and 65 teachers of TTI's asserted in their responses that the establishment of special schools for gifted and talented (94.8% and 92.9%), games and sports(93.6% and 92.8%) and curriculum enrichment(92.6% and 91.8%), need to be incorporated in the upcoming curriculum review as approaches to talent and potential nurturing. Also to considered are; special needs classes (91.6% and 89.4%), clubs and societies (90.6% and 89.3%), cooperative learning, competition among schools and academic conferences (88.4%), accelerated learning and advanced placement (87.4% and 85.8%) and ability grouping and mentorship programs (82.2% and 79.8%). The lowly ranked strategy was early admission to schools at a percentage ranking of 78.1% and 74.1%.

A gifted and talented learner is a child or youth who performs at or shows the potential for performing at a remarkably high level of accomplishment when compared to others of the same age, experience, or environment. The new curriculum therefore needs to ensure that this category of learners is engaged in self-directed learning, thinking, research, and communication.

From the analysis, therefore, it is evident that, nurturing of the learners potential and talents need to emphasized more by the new curriculum.

5.3.2.6 Teaching and Learning Resources

The survey sort to establish the availability and adequacy of resources which are important in implementing and actualizing a competency based curriculum. Information was sort by researchers observing the available resources in the secondary education institutions.

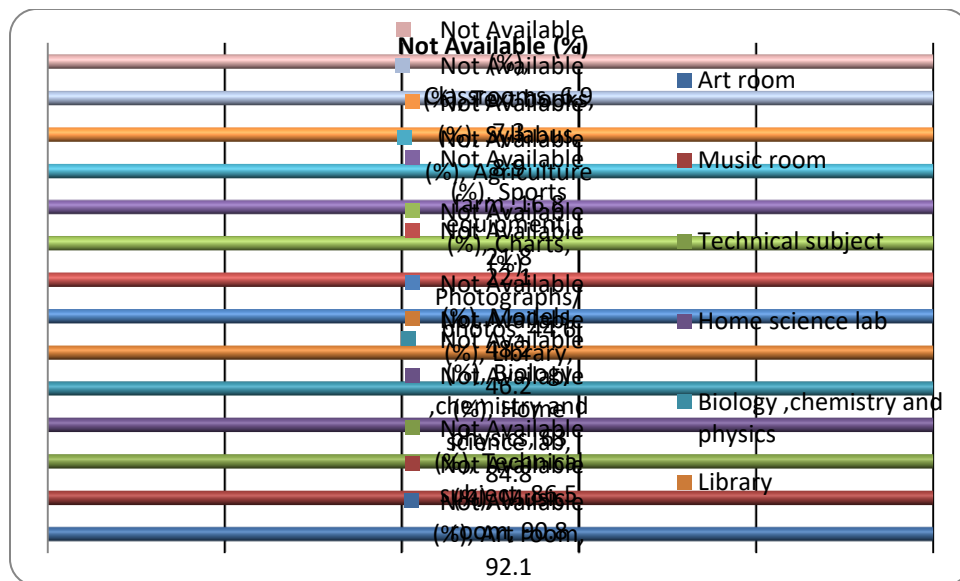


Table 5.3.2.6 ,illustrates analysis of the data obtained from schools which revealed that Art room (92%), music rooms (90.8), technical subjects (86.5%), home science (84.8%) and science laboratory (63%) were observed and were unavailable in most schools and colleges.

5.3.2.7 Assessment

5.3.2.7.1 Technical Training Institutes lecturers and principals

TTI teachers and principals from Technical Training Institutes from the entire country were randomly sampled and questionnaires administered on assessment modes. Their responses were collected using a five-point Likert Scale. The different forms of assessment were clustered into formative and summative and composite means for each of them calculated. Their responses are presented as follows.

Figure 5.3.2.6.1 TTI lecturers and TTI Principals' Responses on the extent to which various forms of Assessment contribute to effective Measurement of Learners' Achievements at the TTI level.

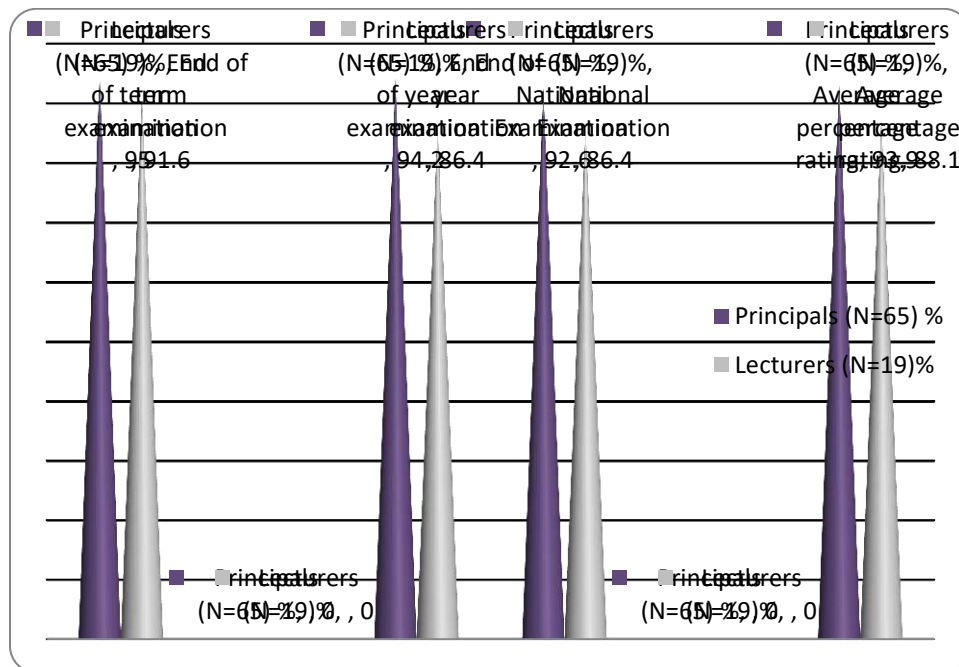


Figure 5.3.2.6.1, shows the rating of the principals and lecturers on summative evaluation, the principals rated the national examination, end year and end term examination highly above 90% as opposed to all lecturers who rated end year and national examination lowly. There was an agreement among them with regard to end term examinations with 95% and 91.6% respectively.

5.3.2.7.2 The principals and lecturers views on formative evaluation

The respondents were expected to show the extent to which formative assessment should be embedded into the curriculum. These finding were presented in the figure below

Figure 5.3.2.6.2 Responses principals and teachers on Formative Evaluation

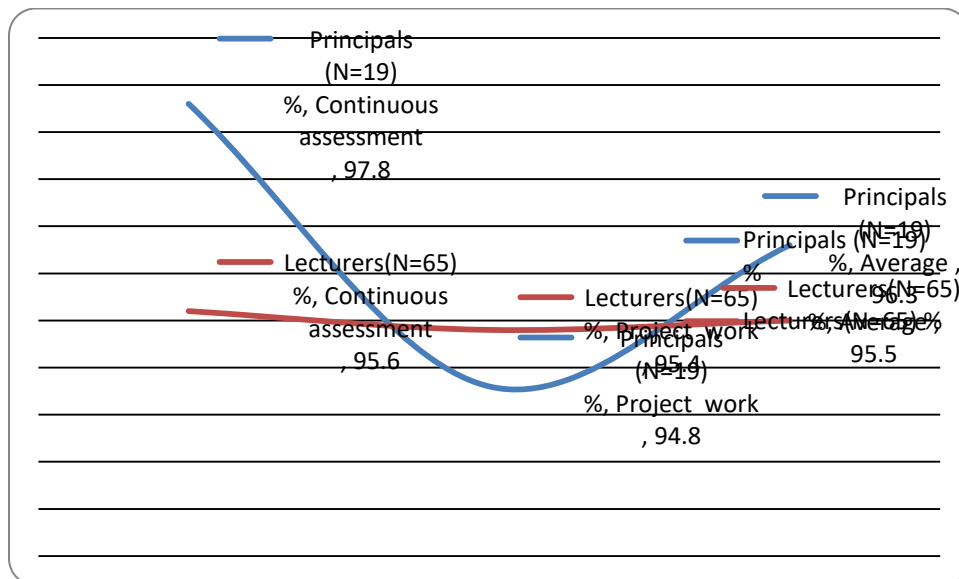


Figure 5.3.2.6.2 indicates the responses from TTI teachers' responses on various forms of assessment, there is more preference for formative assessment (95.50%) than summative assessment (93.90%) though both forms of assessment were relatively highly rated. Continuous assessment was rated highest at (95.60%) followed closely by Project work (95.40%) as compared to end of term examination (95.00%), end of year examination (94.20%). National examinations were the least preferred form of assessment (92.60%).

From the responses of TTI principals, there is high level of congruence with the results documented for TTI teachers on formative assessment which received a rating of 96.30%. However, summative assessment received the lowest rating at 88.10 %. TTI principals rated Continuous assessment highest at 97.80% followed by Project work at 94.80%. End of term

examination received a rating of 91.60%, with End of year examination and National examination tying at 86.40%.

The preferred form of evaluation in both basic and tertiary levels of education is the formative as per this needs assessment. Proposed forms of assessment by TTI principals and TTI teachers included practical based form of assessment taking into consideration creativity and innovation of the learners. Self and peer evaluation, oral examination and observation including spot tests or random assessment were suggested as other forms of assessment that should be considered.

Field and Industrial attachments form an important component of training at TTI level and should therefore be used to assess whether learners can demonstrate their learned outcomes in the new dispensation of competency- based curriculum. In addition, talents' assessment will require to be considered if all learners' achievements are to be effectively evaluated.

5.3.2.8 Pertinent and Emerging issues

5.3.2.8.1 Introduction

Pertinent and Emerging issues are matters that touch a number of different aspects of the society, on general principles such as democracy, human rights, good governance, children's rights, gender equality, population and family life education, poverty alleviation, environment and development, to mention but a few. Cross-cutting issues are commonly defined as topics which, by their very nature, have a strong impact on all operations in a given field and, therefore, must receive special attention hence their inclusion in the intended new curriculum. These issues cut across all the levels of education. Hence they need a lot emphasizes in the future curriculum.

To address crosscutting issues and also to make learning meaningful, hence to enable learners develop deep understanding of what they learn, teachers need to use participatory and cooperative teaching methods. Participatory and cooperative teaching methods help learners develop critical thinking, reflect on their own situations and get insights of their own situations.

5.3.2.8.2 The survey sought to establish the extent to which various pertinent and emerging issues should be addressed by the future curriculum.

Information was sought from lecturers and principals of technical institutions and teacher training colleges.

Figure 5.3.2.6.3: TTI Principals' and Teachers Responses to pertinent and emerging issues that should be addressed in the Curriculum

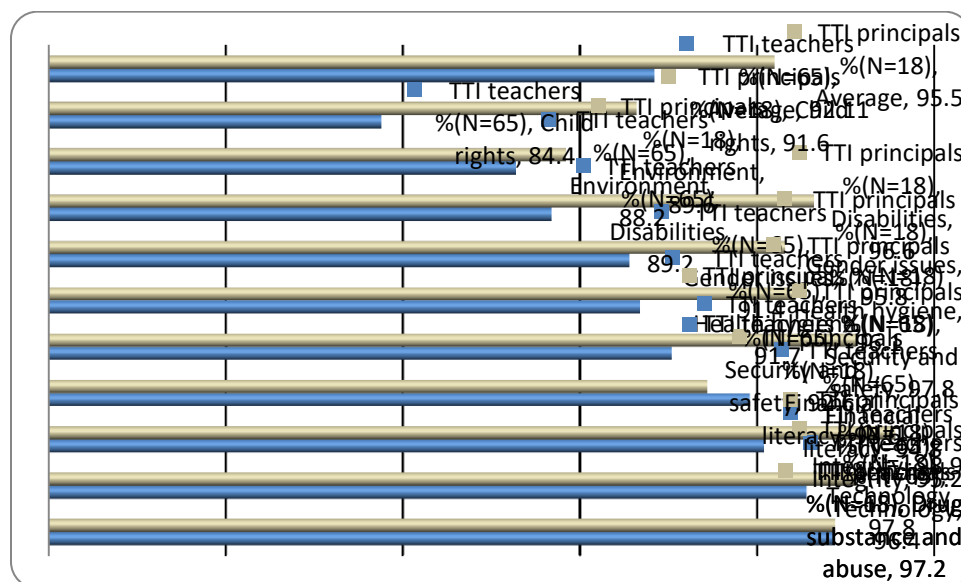


Figure 5.3.2.6.3 Illustrates responses from the TTI institutions were of the opinion that pertinent and emerging issues should be emphasized at a rating of 95.50% for technical training institutions principals and 92.11% for the teachers. For specific pertinent and emerging issues ratings were as follows: integrity at 98.90%, drug and substance abuse at 97.20%, financial literacy at 93.60%, security and safety at 97.60%,gender issues at 95.80%,health education which includes other aspects such as HIV/AIDS, sexuality education, hygiene at 96.10%,technology at 97.80%, environment which includes climate change at 89.60%,child rights at 91.20% disabilities (96.60%).

Similarly lecturers rated pertinent and emerging issues with integrity being the most desired 95.20%,drug and substance abuse at 97.20%,financial literacy at 94.80%),security and safety at 92.60%,gender issues at 91.40%,health education which includes other aspects such as HIV/AIDS, sexuality education, hygiene at 91.70%,technology at 96.40%,environment which includes climate change at 88.20%,child rights at 84.40% and disabilities at 89.20%.

CHAPTER SIX

GENERAL NEEDS FOR CURRICULUM REFORM

6.1 Introduction

Education has to constantly evolve to meet the needs of an ever changing society. In the recent years, the pace of change has been rapid in some areas. The education system has made effort to accommodate the changes through revisions of the curriculum. However, some gaps in the curriculum necessitated a comprehensive reform to address them. Data generation process was conducted through recorded interviews from sampled education stakeholders, and enriched with written memoranda submissions from the general public. The information sought to document the general needs of the Kenyan population including but not limited to the aspirations and expectations of education in the satisfaction of social, economic, political and technological needs. Further, respondents provided information on educational needs of the society, aspired structure of education to satisfy the needs and any other pertinent need that society aspires to be fulfilled through education.

The chapter presents the findings organized under the subheadings: personal needs, social needs, economic needs, political needs, educational needs, other needs and a summary of the needs.

6.2 Personal Needs

Learners related education with acquisition of national values like patriotism, national unity, cohesion, integrity and a sense on national identity. They reported that education equipped them with the ability to fight corruption.

Student leader: Education should enhance unity, patriotism and sense of belonging (SL-KABRS-BAR)

Student Leader: ...so it's like education is a light to the country so everybody should have the basic for it's only an educated person who can differentiate between tribalism. After going through education I would realize that there is no difference between a Luo and a Kikuyu, a Luo and a Maasai and a Kisii for these are all human beings so education would bring some cohesion sort of (SL-MBIT-S-HOM).

Student leader: Equity during form one selection, education should be able to address issues of tribalism and nepotism as well as integration of communities (SL-KABRS-BAR).

Student Leader: Education should also be able to help us fight corruption (SL-KABRS-BAR).

The respondents further indicated that education helps them develop personal skills and individual character. They credited education with acquisition of leadership skills, environmental awareness and conservation and time management skills, personal hygiene as well as improved living standards.

Student: ...good leadership skill, how to protect the environment, types of afforestation, time management (SFGD-IFT-S-GAR)

Student: Also when you get out of the form four curriculum, education may help you, may be important in our country like for example in leadership. When you get out of the school, you can be able to go and study let's say in leadership authorities to be a leader and you can be president even of the country (SFGD-StLKS- S-THA)

Student: We learn hygiene and cleanliness. Not dirty uniforms and house, personal hygiene (SFGD-IFT-S-GAR).

Student: It can improve living standards; nobody has to beg (SFGD-GATU-S-NYE).

Pupil: Education help me to become a better person in life....and to choose career. (SL-ANCPP-UG).

Pupil: When I finish school, I would like to be a surgeon so that I can operate on pregnant mothers. Some pregnant mothers die while delivering their babies (PL- NYP-NYM).

Parents: It should help the people to apply knowledge to develop themselves individually, to become innovative, start business and develop their own societies. (PA-NYA-NY).

The parents suggested that proper education begins at home as the transition is made to the school context. They also suggested that education in Kenya should focus on self-employment and creating employment rather than seeking for jobs.

Parents: Watoto wawe na malezi mema kutoka nyumbani, elimu ya kutosha kutoka shuleni (PA- NDAP-NY).

Translation: Children to get good upbringing from home and sufficient education in school.

Parents: I think Kenya needs a curriculum that does not address issues of white collar jobs alone. Issues that affect our people down to the rural areas, for example we don't need to train our pupils or students in order to compete for a certain job but we need to train them for them to earn their living even when they do not have employment. We train this person in order to create employment for others but not to be employed... (PA-MARP-NY).

Pupils and parents also underscored the need for education to help learners to relate curriculum content to real life; to solve personal problems and address individual challenges.

Parent: The other day, I was going home and my son who completed class eight, I went home at around 3pm and knocked at the gate, he didn't think it was me who was at the gate and I had to go over the fence and I asked him, " Kama kungechomeka huko nje, si ungechomekea kwa nyumba..." Those are the things am talking about. .(PA-FGD-StJPP-LK)

Parent:to me I feel the gap is that even when we are teaching we don't relate that content or real life,of-course the gap is that, we don't emphasize that the moment you teach everything in class let the child see the same in real life. There is a disconnect between the content and child experience. Maybe as we come up with the curriculum, we will see the ways of emphasizing that it is not the objective of getting things right but also the objective of applying every content you teach in real life. **(PA-FGD-STJPP-LK).**

Societal Needs

Parents suggested the need for education to help learners to live together. Both parents and learners agreed that education should be used to fight corruption, reduce tribalism and enhance security. Education should also promote unity and peace by encouraging learners to attend school away from their local environment. In addition, learners suggested that education should be used to promote law and governance while living together in peace and harmony.

Parent: Education should promote unity and make our nation peaceful. However the current education system which allows quota system has confined learners and teachers to their local environments undermining interaction and cohesiveness unlike in the past. People used to fear hurting others because the society and schools had people from different communities **(PFG-NMW-BUNG).**

Pupil: ...stop corruption so that people might have better life in future... stop being selfish and we should do the things according to Christian ways and we should always follow instructions as given so that we can help the poor, we can help to lift the poor from their poor situations and be we will be equal and the country will **(P-FGD-SSNPP-MUR).**

Pupil: We need to demonize corruption ... do away with corruption so we eradicate corruption ... We should not steal others things ...For example how Kenya is taking the Eurobond we should use the euro bond money well and wisely **(P-KARINP -NYE).**

College student: ...corruption education can't change it on its own, because it is everywhere, you may find when you are coming from town that Probox is stopped by the police and they give some money, and when you tell them it is wrong they leave you there, the thing is I think we should tell people look within yourself and change. **(CS-NTTC -NAR).**

Parent: ...tuwache ukabila kabisa... ubaguzi,shauri sasa unaona kama sisi ni waislamu wanubi,kupata kitambulisho imekuwa kwa sisi shida sana... ata watoto yetu kupata kazi sasa imekuwa kwao shida sana... tunasoma sasa hii mtoto ashmaliza darasa la nane,haina haja aende mbele kwa sababu ata akimaliza hatafanikiwa kupata kazi.tunaonahapana,wacha wasisome wakae tu **(PA-FGD- APBET-BAR).**

Translation: ...we stop tribalism completely...and discrimination...because you see for instance we Muslims it is hard to get national identity card....even our children to get jobs is hard. We are seeing that there is no need for our children to go beyond Standard 8 even when they complete they will not find jobs.

A respondent proposed that there is need to improve education standards, build many nomadic schools, offer bursaries and scholarships in a fair manner.

Parent: Build many boarding schools in Arid and Nomadic areas for learners to remain in school and putting life education in the curriculum (PA: LOGOP Marsabit).

Parent:...hata hii misaada kama pesa za CDF, tunajaribu kuomba lakini unaona watoto wetu wanapatiwa kidogo sana ... mtoto mwenye anapata hizo pesa baba yake yuko na shamba na n`gombe sasa sisi hatuna hata shamba ... **(PA-FGD- APBET-BAR)**.

Further, the respondents expressed the need for educating the community on harmful cultural practices, train people to acquire knowledge on business, improved security, be self-reliant to bring about economic development. They also suggested education on basic needs, medical services and electricity. Respondents indicated the need for educating street children.

The respondents were of the view that the government focuses on free primary education particularly for the disadvantaged and that good standards of learning and equality should be maintained for the future. They advocated for education that;

- a) Brings about love, care and protection of children by their parents
- b) Leads to improved rural areas by providing social amenities
- c) Enhances upholding of the rule of law
- d) Leads to employment thus improving the standard of living in the county
- e) Leads to self-actualization and achieving future dreams
- f) Leads learners to understand themselves and be role models
- g) Leads to gaining wisdom
- h) Leads to gaining independence and maturity
- i) Helps learners to grow holistically; spiritually, mentally and emotionally, physically and be healthy
- j) Helps learners to be financially literate
- k) Mentors others
- l) is not politicized.

Pupil: If people are educated they leave the bad cultural practices and so, many girls will finish school **(PL-LOGP- Marsabit)**.

The learners indicated that the girl child should be educated:

Pupil: earlier days girl child didn't go to school and now they are being helped. **(PFGD-TUR)**.

Pupil: I would like to have achieved the knowledge so that after I go out I can teach others what have learnt in schools and also help those on need **(PFGD-STRP-TUR)**.

The learner indicated that education should enable them to achieve his or her goals with the help of teachers in order to become who she/he wants in future.

Pupil: I would say may be the goals may be the things I tend to achieve..... and I can't achieve it without my education and without the help of teachers so I must be very well educated in order to become what I want to be in future **(PL-KIAP-KIA)**.

The Parent indicated that for a cosmopolitan area socialization is very important.

The learner indicated that education should achieve intelligence and healthy life skills. The learner suggested that education should promote social cohesion.

Pupil: It require many things to develop in the future like to become together so that we can develop together **(PL-GATP-NY)**.

Unity and a peaceful environment were stated as the requirements for Kenya's development and described as an instrument for social development. According to the student leader, for the country's social development, education should be provided to mould people to move the country forward. In addition, the leader proposed the need to treat girls and boys equally. At the national level, the need for a more united country was expressed.

Pupil: tribalism, nepotism and corruption should stop **(PP-FGD-HVA-KIL)**.

In areas that are prone to insecurity, parents translate the value of education in terms of how it can equip their children with knowledge and skills to protect them. Additionally, education is expected to give young people the capacity to discriminate between values and vices and make good choices against the trend of terrorism that is rife in the country.

Parents: You know when we educate our children we have expectations. We want our children to help us as parents and also to help our country with issues of security, we want them to get the knowledge and tactics on how to help our country. But first we have to educate them. We also want them to be able to protect us as you know you can't employ a security person who is not educated on security measures We want education that will help our children to be the future leaders and stay far away from groups like al shabaab. They will be making wise choices and believing that education is the start of their good life. And us as parent we will witness their success by seen the fruits of our children in education.
(PA-FGD-MAR-BAR).

6.3.1 Morality

Students and parents agreed that Kenya needs morally upright youth to take the country to the next level.

Student: Kenya needs morally upright youth because they are able to take the country to the next level **(S-FGD-MUS-S-KAK)**

Parent: I think we used to strengthen ethics. The products of our education system are not upright morally **(PA-FGD-NYANDA-S-NYA)**.

According to student leaders, education should help learners in realizing their capabilities, be a mature adult, grow spiritually and morally upright, and acquire values that are useful in their lives whenever they face any challenges.

Student Leader...It is supposed to help me realize my capability, it should help me to be a mature adult, grow spiritually and morally upright, it will help me acquire values that are going to help me in life and whenever I fall into difficulties I can apply what have learnt (SL-MOIG-S-UG).

In relation to moral uprightness, the students said there is need to deal with corruption. To them, not much effort has been put in this.

Student:...Yes, I want to talk about corruption. I think we always talk of fighting corruption but we don't seem to do anything to achieve this. For example here at school there is a lot of corruption so I think the sector concerned should make sure corruption is at low level (S-FGD-PBH-S-UG).

They said Kenya needs social cohesion and freedom from corruption for her development.

Student...We should be united, fight corruption in our country so that we can move to the next level.... The issue of tribalism the whole place should equality, we need peace and harmony. (S-FGD-StCNAM-S-BUS).

The students also said there is need for community members to embrace virtues, be reasonable and role models.

Student ...Need to pass virtues to the community, think as reasonable people, be role models (S-FGD-StCNAM-S-BUS).

Some cultures like FGM were said to slow down development. The students said:

Student...avoid traditional cultures like FGM (female genital mutilation) so as to help those children from the affected areas to get education for it is the only key to successful life (S-FGD-BUT-S-BUS).

Learners stated that education reinforces good social behavior. It helps one to cope with others and understand them. It also promotes peace.

Student: education can open my mind so that when I'm out there to be disciplined to everyone... So when you go out there you should be able to socialize with others in the right way to promote peace in the society. (S- FGD- OLOO- KAJ).

Learners also indicated that when the educated persons are successful, they serve as good role models.

They added that education promotes good decision making.

Student: Education can help us choose the leaders in the community. You know some leaders are chosen because of the last things they have done in their last term like giving out money but when you are educated you will consider the morals of the person and you will know the write leader to elect. (S- FGD- OLOO- KAJ).

Parents would like issues of security, eradication of poverty and creation of employment opportunities addressed.

Learners want to be taught about morals at home and in school and equally request that their parents get educated on how to behave in front of their children.

Pupils suggested that education should promote social cohesion by encouraging use of the national language and discouraging use of mother tongue in a negative light. Education should also address peaceful coexistence among different communities to avoid tribal conflicts which usually affect learning in schools. Pupils expressed the need to be taught social skills to enable them relate well. They suggested that education should seriously address the issue of corruption because they thought it had reached alarming rates.

Pupil: We have been taught how to relate with each other, but it doesn't have effect because corruption is still in Kenya because even in our school here as a boarding school you can't leave your box open there is theft and there is corruption in our Kenya. And so we learn CRE in school but we are not taught the effect of corruption. We are not taught for example I ask myself we can manage corruption but why are we not manage it, and why are countries like America managing it, it's a problem facing the world but in Kenya it is a disaster, so I can say that I don't know what we should be taught. (P-FGD-OLE-SANP-NAR).

Pupil: ... stop Kenyans from fighting.. leaders will have a peaceful country, where we have peace and harmony.. (P-NANP-LK).

Parent:.....for example in class one we used to be taught about who is your neighbor, we were taught that Ouma is your neighbor.. Kamau is your neighbor and would only tell them in regards to sentence construction, but did not emphasize on them staying together.... (PA-FGD-StJPP-LK)

Pupil: we need to come together and stop corruption. (PL-TEMP-NY).

Pupil: I would like to have good interaction so that I can socialize with people out there. (PL-TEMP-NY).

Parents proposed that education should enhance acquisition of the value of social equality, to the extent that students are admitted to institutions of higher learning based on performance and not on their ability to pay.

Parent: It should achieve equality. Careers should not be based on only grades. The rich should not be allowed to take students for high level courses just because they have money. If cut off was A let even the rich have A for that career whether parallel or regular. (PA-FGD-KIS-S-NYA).

Parents suggested that education should achieve national integration and curb tribalism by having learners learn in different areas. In the same vein of thought, students pointed that education should enhance unity among the various communities of Kenya.

Parent: Education is supposed to label us to be Kenyans our education system has all the same habit of tribalism, our curriculum should address on national integration issues on how to bring communities together even if it means going back to a system of allowing student getting education from countries which are not their countries (PA-FGD-MOIG-S-UG)

Parent: It should also achieve social integration. We should not have learners studying in their areas throughout their life. (PA-FGD-NYANDA- S-NYA).

We should develop a culture of Kenyans in schools which devoid of tribes but Kenya based to cure tribalism and achieve national integration **(PA-FGD-NYANDA-S-NYA)**

Parent: We should teach our children to be together and love one another. **(PA-FGD-NYANDA-S-NYA)**.

Student: We need unity for Kenya to develop since unity is strength and as we work together not neglecting the arid areas and knowing that all of us we are equal and we will be in a better position to develop ...**(S-FGD-MOG-SAM)**.

Both parents and learners observed that education equips one with social skills and good morals that in turn leads one to behave in a civilized manner. The parents reiterated that education should enhance good behavior in the learner and help them to fit in the society.

Parent: Education brings overall development for-instance areas where people are educated they behave in a civilized manner...**(PA-FGD--MUTG-S-KIT)**.

Parent:...for one, education teaches about morals...good morals. Good morals as in when you look at our society today, there is a lot of moral decay, for-instance, in Radios and TV we are seeing big people in that vice of corruption, and a young boy or girl is growing, is seeing somebody is mentioned that has stolen hundred million. He goes with that, at the end of the day he sees that has not been jailed, has not been done anything. So the child grows with that culture. So in education religious whatever, religious studies will teach how to be a good person **(PA-FGD-MUTG-S-KIT)**.

Student: I know some few students in this school who came and had poor attitude about education and now they have a better understanding and a better participative and even enjoying coming to school now than they did. When someone comes to a high school they are mostly irrational about most of the things but after getting out of high school they become civilized, they become open minded **(SFGD-MEKA-SP-KWA)**.

Parent: I could expect him/her to have good behavior when he joins the society. And to fit in the society. **(PA-FGD-NJAB-S-NYA)**.

A student suggested that Kenya needs peace for development to take place.

Student: socially, Kenya needs peace and harmony in order to promote the ... our development **(S-FGD-MARM-S-MARS)**.

Learners indicated that education is important in making pupils better people in society as well as preparing them for future careers while the parents indicated that education should help people to apply the knowledge acquired to develop individually.

The respondent suggested that education should address social, environmental and individual characteristics that improve quality of life. The proposed curriculum should address the professional requirements for a functional society. In addition it should reflect religious values, technological changes, moral values to address things like corruption, radicalization, and conservation.

Respondent: Environmental conservation with use of real life examples and the consequences of environmental pollution when teaching mathematics and science subjects. Life skills and their survival value such as self –awareness and make informed decisions. Respect for human life through learning experiences that expose learners to appreciate life. Values (Rationality, Sacrifice, Individuality, Democracy, Equality, Self-reliance, Patriotism). Key competences determined by market demands and social needs. (CEMASTE).

The Kenya Conference of Catholic Bishops proposed a curriculum that has the following characteristics;

- a) Holistic in nature, intended to result in an education which addresses not only the academic advancement of the child, but the physical, social, psychological, spiritual, intellectual, moral, emotional and mental development of the child;
- b) Respects, reflects, and conforms to the Kenya constitutional affirmation that ours is a God-fearing nation
- c) Inspires a love for the search for knowledge and truth and for its application in our lives as opposed to the current practice whose only purpose is to pass examinations and obtain academic qualifications.
- d) Embraces the formation of citizenship (character formation, values education), as one of its core responsibilities (a major pillar of education) and prioritize values and values-based education in all schools and all levels.
- e) Promotes, encourages and employs teaching methods that develop reflection, critical thinking, problem-solving, innovation and creativity in their life situation.
- f) Encourages students and their teachers to form healthy relationships as they walk together in their companionship in search of knowledge and truth.
- g) Prioritizes patriotism and national values as goals of education. (KCCB-RI).

A respondent suggested that the curriculum should incorporate the need for the society is to sustain peace, develop law abiding citizens, independent thinkers, creative problem solvers, able to use ICT to promote peace, solve problems, create wealth and deliver service and serve to instill learners with humanity. One that instills Knowledge, attitudes, and skills in patriotism, anti-radicalization, anti-ethnic discrimination, religious tolerance, non-violence in conveying demands, non-violence in elections, tolerance, anti-criminal culture, anti-corruption culture, ethical practices, servant leadership, transparency, communications etiquette and decorum, accountability, good governance in one-self, family, group, and corporate.

A respondent proposed that education should prepare an individual to fit in the global village.

Respondent: let's not be prejudiced by the multi-ethnicity of Kenya but how we can fit in the global village. (NM-IS).

The respondent suggested that Kenya's social and development needs should lay emphasis on literacy, numeracy and foundations for lifelong learning (emphasis on learning to know, learning to do, learning to live together and learning to be). Education to emphasize on volunteerism, social education, personal obligation and respect for environment to meet sustainable development (ESD) principles.

The respondents suggested that education should equip the learners with life skills, enables the learners to participate in national and international matters, live and grow in a healthy, safe and nurturing learning environment and exposed to information on various fields of work and activities in the global community. The learner should be enabled to appreciate and tolerate cultural and individual differences in order to live in harmony. The learner's potential should be nurtured. The learner should be made conscious of the dangers in the society.

Parents urged that education should promote interaction between learners from different social economic backgrounds and cultures. It should be a vehicle for discouraging tribal groupings. They were of the opinion that students in all schools should be mixed to avoid tribalism and that selection for university should also have a national outlook.

Parent: In terms of values, we should bring up anticorruption form of education which could still be integrating more of the subjects something against tribalism, corruption, something about nationalism, something for patriotism. . (PA-FGD-MOIG-S-UG).

Parent: Myself I am a Maasai. I came to this school when I first brought my son who was admitted here and now have come to look for admission for another son because I liked this school since it does not discriminate learners from different tribes. When people stay together without discrimination in terms of tribes, this contribute greatly to the development of education in Kenya (PA – FGD – NDUR - LAIK).

Parent: Nowadays there are national schools, but when you come to county schools it is led by one tribe because most of them are born there and brought up in the same area so when they go out there they group themselves in tribes. They are supposed to mix the children in those schools. (PA-FGD-NYAKI-S-NYA).

Parent : Like me I was schooling in a National school in Garbatura in Isiolo and in our time I didn't know whether there were Boranas, and Somalis and I was comfortable and after school we meet here in Nairobi. But nowadays tribalism is there like selection of University, e.g. I am a parent when selecting for university like in Kisumu there good university but as parent you refuse your children to go there. (PA-FGD-NYAKI-S-NYA).

A pupil indicated the need to teach anti-corruption from early years of life so that the individual may grow knowing that corruption is a vice.

Pupil: I think they should not be correcting things when you are old enough that they are taking you to court that is issue of corruption if it is the issue of corruption they should start teaching the young generation from the schools they take for instance US when you want to become a leader they follow the way you are when growing up your learning status if you had ever stolen something like a pencil then you are not a good leader now if they implement that in Kenya and pupils will know that if you grow up the way I know corruption will end if they only start teaching the issue of corruption when they are still young they tell you that it is not good to bribe and when you are bribed such for an elder person to tell that this thing is wrong and you report immediately because what you place in the head of a small person it will grow (ST-RUK-HB).

The modern society requires a curriculum that is transformative and which touches on all aspects of life. Respondents proposed that such a curriculum could help many learners to develop careers in medicine, engineering, aviation, teaching, security, administration and modern Agriculture. Respondents strongly indicated that curriculum should enable the country to address issues of infrastructure, health, security, food security, environmental hygiene, and improved technology. They emphasized the need to build more schools particularly for the disabled to create educational opportunities without discriminating those with special needs and the vulnerable such as the street families.

The pupil suggested that they need education that will bring about unity, working together and helping one another.

Pupil: We can do a lot like trying to live together like people of one country and helping one another (PL-KARP-MU).

Learners also suggested that leaders and the people should share ideas.

Pupil: It is not like the president can do everything on his own in the country. They should think together as they say two hands are better than one. (PL-SOSP-UG).

6.3.2 Social cohesion and integration

It was pointed out by a respondent that Kenya needs to strictly have a realistic strategy on Social integration. A respondent observed that the current ethnic divisions are detrimental to development.

Respondent: Kenyans are greatly divided on ethnic lines, leading to extreme distrust and fear amongst the different communities. Nowadays it is increasingly becoming hard for one to invest in “foreign” territory, and this is not good for development. The current structures e.g. the National Cohesion Commission do not seem to be getting us anywhere as far as real social integration is concerned. The current school quota systems do not encourage social integration either, since the majority of students are forced to study in their home areas and work there all their lives (BUS.MAN-INF-NAI).

Other respondents further suggested that there is need live together in harmony and to shun tribalism.

They pointed out that the issue of tribalism makes some of the tribes to feel superior to others.

Respondent: I think people should be empowered to avoid example tribalism. We should all live as Kenyans we should call ourselves Kenyans not to have groups.... Some tribes see themselves as more superior than others but if we just see ourselves as Kenyans I think it can help because some people just get employed anywhere without basing on community where you come from, I think we should avoid tribalism (CARW-INF-UG).

Respondent: If people for example avoid that attitude of temper, just living with the other peacefully, developing peaceful attitude, I think society will be well (CARW-INF-UG).

6.3.3 Education for practical life

Respondents observed that for Kenya to develop better, people must get education. This is because education gives the person skills and power to start businesses. It is necessary to educate the citizenry so that they can live together peacefully. This will also enable political leaders lead their people in the right manner.

Respondent: The country needs education to develop. I have educated my children up to the levels they were able to reach. It will make people know how to live together with others without conflicts. It makes people content living together. It also enable political leaders lead their people (**SHOP-INF-NYE**).

A respondent equated a good life to attainment of a better education.

Respondent: Education should achieve a lot, it is the key thing that all of us should have. You know lack of education brings a lot of issues in our community so I think that all of us need to be educated for a better tomorrow (**MECH-INF-MUR**).

The respondents pointed out that, educating the youth will bring development.

Respondent: Education assists us to be wise and work hard and to know what goes on.... (**MAS-INF-BUNG**).

6.3.4 Religion

Religion was identified as one of the ways that can lead to social development in the nation.

Respondent...Christianity will play a part...will play a role, a major role in development of Kenya (**WEL-INF-NAR**).

Respondent...the religious doctrine is the guiding factor for all beings. If you are either taught the Christians doctrine or Islamic doctrine there are some limits that you can't exceed thus you can be a good child (**CAP-INF-LAM**).

6.4 Economic Needs

According to the learners education is a gateway to a better life. Having literate people in the society promotes economic growth.

Student: me I come to school because I want to better my life in future, I want like to open my mind knowing that when I am in school I get to benefit from the knowledge instilled and will use it when I exit school. So I may not coming to school just to pass or get an A but when I go out I use the knowledge like for business to do something constructive.(S - FGD- OLOO- KAJ).

Student: Education is the key to succeed and without education no one can earn even some money and no one can survive without education(S-FGD-MARM-S-MARS).

Student Leader: ensure there are adequate personnel to man our institutions and economy(SL-KABRS-BAR).

Student Leader::education is what empowers people for I came here with no knowledge and I came out with some knowledge at least now I can work in an office knowing one or two things (SL-MBIT-S-HOM).

Student Leader: So when you look at the economy the business studies and the rest its from education that they train the entrepreneurs and how to manage education and the rest (SL-MBIT-S-HOM).

Parent: where we have educated people, there is good infrastructure in terms of roads, because if you are educated,. So a county, if we have very educated people, it will be developed in terms of infrastructures, roads, that come with civilized (PA-FGD--MUTG-S-KIT)

Parent: I would like my child to continue with education and after that I will be able to see what he is interested in and if it is a college for nursing or teaching and if he performs well he can be an engineer, doctor, and magistrate (PA-FGD-KIRIS-S-SAMB).

Parent: Education will help because like in this place because of lack of education cattle rustling is rampant which is mostly done by our young men who have not gone to school but if they are educated then they will know stealing is not a good thing and they can study and get employed (PA-FGD-KIRIS-S-SAMB).

The learners think that the education system should be appropriate and efficient, such that those people who are able to learn from the learning institutions are able to obtain the relevant skills needed to improve the economy. They were of the opinion that education should help to raise the living standards of the people.

Student...needs to improve living standards, and develop objective future dreams (S-StCNAM-S-BUS).

Student: It has rise to the living standards of people, because those early days' people lived like wild animals (S-FGD-MARM-S-MARS).

The students said that there is a lot of unemployment in our country. Learners pointed out that through education job opportunities are created. In this respect education should be geared towards creation of jobs to reduce the crime rates. Those employed are no longer idle. They contribute actively to the

growth of the economy. Some even become employers thus reducing the gap between the rich and the poor. This would enable them have better living standards.

Student......should serve to reduce the crime rate in the country by ensuring that the population is well educated and people can acquire jobs in different sections in the country so they are able to work and earn **(S-FGD-BUT-S-BUS)**.

Parent: It is important you take the child to school so that the child can get employment **(PA-FGD--MUTG-S-KIT)**.

Students noted that education should lead to creation of job opportunities in order to address the issue of unemployment and reduce poverty levels.

Student: There should be job opportunity provision for student graduated from the universities and the problem of unemployment would have been solved and this will help to reduce poverty level in ...county. **(SL-MAL-S-KIT)**.

Student: education should enable us produce competent people in the spheres of jobs who will help us in alleviating poverty in our counties **(SFGD-RAP-S-MIG)**.

Students noted that education should not endeavour to train bookworms but professionals with specialized skills such as engineering, and these professionals should be trained from an early age.

Student: I think education in Kenya trains students to become bookworms...so education in Kenya should not train students to become bookworms but also to build them to become professionals...**(S-FGD-NJU-S-MUR)**

Student: The education system in Kenya it only teaches students to become professionals in a certain field but it should start training students to become professionals starting from the word go instead of secondary schools. When you can take education curriculum in the USA start teaching children to become professionals where they are you get the person e.g. this one wants to become a surgeon, a doctor and start training the child early from childhood to become a doctor. So Kenyan system should also adapt that curriculum and start training professionals early from childhood so that as they become older, as they grow they will become specialists in certain fields e.g. medicine, engineering and so on. **(S-FGD-NJU-S-MUR)**

Parent: For me, I would like that we have engineers, because a country without engineers (not audible) that might force us to start borrowing from outside and that would prove to be expensive. We want engineers, we want doctors, and we want that kind of education that will help our children ... if it is something found in other countries, it is also locally found here. **(S-FGD-NYAM-S-NYAM)**

The students suggested that education should achieve the goal of self-reliance so that students need not rely on white collar jobs after school.

Student: I think students in secondary schools also primary schools should be taught how to be self-reliant. Most students in our country have the mentality that education you've got to be employed but they don't have the mentality that after education I can employ myself without relying on someone else. **(S-FGD-NJU-S-MUR)**.

The parents would also like an education that focuses on skills for self-reliance and ultimately self-employment. Both parents and students stressed that education should equip learners with skills that are relevant to the world of work and relevant to careers. Such skills can help one to start a business and therefore earn a living.

Parent: Education system could be that relevant only to teach students whatever is going to be useful to them even after they leave school that would be more productive... (PA-FGD-MOIG-S-UG).

Student: Equipping people with knowledge and skills therefore those with education can start their own business to earn their living and also to cater for their needs. (S-FGD-MARM-S-MARS).

Parent: I have seen in some places people are taught how to make soap and this can be a source of economic development if introduced in schools. This can help children to be self-employed and also employ other people. (PA-FGD-NDURS-LAIK)

Parent: I think education still can bring about successful self-employment (PA-FGD-MUTG-S-KIT).

Students suggested education should find a way of enhancing agricultural component for enhanced income generation.

Respondent: I think in the education sector many students should be told in sector, agriculture is only one which can generate a lot of income but it is despised by many, if support can be given from the government from all the people we can have that income generated (PA-FGD-MOIG-S-UG).

Parent: when I look at this county because we have good shambas. Like agriculture can be improved When they use new technology it will change. (PA-FGD-NYAKI-S-NYA).

Students suggested that they should start majoring on subjects that are relevant for their careers in high school. They highlighted the careers they wished to pursue for economic development.

Student: We should try on those subjects which are majoring on our careers in high school, other than doing subjects which we will not need in future in your career. (PA-FGD-MOIG-S-UG).

Parents noted that education should lead to graduates who are more innovative even in coping with daily challenges.

Parent: We should look at education and make sure it makes the graduates more innovative and able to face challenges with courage and come up with solution minimum assistance. (PA-FGD-NYANDA-S-NYA).

Students linked security to the opportunity to take part in activities for development. They urged the government to provide security.

Student: We need to embrace security. In Samburu there is a problem with security and if the government can provide security then people will be able to carry out their activities. They can also improve the infrastructure, transport and communication. (S-FGD-MOG-S-SAM).

Student: economically, Kenya needs a lot of development like making the roads and the poor areas that have surrounded us, around our school. **(S-FGD-MARM-S-MARS)**.

The student said poverty is an issue affecting our country. For any economic development, there is need for eradication of the poverty.

They suggested that education should instill patriotism in the students for their country and this would in turn enhance economic development.

Student: Education could encourage students to love their own country by engaging in economic development may be in agriculture, this country could grow economically. **(PA-FGD-MOIG-S-UG)**.

The economic development of Kenya was closely tied to education. The learners and parents felt that if their children were well educated, it would help them engage in activities that contribute to the growth of the economy in areas of agriculture, farming and business. The learners emphasized the need to focus on farming and agriculture for purposes of provision of food for the whole country.

Pupil: They should invest more on people who do farming and agriculture because it is the one that provides food for the whole country. We are not like other countries who imports food from others we are the ones who moves the products.

Parent : ndio, wasome unajua ukisoma ndio utajua hayo mambo mengine ya kulima na biashara. **(PA-FGD-SOSP-UG)**.

Translation: Yes, let them get education, you know it is when you get educated that you get to know other things like farming and business. **(PL-SOSP-G)**.

Education should empower the individual economically so as to help one's family, the poor and alleviate poverty.

Pupil:.... it can help fight poverty and that most of the people who live in slums or other places can get more stable. **(PL-TEMP-NY)**.

They also indicated the relationship between education and economic development through acquisition of jobs that would enable one to contribute to economic development through taxation.

Pupil ...they will get a good job and that money they get they will pay tax and develop the country. **.(P-BUNP-LK)**.

Pupils and parents indicated that education would provide required practical skills in order to produce professional engineers, carpenters, masons, lawyers, doctors, professors among other professionals; instead of importing engineers from countries like China and paying for their services.

Pupil: We take our money and give them to China and it is something that we can do. But we don't do it because we are not taught. **(P-FGD-OLE-SANP-NAR)**.

Parent: one is those skills. We need skills to be developed for this country to grow. We should not think the growth will come through only those who went to university. Even the carpenter, the mason is

working towards developing the country. The tailor is also part of that development. We need all skills in this nation. We need lawyers, doctors, professors and others. But we also need people to make clothes for these people, make their seats, do their hair. Where will these services come from if we do not develop such skills? **(PA-FGD-KATP-MAK)**

Learners indicated that education is important for future development of responsible citizens and financial stability which would in turn help them to evade criminal activities.

Pupil Leader:....if they don't get educated, their future will end there and when they grow up they will enter into crime and they will end up dying... it can also help your future can be bright and you won't end up in crime or anything that you will ever regret **(PL-BUNP-LK)**

Pupil Leader ...it should achieve for us more, like now we are facing problems with our finance, if we can get more people who have talents they can help our country to develop **(PL-BUNP-LK)**.

The learners reiterated the need to provide education to those with disability to also contribute to economic growth.

Pupil: About economics, the disabled people can be given jobs **(P-FGD-KUJP-MIG)**

Learners also indicated that education would give them new knowledge on relevant areas of life such as environmental conservation.

Pupil:...When people are learnt they can know new things, but when they are illiterate they will not be able to know like keeping and nurturing trees. **.(P-FGD-BUNP-LK).**

Learners also credited acquisition of education in alleviation of poverty and promotion of good leadership.

Pupil leader...it should help also those who are in need. Those children who are depending on others. They can be future leaders and they can have good things in life and they can help us... maybe it can help remove the issue of poverty we have in our country **(PL-BUNP-LK)**.

Learners indicated that education would help them learn about the future and develop their talents.

Pupil Leader:Children need to be educated about the future and about their talents **(PL-91MP-LK)**.

The learner said more industries are needed for the economic development of country.

The parents observed that educated people have high chances of employment whether self or in an establishment within or without the country and will thus have an overall positive effect on the development of the country. Such people will contribute to the growth of the economy through attracting foreign exchange and helping others.

Parents: ndani yako kuna hekima, maarifa, una weza linda uchumi wananchi na kila unafanya una fanya kwa muuongozo. **(PA- NDAP- NY)**.

Translation: Inside of you there is dignity, wisdom, you can protect the economy of the country by working with proper strategies.

Parents: Elimu..... Inatusaidia kutimiza vision 2030 kuinua uchumi wetu....watu wako na elimu wakiajiriwa nje wataleta pesa kutoka nje. **(PA-NDAP- NY)**.

Translation: Education helps us attain Vision 2030, to uplift our economy... people with education can be employed outside and bring in foreign exchange.

Parent: When the child is educated he or she will get a good job. Umaskini utaisha kwa county, na kazi itapatikana, na watoto wetu wataendelea na kupata kazi mahali pengine na kusaidia wengine. ..(PA-LIKP-LK).

Parent: kama, leo nimeona kibao ya kuchukua mtu kazi na kama hakuna mtoto ako na marks hawatapata kazi. Kama hiyo shule itaweka bidii kupata hiyo marks kazi itapatikana na county itaendelea. ..(PA-LIKP-LK).

Translation: ...like today I have seen an advert for a job and if one does not have the necessary marks they will not get the job. School should therefore enable children to get the right qualifications and the country will progress.

Parents suggested that the country could develop if region specific economic livelihoods were exploited through the education of local residents.

Parent: like in our coastal area in our place, we have very good people in fishing but they don't have enough education or certificate to work in the sea. ?(PA-FGD-MBFP-MAK).

Parent: they could benefit a lot in this, and also those who can do farming they could be taught about farming. Women should be educated to avoid getting manual working, our people have no enough knowledge about the sea. ?(PA-FGD-MBFP-MAK).

The learner indicated that education should promote international trade through international languages.

Pupil: to do businesses with the the international personnels because if you are not well educated you can't go there abroad and speak the language that you know from your country but there must be a language you must use in order to know that English you must be very well educated....(PL-KIAP-KIA).

Parent: Our education system should cater for needs that would give the child the skills that would shape their minds or intellectual needs and not just educationally but practical needs(PA-FGDPP-MOI-UG).

Parent: We need to monitor the quality of education we are giving our children in terms of are we giving enough time? Is there close supervision? Are we achieving what we need to achieve as a nation? (PA-FGDPP-MOI-UG)

Parents would desire children who are independent and being able to do something in order to earn a living.

Parent: such child should be independent, someone who can do things on her/himself. Those are children who should be able to do something to earn living ... they should have skills even in business. A very independent child. **(PA-FGD-UNOAP –MAK).**

Parent: ...helps him in his life by offering him a job that will help him in his life according to what he has studied... When the child gets educated he/she gets job to upkeep and maintain him/herself. **(PA-FGD-DABP- KIL).**

6.4.1 Education for Economic development

To develop the economy of a country the learner indicated that we need to improve education facilities, grow entrepreneurship as well the infrastructure of country.

Pupil: For a country to grow, we need to grow in terms of business in terms of economy which is affected by the roads that we have issues about finances and all that. and for example in parts of trade we are supposed to make different types of goods which are not similar like other goods in other country. So that we may attract the tourist in other country. Because when we make other goods which are not, it is main problem in trade, when you make other goods which are not of other types then we may improve the trade. **(PL-UNOP-MAK).**

Pupil: it needs people who will work together to develop the country, stop corruption, and government should hear the cries of its people' **(PL-CHEP-UG).**

Pupil: when we get educated we will come back to our county and make it develop, we will built schools, hospitals. **(PL-CHEP-UG).**

Pupil: I want to say something. For Kenya to defeat those other countries, our teachers must train us properly and they should attend their lessons every day and they should teach us very well so that we may be able to defeat other countries and encourage us to do many things **(P-FGD-HOMP-HOM).**

Pupil: By digging bore holes by planting trees, avoid robbery, **(PL-KATP-KIT).**

Pupil: first, its education. education in these parts of North Eastern, Turkana, there is poor education there, so there is need for education, eee..to have towns because they will promote investors from even other country, so there will be education, sponsors, things like that **(PL-SAIP-KIT).**

Pupil: Support the youth. **(P-FGD-KAMP-NYE).**

Pupil: to rise from slums to mansions, **(PL-NYAP-NYE).**

The parent indicated that for Kenya to develop people have to be literate.

Parent : First of all, for Kenya to develop, first it must remove what we call illiteracy. If there is illiteracy, development cannot take place. Unless we replace illiteracy with literacy, then we are going to improve our country. But if people are not informed, then the development cannot take place. As I can see. **(PA-FGD-TONP-NYM).**

The country could also develop economically if there were able leaders and an all inclusive provision of education that would cover all parts of the country. This education should include the remote areas of

the country. The construction of more schools was therefore envisaged as a way of ascertaining economic development in Kenya.

Pupil: For Kenya to develop we need able leaders, we need more school in areas like Turkana and Marsabit so that we can bring up young minds.(P-FGD-HVAPP-KIL).

Pupil: Kenya needs to add some schools, school teachers so that they can be in work and then schools will change after that .(P-FGDP-SENP-NYM).

Similarly, parents observed that the growing population had limited the opportunities for jobs and children needed skills that would give them jobs to make them economically independent.

Parent: Earlier you could survive without education but nowadays the country is overpopulated so we are trying to educate our children to be skilled, able as well as possess some attributes which will enable them in this tough life (PA-FGD-MAR-BAR).

Respondents said that for Kenya to develop better, learners should be given practical skills. They also said that there is need to have a skilled labour force.

Businessman: A lot of Kenyans are poor because they lack essential skills that would enable them to make a decent income. For example, in the construction industry, as in most industries, essential skilled labour at the lower levels (masons, carpenters, etc) are in dire shortage. Most of the people who undertake these jobs have never received any formal training; they have “learned their trades on the job” It is evident that because of this the greater majority of them does very poor quality work, and cannot then be paid as they would otherwise be if they had some training. The same situation is seen at the tertiary level of skilled labour. Most training colleges at this level have been shut down, and essential skilled workforce is shrinking rapidly. It will be impossible for the economy to advance if the tertiary level skills are missing. . (BUS.MAN-INF-NAI).

Quarry worker: ...Like here (quarry), there are jobs that don’t need a lot of skills like loading stones in a lorry. That one can be done by anybody though you still need to reason on how to arrange the stones. But there are other technical skills needed, for example, kupiga mawe baruti, (exploding the rock to loosen it) and operate the machines. You need skilled people. And this is the same even in other sectors other than this. Skilled people are needed. (QUAR-INFO-MAC).

These respondents therefore suggested that by the time learners leave school or college, they should be well trained in some skills to help them cope with life outside school. A suggestion was given to curriculum developers to consult with the industries on the type of skills that may be needed.

Bussinessman: Curriculum developers need to get comprehensive advice from the various industry players- those that are “out there” on the ground as opposed to academics only, on the current market skills requirements and the requisite background knowledge a worker should have to effectively employ the skills in the various industries. This analysis should be done periodically and curriculum revised accordingly. As things stand, a lot of people now would be engaged if they had such skills, but they know not how to achieve them wholesomely. (BUS.MAN-INF-NAI)

Respondents noted that for Kenya to develop there is need to offer jobs to citizens after they are complete college and university education.

Mechanic: ... if it were my wish the government to provide job opportunities to those who have finished their courses in colleges and universities it would be a good thing because I have my daughter who was taking hospitality course and still yet to get job. **(MECH-INF-UG)**.

Quarry worker: the type of education we need is that which will make people do something for their lives. We should not have so many people who have been to school yet they are all over doing nothing **(QUAR-INFO-MAC)**.

A respondent pointed out that graduates of the primary school level, who do not proceed to secondary level, need some consideration since they do not have opportunities of joining colleges or university. However they still can do something to earn living. Such graduates were said to be more willing to work in *Jua kali* (informal) sector than those from secondary level.

Respondents ... what I can say is that parent should be very much careful after their children come out of standard eight and because it is a must for somebody to join in secondary education so as to have major,...aaahhh....major major institutions that somebody can join in because like now standard eight certificates doesn't work anywhere, you cannot apply any college ...form fours... most of the students form fours they don't like this job of *Jua-kali* sector just because of their brain even the ones I have trained here, you find that a standard eight candidate can understand things easily than a form four person... I think there is something wrong with secondary education onwards **(WEL-INF-NAR)**.

Some of the suggestions given by the respondents on economic needs included encouraging the younger generation to create self-employment. One of ways of creating self employment was said to be through *Jua kali* sector. For this reason, some of the respondents urged the government to provide electricity in rural areas to enhance development of *jua kali* sector and also provide loans and credit to the youths to come up with their own businesses.

Mechanic; The government should provide rural electrification so that somebody can start a welding business in welding instead of watching over somebody else's cattle somebody will start welding or fabrication job or mechanical **(MEC-INFO-NAR)**.

Carwash attendant: ... in *juakali* sector, most youths are not employed .They don't have that finance. if they form some organization to help them, even if is funding local youths to open their own business, I think that will help. For example, our area youths around here does not have permanent place to work, for example the place we are working here we have been given notice. They want to move from outside the town, so how would they work, so politicians should help the youths **(CARW-INF-UG)**.

The respondents also said that more technical schools/youth polytechnics should be build to give young people skills.

Respondents noted that for Kenya to develop, security should be enhanced through job creation and avoiding idleness.

Carwash attendant: ... We can also reduce insecurity if education is there, people are employed. I think socially if people of course if people are idle, they don't have education they shun out of bad behavior **(CARW-INF-UG)**.

A respondent was of the opinion that education should not focus on white collar jobs but on education for self reliance.

Shopkeeper: Chances of getting employment are not for everybody. People should learn they can make a difference with or without employment. Education should not focus to white color employments, remember our parents educated us yet they were not educated. What they learn from school should help transcend in life to the next level, help them apply the mathematics, agriculture and so on and make a difference where they are when they want to **(SHOP-INF-NYE)**.

A respondent noted that for the country to grow economically there is need to engage in business and make savings.

Respondent: kufanya biashara pia haihitaji capital nyingi, lakini wakati ndio inatakikana. Pia mtu anafaa kuwa na sharia kama ukipata leo, kesho unakosa ndio uweze kuendeleza biashara.

(Doing business does not require much capital. What is needed is time. There is also need to save for tomorrow.) **(BUT-INF-KAL)**.

Freedom of the citizens to work anywhere in the country will amount to economic growth of the country. To a respondent, people should not be confined to work in their counties.

Businessman: I would say balkanization of the country into ethnic counties has created a situation where it becomes more difficult for one to work in a county other than where he or she comes from. This poses a very serious issue as we move forward, since employment opportunities will contract for those who graduate into the labour force if they can only work in their counties. Over the years, there has been unequal development of different regions in Kenya, meaning that some counties are extremely underdeveloped while others are handsomely developed with immense employment opportunities. I believe this situation needs to be changed if college education is to have meaning to many. **(BUS.MAN-INF-NAI)**.

The key informants suggested that education should aim at producing a human resource with suitable skills to drive the country towards achieving vision 2030. Informants said that there should be an effort in the curriculum that provides learners with an education that helps individuals to be self-sustaining. They observed that, the current curriculum lacks practical orientation for the country's industrialization. As a result, the economy struggles to absorb the graduates of different levels since the skills and capacities acquired are often quite unrelated to the real life needs. According to one respondent, curriculum should give emphasis to education for sustainable development

KI : We had just decided that in all primary schools there is need for them to have IGAs, so that even if they drop out of school, they still could get themselves sustained using the educational background that

they had. Because when two people go to the market to sell vegetables one is totally illiterate, another one has educational background the one with educational background will always do better. **(KI-CEB-MIG)**

KI: coming up with critical mass for human resources, or training for the right skills that for the personnel that can drive the economy of the nation of the country that time we had not even come up grouping like the vision 2030, which was talking about knowledge based economy **(KI-PWA-UNI)**.

6.5 Political Needs

Students were of the opinion that for Kenya to develop there is need for better leaders who are not tainted with corruption and favouritism.

Student: I think Kenya needs better leaders, that is corrupt free leaders, who are able to take this country to the next level, the main problem being corruption. **(SL-MAL-S-KIT).**

Student: I would like to say that, we must have leaders who are transparent, whatever leaders whom we have elected do, should be done in a transparent manner. **(S-FGD-NYAM-S-NYAM).**

According to the learners, propaganda and hate speech propagated by the leaders does not amount to good leadership.

Student:... the best thing possibly our leaders are supposed to do is to stop these hate speeches and also let me call them propagandas spreading the propaganda because the moment our leaders are fighting and also spreading things, they are not being good role models unto us **(S - FGD –MURS - MUR).**

The learners expect education to give rise to leaders and people who are able to deliver to the country. They also attributed development of patriotism to education. According to them, the politics of the day should change for Kenya to make progress.

Student: the kind of politics which we have in this country of course doesn't really bring Kenya to the right position, it seems we are still in the ancient years I mean back in the 1960s so it's only better in terms of political Kenya will have to come from where they are to somewhere else. **(S – FGD – AHS - BAR).**

Parents were of the opinion that education played a major role in producing educated leaders and citizenry.

Parents: Na bado kuna political...political inasaidia maana sanasana ili nchi iendelee, viongozi lazima wawe wamesoma. Katiba pia inasema mambo na wale ambao watachaguliwa wawe wamesoma...so pia tunaemphasize serikali pia waangalie hii maneno ya shule iendelee, ili tupate political leaders ambao wamesoma. **(PA-FGD-OLOLUG-S-NARK).**

Translation: There is also politics; For a country to develop leaders must be educated. The constitution demands it so we must emphasize that the government looks into education in the country.

Parents: even politically we will improve because will have people who are dependent and will do what they want and not what other countries want. The political system will improve to some point **(PA-FGD-MUTG-S-KIT).**

The parents said that more emphasis should be on constitution affairs and of political issues in the country. On the same, the students said that there is need for adherence to the rules set in the country as well as promoting equality among citizens and electing right leaders.

Student:...We should be follow the rules that were amended, promote equality, increase standard of education and elect those who can rule us well **(S-StCNAM-S-BUS).**

Parents noted that education should enhance accountability and transparency in the country.

Parent: ... if we've education ... our children ... will know what is required to be done in the country. For example, transparency and accountability... they will know if somebody has done wrong. What is it that has been done wrong and how it should have been done right. But if you are ignorant, then you may not be able to know what is happening **(S-FGD-NYAM-S-NYAM)**.

It was said that education should be in a position to produce good leaders, who can work together and ensure there is security in the whole country.

Student:...I think that also improving the political stability in terms of security so that activities such as education can go on very well. For example, we see that the education we receive in western is not the same as that in North Eastern because of security. **(S-FGD-BUT-S-BUS)**.

A student expressed the need for people who are literate to be able to express their political opinions.

Student: I think that not all people in Kenya are literate; at least in every society people are equipped with knowledge to express their views and grievances to the government. **(SL-MAL-S-KIT)**.

Learners were of the view that politicians should work together, not engage in hate speech, tribalism, favouritism as well as corruption in order to avoid post election violence and other related political issues. Pupils therefore indicated that the curriculum needs to include civic education so that learners are taught how to choose good leaders and avoid those who incite people and spread hatred through hate speech.

Pupil: They should also work together, do team work because as they talk they don't remove that hate speech because that is what brought 2007 post-election violence leading peoples misplacement from their homes and it brought enmity to everyone. They should work on tribalism because the country will not be together.

Pupil: I think if Kenya wants to have a well-developed country politically, the leaders should stop being at loggerheads with each other, and also they must support each other so that we stop corruption... make sure those leaders who are corrupt are taken to court and be judged by the law. **(PL-OLMP-NYM)**.

Pupil: Other issues that affecting us in Kenya are some politician incite people, they say hate speech in rally in the name of supporting somebody and you find mostly in Kenya you vote for the person because they come from your tribe. I think we can be taught so that we depend on these politician so that we can vote for leaders I mean politics of our future life because many times the adults have been told don't vote for somebody because he is a Kikuyu like you or a Luo like you but it is still taking place in Kenya because they were not taught at early stage. **(P-FGD-OLE-SANP-NAR)**.

The negative impact of corruption was reiterated by the student leaders who called for concerted efforts to stem corruption in the country. The curriculum therefore needs to mediate through suitable learning areas to change Kenya.

Pupil: We need to stop corruption. Corruption is really hitting us so it requires stern action taken on the perpetrators'. (PL- FGDP- KIP-UG).

A parent observed that parents also have a role in stemming corruption by bringing up their children in the right way.**Parent:** The way they are brought out by their parents determines, community should be shown correct direction, so it should be emphasized over time. So parent should take that responsibility of showing their children the right direction. Money should be used for the right purpose not for corruption. So whatever the parent is doing he should avoid teaching children about money in wrong way. Even if we take them to court, court is also corrupt and nothing will be done to this people.(PA-FGD-MFGP-LAM).

The learners suggested that education should help promote international relations.

Pupil: I think the schools should improve the learning of different languages from different countries so that when somebody goes to another country they can socialize with them...Chinese. (PL-TEMP-NY).

Parents: there is need to incorporate teachers and parents in the learning of schools and pupils management (PA-NYA-NY).

Learners also indicated that education would enable the country to have serious leaders who are accountable.

Pupil: ...We need serious leaders who will account for people's money
Learners indicated that education helped people to get employment and consequently improve their lives (PL-91MP-LK).

Pupil: We will live well, have good jobs and help people. (PL-KUJP-MIG).

The learner was of the view that the country needs political stability for it to develop

Pupil: we need more political stability and not pointing fingers when problems arise....to eliminate terrorism... people should stop killing each other because they are from different tribes. (PL-TEMP-NY).

The parents of the view that politicians should reduce politicking and concentrate on development work.

Parents: on the political side, the politicians should reduce politicking and concentrate on developmental work (PA-NYA-NY).

The parents suggested they come up with up with a book fund in schools and to keep politics away from learning centres.

Parents:.....book fund by parents in combination with school..... parents to plan and keep politics away from education in order to streamline the education process (PA-NDAP-NY).

Parents were of the view that education should inculcate nationalism and patriotism in the learner.

Parent: ... children to develop a sense of patriotism and nationalism; they should see other Kenyans as brothers and sisters ... appreciate the varied Kenyan diverse cultures, and they should live in cohesion with other Kenyans. (PA Kamop –MAN).

The learner indicated that leadership skills should be practised in school by being responsible.

Pupil: I think I as the president before one is elected as a president, they are supposed to know how toThe people because if you are elected there and you don't know your responsibilities you will mislead the school, you know the president is the eye of the teacher, its like he is like a second teacher so you are supposed to if you are elected to be the president she supposed to be responsible person a role model to the children which they should follow, so as to when alive at that category they know what they are supposed to do to have better views than the former ones. . .(PL-UNOP-MAK).

The parent indicated that learners should be aware of just the basics in Politics.

Parent: The pupils need to lighten on the political activities which are going on. But they should not be fully involved but let them have basic knowledge on political issues. (PA-FGD-LAKP-HOM).

The learner indicated the need for leaders with integrity.

Pupil: To ask for..any seat that one represents you have to tell the people who have elected you what you'll do and what you are trying to do after they elect you.(PL-NDAP-KIT).

Pupil: The leader should give what they have promised totally. They should follow the rules that make country to develop politically. (PL-NDAP-KIT).

The parent indicated that for country to develop politically devolution has to be implemented fully to see positive results.

Parent: Mmmh...maybe we can say also on political line, okay the direction we are taking now is not bad but if it can be implemented properly. Because devolution has brought a lot of things closer to the people and now it is easier for people to manage themselves. If it can be implemented fully so that we see the independence of our county governments and then we realize some good development politically and economically. But still we feel it has not been done fully because you keep on hearing counties crying; "we have not been given money to pay, we have not been given money to develop"...So if that one could have been implemented, maybe it can help the counties to be independent.(PA-FGD-TONP-NYM)

Parent:. Our government leadership is controlled by politicians. In other words, our leaders go into office through elections and through politics. You cannot talk of politicians minus politics; .. So I wish if they could put more emphasis in education. For example, in our county, Nyamira, there was a machine that was brought to the hospital but we lacked an expert to operate that machine. It took a lot of millions, but we didn't have somebody, an expert, to handle the machine. It was very good for our use when we have patients, but we were unable to operate it. So let the government let the politicians put and emphasize this in our schools. Such that we can now have informed people in place. Because you cannot develop, for example if we have an X ray machine here, I mean these cancer machines, if we have them around; we may not have the operators. That is why you see we go all the way to India to be attended there. So if we put more money in learning institutions, this one will produce enough skills, enough personnel, to help develop this country. (PA-FGD-TONP-NYM)

Parent : ... politically, politicians should have good intentions and spread resources to all corners of the country so that there can be equal opportunities for the young learners. (PA-FGD-NYAP-NYM).

Key informants pointed at the need to embrace cohesion, togetherness and democracy in political activities from the school to national level

KI: Politically as a country we need to embrace that aspect of togetherness...Kenya is so divided that even according to talk in your native language or probably in English or Kiswahili but you will be associated with some language/tribe which becomes a problem, learners ...made to be part of the political system in a way that they participate in electing the leaders(**KI-FGD-MASU**).

KI:the gaps that relate to the content that is being delivered and in the methods of delivery of that content . . . content this country has developed over the years and there has been a lot of fundamental changes that have taken place on the economic front, technological front and even constitutionally and therefore the curriculum has not been able to move in tandem with constitutional changes (**KI-CA-NAI**)

KI:...and economic aspiration, constitutional changes and being in tune with technological transformations so that the content can help people become self-reliant instead of going to school believing that one day I will get a job. (**KI-CA-NAI**).

6.5.1 Education for political development

Some respondent noted that Kenya can be transformed if people and especially politicians were free of corruption. It was clear that the constitution is not given the respect that it deserves.

Respondent: Kenya's political environment, to say the least, is one that greatly impedes Kenya's growth socially and economically. Corruption and lack of respect for the constitutional provisions today form the greatest negative political setbacks that have to be addressed. The society in general will be a reflection of the leadership they have, will behave as does the leadership. Corruption at leadership levels is simply out of control, the masses follow suit. (**BUS.MAN-INF-NAI**).

Respondent: I think we can for example in terms of politics, If politicians avoid corruption, if they just open I think that will help. Politically I think people if they are not corrupt because most of them are corrupt even people doesn't have hope in them. I think if they were not corrupt, I think we could develop because they deal with local wananchi down here they could help them with their views but for me I think people are corrupt, politicians are corrupt (**CARW-INF-UG**).

Respondent: This country is supposed to be far in development. But so much is missing. One is the leaders that we have. We can't go far if we have leaders who think only about themselves. The corruption among our leaders is so bad. What is lost through corruption can take this country far. (**QUAR-INFO-MAC**).

A respondent noted that some persons with little education make it through corrupt means.

Respondent: You might find that a person has gone up to class four and the other has gone all the way up to college and you find that the one has completed her college has no job but the one went up to class four is linking up or has more money because Kenya nowadays is full of corruption that's why you find a university student or college student is not getting a job that means there is a challenge a bit in our country whereby those who have money you find them succeeding but their education is little. (**MECH-INF-UG**).

Negative politics were blamed for socio-economic divisions and disparities in the country at large.

Respondent: Education should enable learners to engage in positive politics. Negative politics has to date been the cause of all socio-economic divisions and disparities in the county and in the country at large. (**BUS.MAN-INF-NAI**).

6.6 Educational Needs

6.6.1 Education Reform

The respondents raised varied issues on the question of educational reform. They indicated that education is vital to the country's development. The parents suggested that there is need to have a wide curriculum that caters for various talent areas.

Parent: I can say that we can have a wide curriculum, which can accommodate all these talents. (PA-FGD-MOIG-S-UG)

Learners: Another thing that the government should prioritize is that secondary education should not only be geared to competing in the national examination but ensuring that students develop in both aspects of life in school (SFGD-RAP-S-MIG).

Parents were also of the opinion that the curriculum should be regionalized so that learners can focus more on knowledge about resources peculiar to their region.

Parent: Then, the government tell us our resources, for-example what we have in Kitui west. So that as we keep our kids growing and as we go to old age we can tell them that this is ours, and we can exploit this one, so if you are studying, like when studying about coal, we should know that we have coal and how it will help us. You know when we start extracting it then we get people from china and we are here poor, I think every area should be taught what is there, you study for that. That is what will help us (PA-FGD-MUTG-S-KIT).

On their part, learners expressed the need for the curriculum to balance both the theory and practical aspects. They observed that, currently there is a focus on theory rather than practicals. This prevents learners from acquiring necessary skills. This situation impacts on their examinations and in their performance in the job market.

Student Leader: So what I would say our education system is more theoretical than practical so when you leave school you can do less of what you learnt in class probably the theories that we read we can cram and forget them but you know what I do practically I have some expertise out of it. so you realize with that theory when you get into the job market your flexibility is not that good..... when I talk about the neighbouring schools they first see the apparatus when they are going to see the mock exams so you find that this student will handle this and by good luck or bad luck the student may fail or pass. So after this student has failed when you find out this student is normally shy from doing the sciences for they do not know the practical part of it. (SL-MBIT-S-HOM).

Student Leader So even after leaving school I can't find something on my own from the knowledge I gained from school. So I come from school with nothing in my head that I can start practicing so if its taught in manner that's its more practical than theory if I get out this year after form four, I can't start something out of what I learnt. (SL-MBIT-S-HOM).

Student: The government should come up with ideas that enhances not only with theory part of learning but also other activities. Like in college you are to partake a certain course you will not have an idea on how to do it. (SL-KABRS-BAR).

Student Leader: The current curriculum is too much exam oriented. We need to develop skills and ensure learners specialize. We need to reduce subjects so what we study is relevant to our future. (SL-KABRS-BAR).

The learners also suggested that subjects in secondary school should be reduced and that they should start specializing right from form one. The issue of specialization was also mentioned by parents. A parent suggested that the education system be reverted to the old one.

Student : in secondary though there are too many subjects in form 1 and form 2 and in form 3 we have to drop some subjects but it would have been good if the subject you start with form 1 you finish with it instead of doing a subject for 2 years and it will not help you later. So government to reduce the subject in secondary school like in form 1 you do too little subject by doing that in form 3 you have to reduce. By reducing that in form 1 we would like the subjects to be reduced so that they take the subject for your career. If you are interested in science you can take science although science is must now and if you want to do a lawyer you only have to know the history and the two languages but science and mathematics are compulsory(**SFGD-KHADJ-S-MAND**).

Parent: No, it only emphasizes passing, there is need to revert to the old system, because the old system allowed people to specialize in areas of interest (**PA-FGD-MALIK-S-BUN**).
Pertaining to the quality of education, the parents suggested that it can be enhanced if attention is paid on allocation of time and appropriate supervision of teachers.

Parent: We need to monitor the quality of education we are giving our children in terms of are we giving enough time? Is there close supervision? Are we achieving what we need to achieve as a nation? (**PA-MOIG-UG**).

Parent: Secondly in some schools you find teachers are there but they don't teach. The supervision is poor hence at the end of the year some student will do any exam without even completing their syllabus, so it is not equal (**PA-MOIG-UG**).

Strengthening the point of supervision, a student leader noted that teachers in public schools should be closely supervised to ensure they are as committed as those in private schools.

Student: We have seen that public schools are not as well passing as private schools, I think the government should tighten... it should closely supervise the teachers to be committed as ... the private school teachers (**SL-MARMD-S-MARS**).

A parent suggested that national schools should be evenly distributed in the country, even in marginal areas. Another one added that there should be pre-service training before university where learners can learn how to handle societal issues.

Parent: I would like to look at it in two ways: one would be the use of accessibility, if you look at national schools they seem to be concentrated to particular area. If you look at the quality of education provided by national schools they are slightly high those sub county district schools, if it is possible to expand facilities in so called marginal areas to give access to everyone in the county, I think that also would a form of national integration. (**PA-FGD-MOIG-S-UG**)

Parent: There should also be a programme like the pre-service programme before university. Let there be a programme like that where they can learn about real issues in life which can help them. (**PA-FGD-KIS-S-NYA**).

The importance of language education was underscored by the students. They said language is vital to development. They therefore suggested that languages should be improved through libraries adding that schools without libraries cannot compete with those who have.

Student:...In order for us to develop, Languages should be improved through libraries. Those schools who have libraries cannot compete with those that do not have libraries (S-FGD-KAW-S-MAK).

Student:...Languages will make us develop in terms of future because in future I would like to be a journalist, because language will be able to pass information better to people (S-FGD-KAW-S-MAK).

On the subject of evaluation, the students said techniques of evaluation in education should be improved.

Student:...Improve techniques of evaluating the education sector like when they move to the next level. Let's say the classes and the form fours, we can opt for another way or we can adopt another curriculum in that in every part of the country or every person is taught from the childhood in terms of the talent and abilities he has in various fields. (S-FGD-BUT-S-BUS).

The students advocated for improvement of security in some insecurity prone areas like Samburu. They said insecurity affects punctuality in school attendance. It also affects the learners' concentration in class.

Student: We can improve education in Samburu by improving the security. You get those people up there in Baragoi they will not come to school early because they have issues there with security. So if they improve security especially there it will help our education since we will be in school early and we will just concentrate but when we get people fighting there I will not concentrate in class I will say. Oh my mother...so when they improve security there I will be able to concentrate in class. (S-FGD-MOG-S-SAM).

Students also suggested that the government should implement projects to improve boy-girl ratios in schools.

Student: looking at girl child at some parts, ratio of boys to girls is unbalanced; I think government should implement projects which will help the girl child (PA-FGD-MOIG-S-UG).

Students reiterated the need for the government to improve transparency in the education system so that people do not opt for foreign institutions of learning

Student: I think government should improve on transparency in education system, since people are losing confidence on the system and they prefer learning degrees from foreign universities. So if we can have transparency so that we can learn our strengths and weaknesses it could be good. (PA-FGD-MOIG-S-UG).

Education has to constantly evolve and grow to meet the needs of our ever changing society. In recent years the pace of change has become very rapid and in certain areas, our education system has struggled to implement the changes needed to keep pace. Informant emphasized the significance of curriculum reform and maintained that it is a shared responsibility. However, they identified the biggest gap in the current curriculum as the lack of a comprehensive understanding by the public of the

meaning of curriculum. The narrow definition of associating curriculum to classroom instruction and testing may explain the current weaknesses in the education system and the need for the reform.

KI: I think what you are doing is important yet involve because the education of a child is not just an adventure it involves the teacher himself, the parent around that child it involves the doctor, lawyer, pastor, people in the village and so forth. It's a big catchment area so I think you get a lot of information from them so that we can integrate a way forward that is agreeable with all that we should do. (KI – FBO- HOM).

KI: the biggest gap that we have in our curriculum from my perspective is the general lack of understanding nationally of what our curriculum is all about. I think as a country we never engaged the nation in defining curriculum. So the average Kenyan has really no idea what curriculum is and so we end up defining it from what is concrete the subjects and the examinations. (KI-CEB- NYM).

KI: The new system must have a clear philosophy in education and KICD should come up with that. One of the things that philosophy should address is meeting the needs of the employer in terms of needs skills and knowledge or should we address? The philosophy must be clear.

6.6.2 National Goals and Education Policies

The key informants proposed the need to come up with the education policies to guide and regulate the sector.

KI: we need to come up with the education policies that can be able to be implemented and achieved. The implementers of the policy should also be supported by funding. Take for example this policy they have come up with about TVET. The TVET authority which was established as a commission and mandated to train and so forth we thought it was going to be implemented; unfortunately it could not be implemented. They are still trying to see how to get funds to implement programmes- (KI DDE MUR).

KI: this one is the one to register all those have done engineering in Kenya from all TVET institutions whether they have done degree or diploma or certificate or PHD so long as you have engineering then you are registered. . That is what other countries are doing. So as we prepare this curriculum let us also insist that the policies that are put into place are friendly so that they will make everybody feel acceptable in the republic of Kenya- (KI DDE-MUR).

KI: the curriculum we are envisioning meant to address specific education goals that will take us places. If that question is yes then we are on the right track but if somebody is saying prepare the curriculum without knowing where the curriculum is taking the country then we are on the wrong track, is like taking the cart ahead of the horse. (KI-REG-LAU).

6.6.3 Relevance of the curriculum

The informants expressed the view that the current curriculum does prepare the learner for personal development, integrate in the society and for citizenship. They further indicated that the curriculum is not producing desirable end products. They pointed that the curriculum should be functional to develop a holistic individual with spiritual, moral and social aspects with ability to live with amicably with others.

KI: I have serious issues in the current curriculum what we are seeing at the end of 8 year, 4 years of high and 4 years in university, the products who come is not what we need in the society today, the current curriculum is answering the questions addressed today, the issue of serious social issues, moral issues in

the society, issues like corruption and cheating in exams, issues like discipline in boys and girls, issues of immorality among high school students boys and girls in school, basically there are serious issues, not even when it comes to professional we have heard of teachers who cannot teach, doctors who cannot measure the patient in professional area, I think the curriculum is not corresponding to questions asked by the society.. **(KI-CAT-MAC)**.

KI:curriculum...does it prepare learners for a good economy?....does it prepare them to integrate well in the society, in the industry, environmentally, morally, maybe health, spiritual issues, citizenship, own development...**(KI-TCD-KWA)**.

KI: So our curriculum is mainly lacking in skills development and therefore it end up not becoming relevant to the graduates once they are out of school because they have a lot of theoretical knowledge at the expense of what they can be able to do. **(KI-MCDE-NYE)**

KI....people who got an A in Physics and they cannot fix a bulb because the fixing of bulb is not related to the memory the A is a result of memorizing knowledge it is not what you retain, we want people who can retain knowledge..**(KI-CEM-NAI)**

KI... Education should be holistic, it should be formed in spiritual aspects, moral person and social person, the physical persons, all these are components of human being, but there has been issues of a lot resources,the curriculum measure the intellect the moral person is left out the spiritual man is left out, so I think that is where the problem starts...and those five levels, moral aspect, social, spiritual, intellectual, all these aspects must be articulated and none of them should be emphasized more than the other. **(KI-CAT-MAC)**.

6.6.4 Curriculum Overload

The curriculum that learners are offered must enable them to enjoy their childhood, inspire learning and develop the essential knowledge, skills and understanding which are the building blocks to use in higher education or later life.

Curriculum overload is the challenge of using the curriculum documents to support the teaching. It may be the lack of time or opportunity to cover the content by both the teacher and the learner. Against this backdrop, informants were of the view that the curriculum is broad, academic and examination oriented. It does not allow for innovation and lacks relevant employable and life skills leading to considerable wastage. They also pointed out that the foundation for the learners at lower classes is not well grounded and as they move up the grades the problem of the ability to read is amplified as the exam culture sets in. The informants raised concern that the current curriculum is geared towards pleasing development partners as opposed to serving the needs of Kenyans. As such, the curriculum does not adequately prepare learners for meaningful engagement and contribution in society, and instead it is focused on mass production rather than individual development. It was the view of the informants that curriculum overload is addressed.

KI-Another key concern with the current curriculum and the emerging curriculum development trends is that the country is focusing more on addressing the needs and concerns of foreigners (donors) rather

than addressing the interests of Kenya in education. This makes it progressively irrelevant to the lives of the people. **(KI-NCC-NAI)**.

KI: The current education system is not child friendly. There is too much on cramming and giving a lot of work to the children they have no time for themselves so you see a child leaving school with loads of books and they come home they will do homework till late in the night and wake up very early in the morning carry again the load of books to school and the big question is that I don't know if the teachers will have time to mark the work that they give their children- **(KI- CPC- NAI)**.

The informants said that the curriculum generally does not address ethical and moral values. Essentially, it does not provide a place for family (home) and society (community) interaction leading to learners exiting the education system with no sense of morals or value for themselves as well as other people and by extension no value for the nation thus very little patriotism.

KI: So most of our youth just after getting a mean score to go to university, but when it comes to what makes a human person I think that could be lacking and those are gaps that require to be addressed, So that probably we have better generation in future to come. **(KI-TCDE-NYE)**.

KI: curriculum hasn't been able to instill morals that translate to positive behavioral practices. Examples include verbal abuses; child and sexual abuse; corruption; crime; fights; no respect for the elderly; no respect for law and those in authority and so on and so forth **-(KI -LISP- NAI)**.

KI: There is also a big gap in developing individuals who have social competencies / skills that would enable them live amicably with each other, such as peaceful conflict resolution skills; effective communication; empathy; basic etiquettes; communication; among others **(KI- LIS -NAI)**.

KI: The current curriculum in Kenya I should say it is more theoretical it is also very overloaded, because it does not give room to children to be children , they have no time to interact, they have no time to relate, they have no time to have leisure, what children should be allowed to do. And I want to say this is affecting their social development, emotional development, their spiritual is affected by the curriculum. **(KI-CBE-KIT)**.

The informants equally expressed the view that, spiritually, the curriculum leaves learners quite bankrupt, thereby progressively eroding Kenya's identity as a God-fearing society. This has weakened the moral fabric of our citizens.

6.6.5 Curriculum implementation

The informants had insightful contributions on the curriculum implementation. They indicated that there was lack of coordination between KNEC, KICD and MOEST which hampered curriculum implementation.

KI : There is a disconnect between KNEC, KICD and MOEST each protecting its agenda instead of working in synergy resulting to education which is examination oriented and MOEST not monitoring implementation of curriculum as required. **(KI-WIPER)**

6.6.6 Availability of opportunities for all

The student leaders pointed out that education should give equal opportunities for everyone including street children. The youth should be imparted with knowledge and skills necessary for their living. This education should enable everyone get something to do in life.

Student Leader:...Education is supposed to help everyone acquire equal education opportunities and everyone after learning and being educated should be able to find something to do with your life. Note, after you've done school and you have children, it should help you to be a mature and responsible adult in future to be able to responsible for your family and nation at large. **(SL-MOIG-S-UG).**

Student:...Education should serve to produce educated members of this country who are able to rely on themselves or who are self reliant... education sector should help the citizens or the people who have come from school to apply the techniques and the skills on the ground instead of only applying them on paper. **(S-FGD-BUT-S-BUS).**

Students suggested that schools should be allowed to admit students from any part of the country. They proposed that categorization of schools into national, county or sub-county schools should be done away with. They also suggested that ways of supporting needy students and those with special learning needs should be sought. These could include: payment of fees and granting of bursaries by the government, no discrimination of schools, and provision of the necessary teaching and learning resources to all schools in the country.

Student:...Pay school fees, support all students give love and support to all schools don't discriminate any school, no national or district schools others are secondary, ... supplies of text books in the library so that we can read and improve our grades. Promote equality in selection of students to join secondary schools should be mixed....those who score low should also go to Alliance so that they can also work hard...**(S-FGD-StCNAM-S-BUS).**

Student:...On the issue of equality when government is selecting students to go to high school they have to balance...students should be called to any school as long as parents are willing to support you. **(S-FGD-StCNAM-S-BUS).**

Student: ...The government should increase the bursary money so that students are not sent from school now and then. Also provide sponsors especially those who pass can get school fees. Government to decrease the fee. **(S-FGD-StCNAM-S-BUS).**

Student:...In our country we have orphans. We can request the government to provide for them education, and also other students who have disability because Kenyan government according to the constitution it has provided for it **(S-FGD-KAW-S-MAK).**

Parents stated that the process of form one selection can also be done to in a way that promotes social equality. Learners from private and private schools should be given equal opportunities.

Parent: learners from public and private schools should be given equal opportunities because there are no private or public children. **(PA – FGD – NDUR - LAIK).**

Parents further indicated that all schools should be at the same level to avoid

scrambling for certain schools which are perceived to perform better.

Parent: All secondary schools should be put at the same level so that parents stop struggling to take children to specific schools which they perceive are better than others. (PA – FGD – NDUR - LAIK).

Parents indicated the need to provide quality education in all schools at national, county and at sub-county levels so as to provide equal opportunity to every student in future.

The learner indicated that they want to pursue their Primary education to High School.

Pupil 1: to go to a good High school (P-FGD-CHEP-UG)

Pupil 2: to get a high mean score (P-FGD-CHEP-UG)

Parents would want our education to contribute in the reduction of over-reliance on expatriates.

Parent: ...Matters of education are very important. It is important to note that land is scarce and we cannot rely on it as inheritance for our children. At the same time we need to educate our own people in order to reduce reliance on expatriates. (PL-FGD- KIARP –MUR).

Respondents were of the view that inclusive quality education is prerequisite to development. Consequently, the curriculum should address Kenya Vision 2030 development goals and should focus more on vocational and industrial courses that enable learners develop employable skills for them to live fittingly and peaceably in the society as responsible citizens. Respondents also highlighted that education as a strategy could help the country achieve Education for All goals and to particularly create awareness in the youths on effects of substance as well as environmental stewardship. Respondents also suggested that education should help learners to identify and develop the values, social cohesion and uphold the rule of law.

Pupil: Education is the most important thing in our lives so that in our future we may live well and our live will be good. (P- FGD -MANP- NAR).

Parent: we need an inclusive education not only taught to pass exams. And it touches all aspects of life (PA- FGD- KANP-THA).

The pupil suggested a good education system would also attract people from other countries to come to Kenya to learn.

Pupil: Okay if everybody gets good education it will make the people in America, Uganda to come to Kenya to learn because they see that Kenya is the perfect country. They will have that interest to come here but if they see that Kenya is not improving they will not come here, and they will be proud of Kenya (PL MIRPHB).

The pupil indicated that the Kenyan curriculum was too hectic unlike in countries like Japan where a few subjects are taught and in the native language of the people.

Pupil: I think our curriculum is too hectic for us for instance in Japan you find that they learn a few subjects during the day before noon and in the afternoon they learn things like music arts and they are taught in their language they don't have so many languages to learn (**ST- RUK- HB**).

The parent expressed concern over the shortage of teachers which compromises quality.

Parent: The biggest problem area is the shortage of teachers. One teacher is forced to serve more than enough pupils and thus quality is compromised (**PT-MIR- P- HB**).

The parent suggested that a good education will produce good leaders in the country and also produce competent professionals.

Parent: I think education can help the country to get good leadership, because it is through education that we get, for example if we need a doctor, this doctor must be qualified in his education and it is education. That is going to enable the doctor to know the areas or the profession as per what he has to do. The education is going to assist country get good leaders and personnel in various sectors (**PT-RUK-PP-HB**).

The pupil indicated that a good education would help to produce professional as doctors who will sick people within the country.

Respondent: Education can help this country to grow to another stage like caring for people who are sick like India. If we can have like five doctors who can help the sick people our country can reach like other countries like India. (**PL- KAR-PMU**).

The parent expressed the wish that early childhood education which is devolved be returned to National level because the County Government seems not to manage this level of education with the seriousness it deserves.

Parent: I understand that lower education was devolved, that is what I understand people saying this from pre-unit, nursery and the rest, they were going to the county. I have issues with the county, the county government they are not serious with that part of education so what was my wish it could have been that all education belong to national government is when things can be followed (**PT-RUK-PP-HB**).

6.6.7 Learning Environment

Parents observed that most private schools do not have enough space for learners to play. This has adversely affected children's ability to manipulate objects and to interact with others.

Parents: This is a good point, you see here in Ngong a school is in one acre, such should be abolished. There is not enough space. The space is important; the children need space to expose himself. During our time there were many places to play and this should be made available today to our children (**PA-FGD-OLOOL-S-KAJ**).

Parent: Yes, they need space for modeling and playing because you will find a child playing computer games and they do not have time to manipulate things. They also do not have time to interact...they do not want to play with the sand because that is what they have been taught from home. Playing should be the most important thing for a child (**PA-FGD-OLOOL-S-KAJ**).

The parent expressed the need to have a friendly learning environment.

Learners require parents to be involved in school activities and facilitated to talk to their children. They also suggested that parents should ensure that their children go to school in order to avoid dropping out and prevent children from going to the streets.

Pupil: As Kenyans like parents, I am encouraging parents to take their children to school. They should The children who are on the streets are supposed to go to school and I think that the street children have their own parents and some of the children you know they lost their parents, they don't have anything, they don't have shelter so they go on the streets like the kibandas (sheds) to sleep there. Some have parents and have run away from them because they don't want to learn. I want to say that the parents must be strict with their children **(PL MIRPHB)**.

Parents suggested that there should be capacity building of parents on their responsibilities

Parent: there should be some form of a program organized through the school to capacity build the parents on their responsibilities in up bring. Especially the fathersthey hardly participate in anything on my part there should be parent clinic **(PA-KAM-NY)**.

Some pupils proposed that parents should pay school fees as well as buy supplementary books and classrooms to be supplied with maps, charts and globe, newspapers:

Pupil: parents should buy supplementary books to help the pupils read wider and for something like Social Studies, classroom should be supplied with something like maps and charts and a globe **(PL-TEMP-NY)**.

The parents suggested that parent should be involved in the education of their children to ensure there is continuity of learning between school and home:

Parent: once the child has been given assignment for something to do you as a parent must follow. Did he go to school and the assignment given was it done. **(PT- RUK -PP -HB)**.

The parents suggested they be fully involved in school issues especially those involving their children.

Parents: Counseling, proper support of teachers and parents in dealing with wanafunzi. **(PA-NDAP-NY)**.

6.6.8 Support for Learning

Learners and parents concurred that key stakeholders in education like parents, government and the private sector should contribute towards curriculum support materials and for the development of school facilities or alternatively schools could organize fund drives for this purpose.

Student: Some able parents should contribute for the development of the school. Sometimes the school can request for a fundraising. **(S-FGD-KIS-S-NYAN)**.

Student Leader: How I feel is that the parents in the government, the general society , wellwishers and NGO's should come in.**(SL-MBIT-S-HOM)**.

Parent:I think the government should be committed to one, provide adequate instructional materials for all levels of education; they should also be committed to provide human resource to ensure that these children get the right education interms of teacher-pupils ratio. There should be enough resources to

make sure that there are enough teachers. then they should also allocate budget to improve the physical structures in schools **(PA-FGD--MUTG-S-KIT)**

Parent: I think the government should provide like it used to provide, we used to have a lot of tools for building, for woodwork. All these are gone. We don't have these. Like there are no carpenters in Kenya. And many of them are just tarmacking around **(PA-FGD--MUTG-S-KIT)**.

Parent 1: Kando na hiyo, wazazi pia wanaweza kucontribute kwa kununulia watoto wao vitabu. Mtoto akihitaji kitabu flani mzazi anaweza kusaidia kununua, ndio yule mtoto awe na kitabu chake mwenyewe cha kusoma **(PA-FGD-OLOLUG-S-NARK)**.

Translation: *(apart from this, parents ought to contribute towards buying books for their children. if a child requires a certain book, then the parent should buy it so that the child will have their own book to read).*

Parents went on to suggest that apart from funding schools, the government can also revive the school equipment scheme. They also suggested that they, as parents, can help in paying for school lunch, teachers and support staff.

Parent: my request will be whether they (*government*) can give cheques to schools, the old equipment scheme could come back so that according to the population of the school, books laboratory equipment and all the other equipment in the stores are brought back.... and parents should be able to come in terms of supporting ... lunch, teachers and supporting teaching staff **(PA-FGD-MOIG-S-UG)**.

As parents, they suggested that they should support their children by buying books for them and support teachers so that teachers can be motivated. They also noted that they should support learning by paying for trips and contributing towards building projects in the school.

Parent: Buying books for the child so that his life should be simple. **(PA-FGD-NYAKI-S-NYA)**

Parent: Parents should support the teachers so that the teacher will be encouraged. **(PA-FGD-NYAKI-S- NYA)**.

Parent: Like also as parent you should also pay school trips. Whatever a child see he will not forget in his/her life and it help him in future. As a parent you should be contributing and like when you finish to build this library it will help many children. **(PA-FGD-NJAB-S-NYA)**.

Students noted that the government can support education by creating an organization to deal with students with special needs and those from poor families and offering education to illiterate people. Another means of support is to reduce schools fees and help in paying fees for needy students to reduce the drop-out rate.

Students: Government to create an organization to deal with student with special needs and poor families...offer education to illiterate people to reduce poverty rate **(S-FGD-KWANG-S-KIT)**.

Student: ...in this school is that most students are not able to pay school fees hence we should support those affected students. This will help in reducing the number of students who end up dropping from schools due to lack of school fees. **(S-FGD-MOG-S-SAM).**

Student: Reduce the school fees for the government schools so that those cannot afford schools fees **(S-FGD-KAS-S-KIL).**

Student: By providing bursary, reducing school fees **(S-FGD-KAS-S-KIL).**

Students pointed out they could support learning by taking care of available resources.

Student: I think we should be careful... eeh... you see now if we know some students can be destructive, some can just break these facilities... I think we should be disciplined enough to...to take care of our property because the school belongs to us and the resources in the school is ours **(S-FGD-MARM-S-MARS)**

6.6.9 Technical Education

It is the parents' opinion that emphasis on practical skills is vital to economic and industrial development of the country. Learners should be able to get practical skills because they are essential for life after school. They suggest that there should be technical schools in all the counties to cater for those who are more skills oriented than academic.

Parent: ...currently education in Kenya lays a lot of emphasis on theoretical knowledge and ignores technical skills such as sewing, carpentry, mechanic etc. and what I have observed is that many counties lack technical schools for those children who may not excel in academic subjects. Technical education can contribute a lot in economic and industrial development of the country. Education should therefore emphasize greatly on technical competencies. **(PA- FGD -NDURS LAIK).**

Students noted that for Kenya to develop, she requires technical skills. There is need for more schools, universities, training centres, administrative centres and industries.

Student: Kenya needs more technical skills to improve economic status of the country Kenya needs morally upright youth because they are able to take the country to the next level **(S-FGD-MUS-S-KAK).**

Students: More industries...more schools...more universities...training colleges...administrative centers **(S-FGD-MAKWE-S-KWA).**

Learners called for Aviation as a subject to be introduced in secondary schools.

The parent suggested that education should emphasize on technical education by offering subjects such as art and craft, carpentry, masonry and agriculture for self-reliance. This will also give opportunities to pupils who do not join secondary schools.

Parent: As parents there are education skills that need to be incorporated like for example most students missed slots in the form one selection and there is a problem since there is the question of where all these children will go. The art and crafts should also be re – introduced in the curriculum since pupils are gifted differently. This will avoid early marriages pupils will be able to do sometimes of themselves. The technical work was dropped which is vital carpentry, masonry and pupils need to learn these courses.

From the primary school stage the agricultural sector is also not emphasized enough in terms of starting at primary level **(PT-MIR-P-HB)**.

Parent: Please return the Home Science/music and all those practical programmes that were there earlier **(PT-MIR-P-HB)**.

The pupil indicated the need for technical skills like those offered in youth polytechnics so that those who do not move to high levels in education can utilise the skills to do something in life.

Pupil: If there are people who are not educated they can go there and be taught what they must do and to practice more. If you know that you do not know how to about this and if you not good in school you can try your career in youth polytechnic **(PL-KAR-PMU)**.

6.6.10 Sex Education

Parents want children to be taught sex education

Parent: this thing has affected the children too much, it cannot fail to be taught. When we were in school we were cheated that a child is bought but now we cannot take the same lie.....should be started at upper primary level. **(PA-KAM-NY)**.

6.7 Technical Skills and Technological Needs

6.7.1 *Applicable practical skills for life*

The respondents advocated for development of applicable and hands-on skills that enhance life in the twenty first century and beyond.

Respondent 1: ...Soft skills; 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness, and Teacher professionalization programmes through mentorship. **(CEMASTE)**.

Respondent 2: ...Competencies related to life skills development in areas of negotiations, communication, relating to strangers are crucial for young children. For those who are training as their teachers need to be more careful to exhibit the very values desired of the children **(DBK-IS)**.

The society need people who have hands on skills, rather than the current status where the education has produces more of the knowledge and cognitive development.

Respondent: Our obsession with the cognitive dimension of education, which has overly stressed academic, theory and examinations, has meant that knowledge and its acquisition are promoted at the expense of all the other domains including the affective. Civic education and citizenship have suffered at the expense of theory or intellectual development. **(KCCB-RI)**.

A respondent suggested that learners should be taught:

- food security in relation to climate change, poverty and ignorance and aspects of indigenous crops, livestock and farming systems.
- Environmental conservation to counter land degradation, water pollution and depletion.
- Job creation to address the problems of unemployment especially among the youth.

Respondent proposed that education should offer science, technology and innovation.

6.7.2 *Skills for Modern Technology*

Learners and parents observed that education should equip learners with technological skills that will help them contribute to national development.

Student Leader: When building roads we had to go for engineers from other countries, is their education superior to ours? Ours lack skills, so let's train skilled engineers and other professions, education for ourselves. Education should harness skills to build Kenya. In developed countries there is specialization unlike in Kenya where all the subjects are must do. **(SL-KABRS-BAR)**.

Parent: *kuna mambo ya digitali na hiyo inahitaji masomo. Wanafunzi lazima wafundishwe ili tuwe na watu ambao ni tegemeo la kesho. ... nafikiri nchi itakuwa mzuri na kila mtu atakuwa ako sawa. (PA-FGD-OLOLUG-S-NARK).* Which means;

(there is this thing about digital and it requires education. Learners must be taught so that we can have people whom we can rely on in future...I think the country will be fine)

Parent: On technology the youth or younger generation of Kenya should be exposed to technology because this is the time technology has come up and we need to make use of it **(SFGD-RAP-S-MIG)**

Parent: On the social side we try to prioritize technology. At secondary level it should be compulsory that we learn computer studies because it is very vital in helping us navigate the outside world **(SFGD-RAP-S-MIG)**.

Parent:... it will improve the economy of the country because these people are skilled and the country will depend on us not on people from outside. For instance not depending on engineering skills from chinese. **(PA-FGD-OLOOL-S-KAJ)**.

It was pointed out by the students that there is need to come up with new ideas for technological development.

Student ...We should ... come up with new ideas so that technology can develop **(S-FGD-StCNAM-S-BUS)**

Student...education should help students in the innovation world... there are very many people who have invented something. So we get Kenya depending on other countries like importing machinery but we are supposed to produce one of our own **(S-FGD-BUT-S-BUS)**.

The students pointed out that the issue of laptops should cover even secondary school. To them the issue of computer studies was important for technological development.

Student...we need Laptops for form 1 students when they are joining form 1. They could introduce them and continue until they are in form four. .. And then computer studies should be compulsory in secondary schools **(S-FGD-MUL-S-BOM)**.

Parents noted that education should enhance technological development by having aspects of technology like preservation of milk using technology and bio-gas.

Parent: If government can afford, all technologies should start in schools where the students should tell their parents about the technology when they go home. Like the students should say in school this how we preserve milk, we can also use this at home. **(PA-FGD-KIS-S-NYA)**.

Parent: I went to a school and I saw the school using bio-gas where the cow dung is directed into a pit and they get biogas. **(PA-FGD-KIS-S-NYA)**.

Learners and parents stressed on the need to have computer technology introduced in the curriculum in that this would open avenues for innovation which ultimately would impact on the economy of the nation.

Student Leader: The computer technology is very important for I am told the person who invented the Mpesa was just a student so if this thing can be introduced into the education system so that we can find time to invent.**(SL-MBIT-S-HOM)**.

Student Leader:...and the computer it would be my own opinion that when one graduates from form 4 he should have taken computer so as to understand the computer system.(SL-MBIT-S-HOM).

Student Leader: The computer in my own opinion should be compulsory across the country ... studying computer I would come out technologically equipped. With the computer you can do a lot but you see now when you leave school when you see the advert they say computer literate so computer should be compulsory. (SL-MBIT-S-HOM).

Parents: they need to be taught some ICT knowledge, limited to only what is helpful. primary to secondary a lot of ICT (PA-FGD-S-KAJ).

Student: So computer studies should be made compulsory in the secondary level of education. (SFGD-RAP-S-MIG).

Student Leader: Since the world is very digitized if something could be inculcated in our schools for example increasing the computer study space in our schools somebody can have a basic knowledge of computers and IT (SL-RAP-S-MIG).

According to the pupils, early initiatives and sequential progress in the use of technology in schools were found particularly advantageous for technological development.

Head girl: As they said they will give laptops to the class one as for me I don't think the class one needs the laptops they should give to the class six coz for class one most of their syllabus doesn't come from internet so they should give the laptops to the class six and above (SL- SOSP-UG).

Pupil Leader: We should introduce computers in at least every school especially to young children as young as about 10yrs or even 8yrs. (PL- FGD- KIP-UG).

Some learners however expressed fears in relation to ethical issues with regard to usage of laptops in the school context.

Pupil: ...laptops will be given to schools there should be discussions to see if learners will cooperate with them, and how to use them and not the bad things that go with them because the technology has those bad things like bad pictures. The learners should be told not to go to those things because they are too young for those things... they can go to pictures which are not good like pornography which is very bad. And when learners see them they shall be thinking of those things and they shall be telling others how they saw the things and how good the things are. (PL- MBIRP –MUR).

6.7.3 Applicable Technical Skills

Parents suggested that there is need to teach technical skills to hasten industrial development.

Parent 1: I think the way you are seeing the changes which are taking place, for example in terms of industrial development, it is better that tuweke mambo ya our curriculum ikuwe iyo side ya kudevelop watoto, kuwadevelop in terms of technical skills (PA-FGD-OLOL-NAR).

Parent 1: I think because we are talking about Vision 2030, we are supposed to bring now...iyo kitu itasaidia...tulenge iyo Vision 2030. For example, tunasema Vision 2030, our country will have developed industrially. Tufanye hiyo technical skills, vocational skills, yenye itasaidia hiyo tukifika Vision 2030, watoto

wetu watakuwa na skills za kutumia kama tutakuwa tumeendelea maneno ya viwanda...industries. . (**PA-FGD-LOL-NAR**).

Learners are of the view that technology can aid in monitoring the security situation in the country through use of satellite.

Pupil: ...have satellites which the country will use to know what is happening in the country should be developed so that when people are discussing for example at the boarder the Al shaabab may come give bribes talk to the people at the border and then they get money and then we stop criticizing the Kikuyu tribe by telling them that they love money cause what you criticize someone may be the person will proof to you it is true so that at the boarder we might get someone who can get the money the Al shabaab might get in and the satellite will get all the information so that we can know all the people who are discussing to destroy or to ruin the country (**P-SFGD-SNPP –MUR**).

The participant is of the opinion that technology has aided the leakage of exams.

Parent: ... It is sometimes used negatively. For example leaking of exam is largely through technology. (**PA-FGD- UNOAP –MAK**).

Parents are requesting the government to properly regulate the consumption of technological products in the country.

Parent: ... am requesting our government to help us on the video pictures, the pictures on love affairs and other filth things, children get spoilt there and the government allows such shows to be shown to children, shows that have no values.... (**PA-FGD-MAKWP –KWA**)

Parent: ...to watch Videos which show indecencies again the cell phones are so bad and affects performance. Some schools preventthe students' use of cell phonesbecause this has ruined many children... videos also influence learners into selling books to get money for the videos. (**PA-FGD-KIARP –MUR**).

Key informants strongly felt that ICT should form foundational knowledge and skills in educational programmes to make the learners globally competitive. All the same, the curriculum should be dynamic to accommodate the frequent changes in the digital world. They proposed that the teaching of ICT skills should begin from the lowest educational level of ECDE.

KI: we can never do without an ICT it is something that is really lacking in the current system because as long as it is not enshrined in the curriculum right from the nursery the pre- primary for that matter then when they tend to go to work and you know and go to university some students tend to be disadvantaged (**KI- CDE- LAI**)

KI... Education need to be modernized (ICT based) to make the Kenyan Child globally competitive... A global benchmarking is an extremely vital component of the reform agenda if learners are to be globally competitive.(**KI-CCO-MAN**).

KI... use of technology would relate to practical oriented subject matter that help them ... very basic level abilities to perhaps based on the environment where they live and economic activity perhaps discovering so through IT software that can help either add value to their activities that the environment is engaged in

or reduce the cost of doing business you know elements software on transport management, Agricultural management.. are the competencies that are so important and they have been lacking in our curriculum. **(KI-CA-NAI)**

KI: One is the integration put to know how relate with others, international community, I think we should not think of jobs in Kenya now, I think we should develop workforce competitive work force in the world, we should take advantage of Israel see they export talents, they export expertise, we should also be global, we can also export expert because the contemporary keeps on changing, so we should move on the global trends. **(KI-CEM-NAI)**.

6.7.4 Education for technological development

Respondents called for education that develops Information Communication Technology (ICT) Skills in the learners from early ages of schooling. The parent indicated the need to have pupils exposed to ICT. The pupil suggested that they should be provided with computers to know more about computers because they help. Technological advancement was pointed out as one of the ways of ensuring development. It was noted that Kenya has not invested enough in technology.

Respondent: Also technological advancement is one area that Kenya has not invested in as it should have over the years. Looking at a country like Indonesia which has made great strides in technology and industrial development, and which at some point was at the same economic level as Kenya, one tends to feel that Kenya has lost an opportunity of a lifetime. Kenya focused on Agriculture after independence, while the education system has been tuned to churning out graduates more oriented towards blue collar jobs. Considering current pressure on land due to increased population, Agriculture will not be the way to go, it is imperative that the government and the counties heavily and hurriedly invest in industries and technology so as to be able to absorb the ever-increasing numbers of graduants seeking employment. A crisis will certainly emerge in due course if nothing is done today. **(BUS.MAN-INF-NAI)**.

The respondents indicated that the government should buy computers for schools.

Respondent; let me say when you are computer literate, when you're able to use technology then you'll be able to do business more efficiently.... **(BODA-INFO-NYE)**.

In addition to computers, the respondents noted that for Kenya to develop and compete with other countries there is need for machines to make work easier, especially in the Jua-kali sector and other electronic devices like phones.

Respondent: ... so as to develop better we need technology...So as to compete with other countries, we need the modern technology ..., I think we can develop, if we have more technology like machines to make work easier. **(CARW-INF-UG)**

Respondent: ... They are very important in current generation (*technology*). The country will not progress without the phones and such other new technology because the country is progressing fast **(SHOP-INF-NYE)**

Respondent: ... things are changing very fast and us as a nation we need to move in same speed. Issue of technology should not be left behind. Even us here in cutting stones we need same technology. **(QUAR-INF-MAC)**

6.8 Other Needs

Respondents proposed various areas for improvement in the education provision process. The suggestions advocated for improvements in the teacher management, subject areas, disciplinary methods and content integration.

A respondent suggested that to improve curriculum implementation, the teacher management factor should be considered in terms of performance management system, assessment of teacher welfare, need for periodic review of teacher certification by a professional body, training programme and appropriate teacher to learner ratio.

Respondent: Design performance management systems for all teachers. This should include a systematized mentorship model for both new and experienced teachers. Institute periodic sector wide assessment of teachers welfare and adopt sector recommendations for improved teachers' welfare. Institute a mandatory sector wide program to train teachers on the essence, purpose and components of competency based learning and assessment. Adopt a policy position on the institution of measures for progressive realization of teacher/student ration of 1:2 over the next five years. Reduce student workload and hours. Adopt best practice threshold on student workload and hours in lower and higher education **(Hatua-RI)**.

Respondent: Teacher Training for all levels needs to be enhanced. The minimum qualification should be a diploma. For lower primary and early childhood education, better qualified teachers need to handle the pupils because this is the foundation of their education **(JWM-IS)**.

On learning areas, suggestions were made for separation of Kiswahili and fasihi as distinct areas of study. To increased professionalism quality in delivery, teacher education should include mentorship and coaching for new teachers to enable them link theory and practice. A respondent also suggested that creative and performing arts which include music, dance, drama and theatre arts including filming should be taught in schools. A respondent proposed localization of the curriculum and inclusion of learners with special needs.

- Education implementation to consider parental engagement in the learning process
- Teacher induction and refresher training on revised curriculum implementation
- Develop key indicators for success/monitoring and evaluation
- Facilitate collaboration and data sharing among education institutions

There is need for national curriculum framework . Enhance the public-private sector partnership in education to allow the educational partners invest more in the educational sector for the benefit of the country.

IRE and CRE to be combined and taught as one subject

Respondent: Consolidation of Christian religious education and Islam religious education to one unit, religious education which would also include study of other religions practiced locally and globally...the

point of which would be not to indoctrinate children in schools... **(KGK-IS)**.

The respondent suggested that the school calendar should be changed to allow learners for longer holidays that should be strongly protected from holiday tuition.

Respondent: The holidays can be used for community service at primary level and industrial attachment at secondary level **(KGK-IS)**.

On student discipline , respondents suggested more humane disciplinary methods to be used in schools.

Parents gave the following additional views

1. Education should not prepare learners for white collar jobs only.
2. All schools should be treated the same way so that children stop fighting to go to national schools.
3. The way text books are changed from year to year is hurting parents very much. Only those books that have been approved by Kenya Institute of Curriculum Development should be used in schools.
4. External examinations should be abolished to get rid of examination cheating and unhealthy competition.
5. Education should be digitized.
6. School fees should be streamlined and fee guidelines followed.

A respondent suggested that education system should do away with tuition.

Industrialist...And this thing called tuition it should be removed...**(MAN-IND-NYA)**

A respondent proposed that the education system should review the school calendar especially in relation to the school holidays.

Industrialist...mashule za boarding school ...wapate 45 days...mwisho wa mwaka. wakae nyumbani waone maisha inaendelea namna gani, ...mtoto anatakikana apelekwe shambani, mtoto apelekwe ngombe na mbuzi, aone namna ya kuishi, biashara... ndio apate fikra... Sio kila wakati shule,shule **(CEO-IND-GAR)**; **Translation:** *(Consider longer December school holiday in order to expose learners to other aspects of life and widen their view of life beyond the school).*

Deployment of teachers

Respondents suggested that teachers should be posted far from their homes to enhance respect and proper utilization of time.

Industrialist...The teachers should not be posted in their areas. They have house allowance... During my education in 1960's our teachers came from far places like Kisii, Kisumu, Murang'a etc... Some of these

will know you so much hata anamadharau (they disrespect the teacher due to over-familiarity)... Some have business that they attend to during working hours.(**MAN-IND-NYA**).

Cultural integration

The respondent indicated that learners should be sent to secondary schools in different parts of country so that they get an opportunity to mix with other cultures.

Industrialist:...I think there should be a way integration, the students should be picked to various different parts of the country they will be able to acquaint themselves to different cultures, they will be able to learn a lot of things because they are on the outer environment may be starting from kindergarten goes to the same primary, go to the same secondary, goes to the same university, may be two kilometer radius, so the rest of her live is just structured within,...also the government should play a role in terms of a teachers who are trained because at time a teacher who is from that county teaches only on that county, there should be a way that teachers should be transferred, this will bring cohesion and integration of learners and also on teachers (**CEO-RIV-UG**).

Regular review of the curriculum

The respondent indicated that review of school curriculum at regular intervals is needed.

Industrialist: ...there should be frequent review at a span of 7 or 5 years, that's the right time that a curriculum should be reviewed, and also implementation of any a curriculum can be designed a very good curricula but if there is lapse in the implementation to the latter then the whole process will be useless so in terms of implementation there should be a matrix, that they will show that if this has been implemented there is a time line for implementation then it should stick on it, so implementation plays a critical role cause here in Kenya policies can be set but a lot of issues but the implementation is a serious problem., so implementation is very critical and also again all the stakeholders should play a role, there should an oversight body which check on implementation and the feedback on the implementation and if there are challenged there should be away to address them (**CEO-RIV-UG**).

6.9 Educational Structure

The respondent suggested that though overhauling the system is demanding, the government should make effort to realize significant change in education.

Respondent 1: Please take courage and overhaul the whole system. We are tired of living in stagnant waters for so many years. We want to go into the turbulent waters and change. After all it is better to die of turbulence in the high seas than to die of suffocation in murky stagnant waters. The effect of this curriculum review should be seen 18 years from now when the first graduates of the system are released into the economy. **(ASM-1S).**

The respondent proposed that ECDE should be developed as part of the primary education.

Respondent 2: It is therefore imperative that we integrate ECDE into the Primary Education cycle. This will enable learning to be done with a more child centred approach and the long term benefits will be there for all. Again, getting it right first time around will improve the standard of education in the country and help us nurture every learner's potential **(HE-IS).**

The respondents made the following proposals on the structure of Education:

Respondent: Basic Education

Grade 1-4 should handle general education including ethics and integrity, life skills, the constitution of Kenya etc.

Grade 5-7 should handle academic subjects i.e. languages, sciences and arts

Grade 8-10 should handle competency based training at certificate level

High school education

academic studies to be developed for those who wish to continue with university education

competency based training to be offered (at diploma level) for those who want to join the job market after high school

talents

Technical & vocational training institutions

business and commerce based

technical based

talent based

university Education

technical based universities

academic based universities

talent based universities. **(RW-IS).**

Secondary education to be broken into two levels

Entrenching minimum age for entry at all levels of education

A respondent proposed the following structure of education

Preschool	2 yrs		4-5yrs
Lower primary	3 yrs		6-8yrs
Upper primary	3yrs	National assessment	9-11yrs
Lower secondary	2yrs	National assessment (the first 2 yrs to used	12-13yrs

		to identify a potential pathway for	
Upper secondary	2yrs	Learner to consolidate competencies for specialization	14-15yrs
A-level or middle level college	2yrs	National assessment	16-17yrs
University			18yrs

Another respondent proposed the following structure of education.

Respondent 2: Primary School-7years
Secondary School- 4years
Higher School- 2 years
College-2 to 3 years depending on the nature of competencies required.
University- 4 to 6 years ,depending on the programme. **(JWM-IS).**

However, one respondent had a view that whatever they structuring may be adopted, it really does not matter as it matters with what goes into the curriculum content and its implementation strategies.

Respondent: My suggestion ... I would leave the present arrangement of 8-4-4 with some thought about ECD. The task at hand is enormous and to change from 8-4-4 would simply aggravate the changes. Let something remain stable. The end result will be the same no matter what division of years is followed **(SMO-IS).**

Another respondent proposed the following structure

ECDE: Two years should be used in this level. There should be sustained insistence for learners to be enrolled at the age of 5 and complete at the age of 6 years. Practical and basic theoretical concepts should be learnt.

PRIMARY EDUCATION: should last for nine years. Learners should join primary schools at minimum age 7 and complete at minimum age 15 without repeating. All subjects, both academic and basic vocational, should be taught. National primary education examination, currently KCPE, should be done away with. This will shift emphasis on traditionally examined subjects in KCPE and emphasis in instilling basic practical skills in vocational subjects, sports and creative arts for self employment, talent growth, establishment of micro and cottage industries for poverty reduction.

Talents should have been identified by mid-primary level and specialization commence at upper primary level. Trade Tests, Grades 1 and 2 be conducted among the talented learners for preparation to undergo the same courses and sit for higher Trade Tests in Youth Polytechnics

At age 15, learners will have neared maturity and will have developed sufficient intellectual, cognitive and social skills for entry in the world of learning and work.

SECONDARY EDUCATION

Secondary Education should be restructured into

- Four year ordinary level secondary education
- Two year advanced level secondary education

Secondary Education should last four years. Learners should transit from primary level at minimum age 16 and complete at minimum age 19. Learners be facilitated to advance in their talent subjects identified at primary level, while learning Basic mathematics, Languages, Citizenship Subjects.

A respondent proposed that technical schools to be revived to introduce trainings according to industrial and technological needs.

Further, the following educational structure was suggested.

- (i) Primary 6 years
- (ii) Junior High School 3 years
- (iii) Senior High School 3years
- (iv) University 3 years

The respondent also suggested that all the primary school pupils transit to Junior High School. The following pathways were proposed:

- Academic
- Talents
- Technology.

That the National exam be administered at end of senior high school and determine the various pathways the student should take, and that co-curricular activities be carried out during the school holidays so as to engage pupils and students in worthy activities other than academics.

The respondent proposed for a change in the current system of education to allow learners to mature and reduce wastage

Respondent: ...would suggest we go either 8-4-2-4 or the former 7-4-2-3. You think that our system of education today, releases so many children after form four who are not fully mature. Some go to university or college but some of them do not go anywhere... parents are taking their children to Uganda for form five and six and others are taking their children to schools here which embrace the British system of education, which embrace form five and six. **(KI-MCDE-KAK).**

The choice of subjects should be done by the end of form two; with a reduction in the number. The child should further be guided based on his/her potential.

Respondent: ...after form two one should choose where to go generate his life from there depending how you will be performing in form one and form two. So in form three and form four just get a few or six or seven subjects that you are doing to proceed on your line... If the child is good in sciences let him or her be given the chance to do science. But if the child is not able he can be a good lawyer, he can be a good priest he can go do theology **(KI-NACECE-BUN).**

It was the respondent's view that the government should develop policies that encourage integration and living together. Regarding the educational structure, being in the East Africa Community; it is fair that we have a system that is similar to that of the member states. The secondary cycle should be longer if not really secondary cycle we have a system whereby may be a period of one year these children are having some kind of training on service.

The respondents proposed the review of admission criteria for teacher trainees at PTE and Diploma level. Currently, the entry levels are very low and to the practitioners in the field we believe they are not placed no matter how much you train them, if they have not done very well in their respective subjects they will never become better teachers so that should be the first thing. Teachers should be able to specialize, while the Youth Service training should be reinstated to prepare youth before joining university.

The respondent suggested the need to introduce career pathways in the curriculum to allow learners to choose subjects for their desired careers as early as possible. This is not provide for by 8-4-4

Respondent: we must begin with career pathways within the curriculum. If a student wants to do law, there is no need of that student taking the three sciences for instance, if a student wants to be a pilot, these is no need of leading that student with all humanities, we must allow that decision the curriculum has enabled learners to identify their careers early enough to allow to, to take relevant cluster of subjects **(KI-SGKN NAI).**

The respondent also pointed out that learners should be exposed to internship in their areas of career so that they adequate time to develop the required competencies

Respondent: I think the curriculum should offer a lot of democratic options students even should be able to do some bit of internship in what they think is a student's wants to be an engineer should have time to engage in some internship in related field **(KI-SGKN NAI)**.

A respondent indicated that the pathways should take the direction of general education, vocational and talent pathways

The respondent felt that the reforms should not focus on changing education structure from 8-4-4 but it should focus on re modernising the current system so that it work for the country

Respondent: it does not mean system change and we are not saying change the system in 8-4-4 in fact, it would be more economical to sustain the 8-4-4 and re-modern the curriculum as it is **(KI-SGKN NAI)**. We have heard of different recommendations but we still believe we can still work on the system that we have so that we don't invite we face the challenge of cost implementing another new system, so curriculum, curriculum review should not be about the structure and system, once we review, it should determine whether then, we change 8-4-4 that will be a big decision.

On education structure, the respondent suggested introduction of 'A' level in the current education system where learners can specialize in preparation for future careers.

KI: Because from five and six started preparing you now for the future career ok, giving you more skills ok, if I were to recommend of course I know I'm not the one recommending but I know my opinion might be heard sincerely speaking we should revert to that old system **(KI-REG-LAU)**.

Respondent expressed the view that 8-4-4 has not failed, but it has certain gaps which if addressed the system can serve the needs of this nation. The informants stated that there is need to consider the context within which 8-4-4 curriculum is operated and circumstances under which it was put in place. Again the theory behind 8-4-4 which was to provide a skill based curriculum but the education system has not given learners an opportunity to develop skills from an early age. The education structure should therefore be inclusive taking cognizance of the varied lifestyles and regional disparities.

The key informants pointed out that the learners who join madrasas from Muslim religious communities drop out due to age since they finish Madarasa at age 8 years and they find that their class mates are younger than them. So they consider themselves as misfits and drop out of school. They suggest accelerated learning for such learners

An industrialist felt that ECDE should be abolished.

Industrialist:...ningetaka itolewe...inaitwa pre unit. ...unakuta kwamba mashule kama private unakuta mtoto anamaliza mwaka tatu, mwaka nne. Hiyo kwanza ingebadiliswa, ingesimamiswa kabisa... Afadhali kama North Eastern watoto wanasomanga Duksi wanasomanga qurani. Mtoto Anajifundisha namna ya kusoma na kuandika **(CEO-IND-GAR)**.

Some respondents recommend seven (7) years of primary school while others recommend total overhaul of the current system

Industrialist:...Put continuous assessment tests in classes 3, 4, 5 and 6 before going to 7 for final exam.**(EMP-IND-BUS)**

Industrialist:...I think they should bring the old system of Std. 7 ... In the 8:4:4 system the learners are given masomo mingi but during vocational they forget everything. **(MAN-IND-NYA)**.

Industrialist:...ibadilishwe kwa jumla. Na mfanye mkazo kwa elimu. Elimu yetu inaonekana iko chini sana...curriculum kwanza ibadilishwe. Ipunguze hii mambo ya 844... zamani wakati ilikuwa mpaka class 7, afadhali masomo yalikuwa mazuri...**(CEO-IND-GAR)**.

6.10 Summary of Key Findings on General Needs for Curriculum Reform

Personal and societal needs

Respondents expressed the need for a curriculum that enables learners to develop national values like patriotism, national unity, cohesion and a sense of national identity. The need for an education that instills personal integrity was largely seen as the ultimate way to eradicate corruption in the country. Respondents suggested that education should seek to demonize corruption as opposed to the current situation where it is glorified in society. Security also featured as a personal and societal need. Other needs were promotion of the rule of law, provision of basic needs and eradication of tribalism and nepotism. It was suggested that there should be role modeling and mentorship from political and other leaders.

Educational needs

Respondents suggested a transformative curriculum that touches on all facets of life. They proposed a curriculum that relates learning content to real life situations and helps to solve real life problems and individual challenges. They suggested a curriculum that promotes holistic development of the learner without placing undue emphasis on the cognitive domain. Respondents suggested an education that addresses areas like ethics and moral values, citizenship, financial literacy, peaceful co-existence, entrepreneurship, health and hygiene among others.

It was proposed that that education could serve to discourage harmful cultural practices. Respondents mentioned that education could provide viable alternatives to practices like female genital mutilation (FGM) and cattle rustling. They also advocated for the promotion of education for marginalized and disadvantaged communities and individuals such as parts of the ASALS, the disabled and street children.

It was suggested that education should adopt teaching methods that encourage reflection, critical thinking, problem solving, innovation and creativity. Respondents observed that there should be healthy and friendly teacher-student relationships. They suggested that learning should be an enjoyable experience particularly for younger children; that children should be allowed to enjoy their childhood.

Respondents called for early identification and pursuit of individual interests by allowing learners to major in subjects of their choice. They also proposed that agriculture and other technical subjects need to be encouraged so that they are not perceived as any lesser than 'office-oriented' subjects or careers. It was proposed that the society need more technical schools and youth polytechnics to equip the youth with employable skills.

Economic and Political Needs

Unemployment, crime and insecurity were mentioned as key challenges to economic progress of the country. Respondents suggested that the reformed curriculum should help the youth to look towards self-reliance as opposed to being employed. They called for emphasis on entrepreneurship and innovation as ways to achieve this. They also observed that for Kenya to attain economic development there will be need to promote technical and vocational education. Agriculture was also cited as a potential area for gainful employment of the youth.

Respondents observed that Kenya should not be depending on experts from outside the country while she can produce her own. The many Chinese engineers and artisans, particularly in the construction sector, were cited as an example. Similarly, the many Kenyans going to India to seek medical attention was mentioned.

Respondents indicated that there is need for the political leadership to respect the constitution and the rule of law. Leaders were challenged to lead by example and avoid hate speech; to appreciate that they have the ability to guide the masses towards peaceful co-existence through their utterances.

CHAPTER SEVEN

QUALITATIVE DATA:

ECDE LEVEL NEEDS

7.1 INTRODUCTION

Early Childhood Development Education (ECDE) in Kenya has been recognized as a fundamental stage that lays foundation for a child's holistic and integrated education that meets the cognitive, social, moral, spiritual, emotional, physical and developmental needs. The concept of Early Childhood Education (ECDE) in Kenya has been described in various forms. The Early Childhood Development Service Standard Guidelines for Kenya defines an ECD child as a human being from conception to eight years .Basic Education Act No 14 of 2013 refers to this level of education as pre-primary The Act, defines ECDE as the education offered to a child of four to five years before joining class one in a primary school. Sessional paper No.1 of 2005 on Policy Framework for Education, Training and Research terms ECDE as the education that covers early care for 0-3 old children and pre-primary for 4-5 year olds. Sessional Paper No. 14 of 2012 refers to the holistic development of children in the range of 0-5years of age. Against this legal framework ,The Ministry of Education Science and Technology focuses on the 4-5 year old children with a view to providing a holistic and integrated programme that meets the child's cognitive, social, moral, spiritual, emotional and physical needs.

In this chapter, needs assessment findings on ECDE have been discussed under the following headings: needs in the school curriculum, Competencies, Content/learning areas, talent identification and nurturing, pedagogical approaches, teaching and learning resources, Assessment and Contemporary issues.

7.2 GENERAL ECDE NEEDS IN THE SCHOOL CURRICULUM

7.2.1 Needs for social development

In terms of needs for social development respondents suggested that education should enable learners to make informed decisions, and respect human life. Education should further address Democracy, Equality, Self-reliance, Patriotism social, environmental conservation, individual development. The proposed curriculum should also address the professional requirements for a

functional society. In addition it should reflect religious values, technological changes, conservation and moral values in order to address issues such as corruption and radicalization.

KI: We rarely plant trees but find it very easy to cut them. We need to instil positive environmental conservation values and practices as early as at ECD level. Our current curriculum is lacking in this - **(KI LIS NAI).**

ME: Environmental conservation with use of real life examples and the consequences of environmental pollution when teaching mathematics and science subjects. Life skills and their survival value such as self – awareness and make informed decisions. Respect for human life through learning experiences that expose learners to appreciate life. Values (Rationality, Sacrifice, Individuality, Democracy, Equality, Self-reliance, and Patriotism). Key competences determined by market demands and social needs. (CEMASTE).

The respondents further proposed that curriculum should be relevant to every community in terms of resources of the catchment area. They continued to propose that experts from each county come together to prepare ECDE curriculum in accordance with the needs of the locals. They also proposed a curriculum that is holistic in nature, thus addressing the physical, social, psychological, spiritual, intellectual, moral, character formation and values education as contained in the constitutional of Kenya.

The curriculum should incorporate the need for the society to sustain peace, develop law abiding citizens, independent thinkers, creative problem solvers, ability to use ICT, solve problems, create wealth and deliver service and serve to instill learners with humanity. It should also instill Knowledge, attitudes, and skills in patriotism, anti-radicalization, anti-ethnic discrimination, religious tolerance, non-violence in conveying demands, tolerance, anti-criminal culture, anti-corruption culture, ethical practices, servant leadership, transparency, communications etiquette and decorum, accountability, good governance in one-self, family, group as well as in the corporate. Education should prepare one to fit in the global village

The curriculum should be; Holistic in nature, ;Respects, reflects, and conforms to the Kenya constitutional affirmation that ours is a God-fearing nation; Inspires a love for the search for knowledge and truth and promotes, encourages reflection, critical thinking, problem-solving, innovation and creativity in their life situation; (KCCB-RI).

ME: let's not be prejudiced by the multi-ethnicity of Kenya but how we can fit in the global village. (NM-IS).

On the same breadth respondents suggested that education should lay emphasis on literacy, numeracy and foundations for lifelong learning (emphasis on learning to know, learning to do,

learning to live together and learning to be). Emphasis was also put on volunteerism, social education, personal obligation and respect for environment to meet sustainable development (ESD) principles. Education should equip learners with life skills, in order for them to participate in national and international matters, live and grow in a healthy, safe and nurturing learning environment. They should also be exposed to information on various fields of work and activities in the global community. The learner should be enabled to appreciate and tolerate cultural and individual differences to promote peaceful co-existence.

7.2.2 Needs for technological development

The curriculum should incorporate the need for the society to sustain peace, develop law abiding citizens, independent thinkers, creative problem solvers, ability to use ICT to solve problems, create wealth and deliver service. In terms of digital literacy, respondents indicated that learners at ECDE level should have basic exposure to ICT skills such as identifying sounds and colours using technology as well as being able to manipulate basic ICT devices. A respondent noted that ICT skills are equally critical for provision of quality education. This can only be ensured if learners are exposed to ICT skills at an early age.

KI: we can never do without an ICT it is something that is really lacking in the current system because as long as it is not enshrined in the curriculum right from the nursery the preprimary for that matter then when they tend to go to work and you know and go to university some students tend to be disadvantaged (**KI CDE LAI**)

Digital literacy should be achieved at 10 years of age. This includes understanding communication principles, how to operate computers, internet usage skills and understanding of the basic principles of digital technologies and issues surrounding use of digital use (security and privacy, digital citizenship). (ED-AC)

Industrialist... young children, we should give them charts, they see how they draw something, we can use computers they learn to use computers... (**MAN-IND-NYM**)

It was also established that respondents would like learners to acquire ability for clear logical, thought and critical thinking, Self-expression, self-reliance, self-discipline and full utilization of a child's senses, acquisition basic foundation for the world of work in the context for economic needs of the society, development of the desirable social standard and attitudes, constructive and adaptive attitudes to life based on moral religious values and responsibility to the community and the nation and appreciation of ones and other peoples cultural heritage. The child to grow towards maturity and self-fulfillment to become a useful and well-adjusted member of the society

Some of the teaching areas highlighted by respondents include: Writing, Computer, Singing, reading. They added that at this point the teachers should be able to identify talents among learners. However they were quick to caution that, computer studies should go hand in hand with instruction on appropriate use of technology to counteract social media influence.

Parent: Computer literacy is important from Pre School because everything in today's world has turned digital .Children should learn appropriate use of technology to avoid social evils spread by social media. . (PA FGD Ndur Laik)

7.3 COMPETENCIES

Respondents proposed that education should produce people who have hands on skills, rather than the current status where education seem to have focused more on the knowledge and cognitive development.It was also recommended that skills of Critical thinking, Creative thinking and innovation, Problem solving, Questioning and analysis, Knowledge manipulation and application, Research, Communication and cooperation should be emphasized in the curriculum.

Respondent:, , Decision making, Soft skills (empathy, emotional intelligence), Critical thinking, writing skills, public speaking. Skills to harness local resources for livelihood. This may be brought out through exposure of the learner to the existing environment. (ED-AC)

Respondent; Civic education and citizenship have suffered at the expense of theory or intellectual development. (KCCB-RI).

At ECDE level, it was indicated that sensory responses, spiritual element, social and intellectual capacities should be developed. It is at this level that a child should acquire basic literacy and numeracy skills and develop interest in school to be able to continue with education.

Respondents noted that innovation, creativity, teamwork and virtues such as hard work and honesty be nurtured in the learners at all levels. These must be demonstrated and not taught theoretically. Teachers should be good role models to the learners.

It was also indicated that ECDE learners be equipped with practical skills such as cleanliness and social skills. These social skills should enable the child to recognize when they are in danger and take appropriate action.It was stated that young children should develop language of communication. They should play and associate with others, be conscious of the things around

them and have a sense of relating with God. Expression in music and play was noted to be of great importance. I was further indicated that a child should enjoy going to school, learn through play within one's experiences, socialize and appreciate others, be inquisitive in order to develop discovery skills. Curriculum should consider the whole concept of the society.

KI: I would want a child to be able to enjoy to go school; play as an element of learning, discovery, exploration;.....so lets teach our children the values that help us dignity, respect, kindness, honesty; (**KI- BA-**)

A concern was expressed that creativity is being killed at the preschool level because of people's perception that, the best ECD centres are those in which children are able to read, write and do arithmetic and are praised yet what they are doing is simply copying what the teacher has written. It was proposed that

Children be taught to manipulate resources, make choices and understand the consequence.

KI: even in ECE we teach kids to solve problems, we teach them to pose problem, we teach them to create and appreciate their creations then by the time they get into primary school it is just a continuation of that creativity but we finish the creativity right from ECE and start pigeoning them into some poles that is why the good ECD centres are those ones that teach children how read how to do basic arithmetic in ECD and we praise them when that writing is basically copying what the teacher has written. (**CEB - NYA**)

KI: Probably at Early Childhood development the greatest competency should to manipulate objects, toys I like saying NACECE people talk about manipulative in whatever, the question is what they are manipulating. We narrow it down to just objects. A child can manipulate total environment, including a person, and they do that. The most important thing in choices and manipulation is the consequences. Our education doesn't look at the consequences of choices made. (CEB – **DR. CHARLES NYANDIGIRISI – NYAMIRA**)

KI: ...in Kenya like in the kindergartens you see when you go ... learn how you to start writing spellings but in most developed countries they don't begin by learning words and spellings and all that. ..There are different equipment to play around with there are cars, there are bows, everything so pupils or children are placed there and then you see someone will start engaging him or herself with something that he or she likes so from that point will identify what this person wants and you start developing from that point. (**KI STU KAU**)

I: At ECD – this is the formation and yet we do not address it. At this level children have ability to communicate feelings, needs, be able to interact with fellow learners. At this level we want children to go the best ECD where teachers have their own values where now children start to learn about differences. (**KI – VC – KIB - BUN**)

KI: At ECD the bible says bend a tree while it's young, teach a child in the way they should go. Instil competences of what is right and what is wrong by appreciating a child when they do right, and when wrong correct them. Values such as honesty should be taught by parents. They should also be taught how to speak and learn the competence of doing through the little games they play. **(KI-EAC-NAI)**

KI ... ECD they should be taught; love, sharing, respect, listening and hard work. **(KI-FAWE-NAI)**

KI:Life skills are very important to a child. There are so any risks now that are encountered by students going home back from school. Life skill is really something very important and maybe should be introduced. In fact it needs to also be put in the syllabus.....actually before a child joins class one I would like a child going from preschool to class one to be able to write competently and to be able to read. That is really something that is missing now in most of our public..... **(KI – CEC - SAMB)**

KI: Life has changed and parents are doing so much to their children for me my child should come out of the ECD speaking fluent English so that as they go to primary they should be competent in language (English Kiswahili, Mother tongue) and numerical numbers. I also in that we need to have this kids be courteous, integrity honest. Also I would like to say this issues of sex education this kids need to know there body parts including their sex organs. We should not shy away from this. **(KI – PAS. JM)**

KI: At ECD – this is the formation and yet we do not address it. At this level children have ability to communicate feelings, needs, be able to interact with fellow learners. At this level we want children to go the best ECD where teachers have their own values where now children start to learn about differences. **(KI – VC – KIB - BUN)**

KI: I think these are children who have come out of their mother care from breast feeding and all that requires from these one is self-expression, they can express themselves, ..they can say am sorry, they can also tell who they are, they can say am a girl am a boy, also life skills, they also needs to acquire life skills like proper mannerism in eating, dressing, and so on. So life skills is a competence that they need to have also literacy and numeracy readiness for numeracy and literacy in the primary section, that is also a competency that they should have when they are going to class one. **(KI-CBE-KIT)**

Most respondents suggested that the curriculum should be designed to develop in the learner critical mindedness, analytical and communication skills; innovation, entrepreneurial and financial literacy skills. This is because learners display little knowledge for solving problems whenever they arise.

KI: A better curriculum should enable people to be enterprising. That entrepreneurial skill is lacking. Even those who have business related subjects are not entrepreneurial in their thinking. **(KI-CEB-BUS)**

Respondents further noted that the current ECDE curriculum is devoid of necessary skills that support learners in their day to day living. According to key informants, certain subjects that

were removed from the curriculum had a role in assisting people to become responsible adults. They suggested that, learners should be taught basic hygiene, life skills, communication skills, basic arithmetic and responsibility.

KI: This child even at the ECD level should be made in such a way that he is self-reliant...but you see a form 4 coming cannot even spread a bed which means that was not part of the education at school. We, when we were at school, home science was compulsory it is a lesson you must have. Why is it important? The girls at the end of the story will be mothers. They will be mothers, and they will be caretakers of other people. But because they lack that totally now, that is a necessary. So what am I saying? Some of the practical subjects that were removed if need be should be reviewed to come back to the curriculum. **(KI-CEB-MIG)**

KI:can the child have basic skills of hygiene, tidiness, can that child, be trained to even wipe their noses, okay, can that child be trained how to dress up, not that, there is a maid who will always be saying come here, no turn around and you are tucking in, so the what we call life skill at that level, the child being able to manage basic hygiene like brushing their teeth, the child being able to keep time.....so training for basic life skills, hygiene, time management, living within the realities and also the communal, being able to live with others, so that now communication skills becomes become very key at that level, so these are the early child hood level.....at primary school and if you are talking about competencies, if really you have to be able to live within your means, you have to start knowing, you have to be able to manage numbers, so basic skills of being able to do a bit of arithmetic.Secondary school, now, at secondary school that is when we train for responsibility, even at primary is responsible living, so irresponsible living and leadership.**(KI-PWA-UNI)**

KI: ... I think these are children who have come out of their mother care from breast feeding and all that requires from these one is self- expression, they can express themselves, ..they can say am sorry, they can also tell who they are, they can say am a girl am a boy, also life skills, they also needs to acquire life skills like proper mannerism in eating, dressing, and so on. So life skills is a competence that they need to have also literacy and numeracy readiness for numeracy and literacy in the primary section, that is also a competency that they should have when they are going to class one. . **(KI-CBE-KIT)**

The key informants expressed the need for learners to be given exploration skills coupled with the right learning materials. These will enable them gain competencies, learned behaviour as the learning is practical in nature.

KI: ...At the ECD level there should be discovery, hii maneno ya kuchang amtoto kwa class moja, kufunzanakuimbawimbo, I have visited ECD, and I believe the children love to play and like all colours, we need such an environment akiingiadarasaanawezakushikaunampatia time to explore, but when you take that child to a bare classroom with nothing, you see in environment jioniakiendaanaendakwamsitu, ana explore kulikohukohapatikitu, and the issue, of KISERT, kuna document to test ECD to go to primary, it is a document that should be administered to find whether the child is suitable to enter class 1, **(KI-CDE-MAK)**

KI:at ECD generally it is trying to know how people are behaving, they would want to know how thing are getting on..to teach a child at ECD, it is more practical oriented.. they imagine how is this chair modeled, they see a vehicle moving they want to know how it is modeled, at ECD they play with something that is able to make them learn, if you are teaching them about number you should model something of what they see and then they model it,. **(KI-UNESCO-NAI)**

7.3.1 Values and Attitudes

The respondents recommended that ECDE teachers shift focus from examinations and concentrate on inculcating values during the teaching and learning process. This can only be made possible if they are able to put in more time on subjects that are not externally examined. At ECDE, respondents expressed the need for children to acquire discipline, social skills, taking care of the environment and knowing God. The respondents explained that at the ECDE level, children need to express themselves freely. They further said that children at this level should have the following social values such as respect, justice, love for one another sharing, justice honesty, diligence, caring, compassion, patriotism and moral and harmonious coexistence and interpersonal relations.

KI: ECDE should now have values of sharing, justice, coexistence and love neighbours. **(KI – FBO - BUN)**

KI: When you look at an ECD child I would like to see a socialised child, the social part of the child. The child is able to interact with the others. It should be more of knowing how to live with the other children other than being able to do a lot of mathematics and such **(KI-MCDE-NYA)**.

Respondent...so they must be taught when you want to assist somebody just assist up to the last minute, **(WEL-INF-NAR)**.

Respondent: Values are eroded in our contemporary society. There is need for a curriculum that emphasizes on reviving values like honesty, kindness, love, unity, trustworthy in young children. Such values will uproot corruption which is the cancer of the nation. **(DBK-IS)**

The respondents expressed the need for the curriculum to include the national values as enshrined in the constitution, and the 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness.

Respondent: The curricula at different levels should aim to enhance Accountability, Integrity, Responsibility, Peace, Commitment to work, Negotiation, Acceptance and environmental preservation. This can be achieved by involving learners in community service at all levels during holidays hence inculcating Nationhood in learners. **(OCO-IS)**.

Respondent 1: Soft skills; 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness, and Teacher professionalization programmes through mentorship. **(CEMASTE)**.

Respondent 2: Competencies related to life skills development in areas of negotiations, communication, relating to strangers are crucial for young children. For those who are training as their teachers need to be more careful to exhibit the very values desired of the children. **(DBK-IS)**.

Respondent: One, they should have discipline...discipline for life....Sometimes it happen, they have discipline in school. But when they come out, they steal and conflict with others, abuse people. Discipline means they are humbly and obedient and conform to everyone's expectations. **(SHOP-INF-NYE)**

Respondent: Discipline....they should learn social discipline....Girls these days are coming from school but move about carelessly. This can be boosted alongside schooling but also at home by parents. There should be a subject to teach them good conduct, both boys and girls, about conduct ...There should be a subject to teach them good conduct, both boys and girls, about conduct (**SHOP- INF-NYE**).

Respondent: ...should be able to respect... value of respect and obedience. If she leaves ECD she should be able to have those. (**CARW-INF-UG**)

Respondent: ...they should be able to differentiate between good and bad habits, and stand out for good habits. Also let them be able to socialize normally with peers; (**BUS.MAN-INF-NAI**)

Industrialist...Education should first all liberate the mind of ...any person who goes through the education system. It should also be able to expose the learner to utilize what they learnt in school for their own personal growth (**MAN-IND-BAR**)

Kenya inahitajielimuyamanufaaambayoinawezakuwafanyawatotowetuwaendembali.CEO-IND-GAR)

It was also indicated that curriculum puts a lot of emphasis on content and not on other aspects of life such as humanity, dignity and values. The curriculum should address aspects like caring and love.

KI: The value of the education is not just the degree. There is the other aspect of our life, the humanity, the dignity, the value, you know? Basic things that are in us. And all the other things we used to see in international schools, we used to see at KCCL. The first thing we look for is a happy child. While really, this child can cheat to cover content can do manner, all manner of things. So our curriculum doesn't teach us to care, you know. It doesn't teach us to care, or to love, or. I mean, it's, I don't know, it's strange. (**KI CITAM NRB**)

The respondent further explained that values should be inculcated into our children very early during their formative years of development

KI: ... is like that we are giving wrong values along the line it will be like that at the end so we should start with the right values and best thing you mentioned already where others are using the method of radicalization the best thing you should understand is that you are too late already to educate a child when he you are starting to educate at 4 years its too late. Education to a child should start before birth. (**KIT - BIS. ONYUKA – HOM**).

Key informants indicated that values such as good behaviour, relationship between gender and attitudes character, patriotism, integrity good morals, general social etiquette, ,appreciation of their environment and consciousness on how to better their lives.

KI: ... have some values to have in the ECD level like good behavior, character, moral at that level..**(KI-CDE-KIT)**

Industrialistso character formation is everything...We should focus on developing the child as a whole (**MAN-IND-BAR**)

Industrialist...what needs to be calculated from an early age the fear of God and honesty hard work living in harmony with other people (**MAN-IND-BAR**)

LEARNING AREAS/CONTENT/PATHWAYS

A number of participants of the study suggested that ECDE learners should be taught toileting in baby class, and at age four, they should be taught simple letters of the alphabet and in the fifth year they should be taught social relationships and basic writing skills. At age five and six, they should be taught social relations in a family, writing skills, alphabets and physical knowledge.

Parent: I want to suggest the following one at ECD, the first year... they should just sit and be taught about toilet training, then about four they can learn numerous skills and simple letters of alphabets if, but that should not be done in the fifth year, at sixth year I propose this child is made to know communal relations society expectations what a father does what a mother does, basics and writing skills, and ... alphabets....there is need for physical knowledge... that the children will grow natural children (**PA-FGD-MOIGP-S-UG**)

Parent: To interact with other children. Learning basic like communicating, writing, reading. That interaction and socializing level will help attain their goals. To be able to talk and values like going to church, attitudes which are positive (**PA-FGD-NYAKI-S-NYA**)

Several respondents were of the opinion that at ECDE, the child should learn mother tongue, followed by Kiswahili for easy communication as well as writing, communication, play, modelling, drawing, creative arts, singing, dancing, life skills, counting and reading skills in addition to cleaning themselves.

Parent: I would like to say that, because the child is still young ... it would be good if that child first learns mother tongue ... this will help that child to talk and communicate with others, even at home he/she can communicate with the parents even when in need of something, the child can express him/herself, and, if possible, for those who will learn faster can be introduced to Kiswahili. This can help the child if he/she meets with strangers along the way. (**S-FGD-NYAM-S-NYAM**)

Parent: ECDE Level-learners should have know things they have learned, simple skills in writing numbers, counting and reading vowels and alphabetical letters. They should be taught how to keep themselves clean. (**PA-FGD-MALIK-S-BUN**)

Parent: The teachers should help learners to have skills and knowledge such as; integrate play and numeracy and communication; Modeling, drawing and creative Arts; singing, dancing and Life Skills and Simple reading and writing (**PA-FGD-MALIK-S-BUN**)

At ECD, parents expressed need for their children to acquire skills of counting, recording and sorting things in order of sizes.

Parent: ... distinguished numbers, alphabets, they should be able to match, sort, read, record, reading, writing, paint, record and socializing with other learners... (**PA-KAMOP-MAN**)
-Kwa)

Emphatically, learners indicated that at the ECDE level learners should be given opportunities for play and that they should also be involved in inter- school co- curricular activities.

Student: When we talk about co-curricular activities, the big challenge is that in the ECD it is a bit challenging. I think that as we are developing a curriculum, there should be something for these little children, so that they can also

come together to enjoy and interact in their own way. For these upper schools and colleges, there is not much problem there. The big challenge is on the ECD section. These small children as not so much involved in the co-curricular activities. That is why even when you go to a primary school, maybe there is a co-curricular activity that is taking place in the school nearby, you will hear that teachers saying that only the upper classes will go, but the lower classes to remain in school. That is why it is a challenge... (CSL – TTCP – NAR - NAR)

Student: It will be a big challenge in terms of travelling and managing the children is very hard. You cannot take little children to a very far place because to handle them will be a problem, but I think it should be done in the school level. They should be having something like a competition, they can make a talent day for the school...the competition that they will be able to do within the school. Going outside is a big challenge for the young ones... (CSL – TTCP – NAR - NAR)

Parent: At ECD the child should know themselves. Since this is a new being. They don't even know whether a boy or girl. (PA-FGD-KIS-S-NYA)

Some of the respondents were of the opinion that at ECDE, the child should be taught sounds and writing.

Parent: I think the child should know sounds for them to know big things about education. (PA-FGD-KIS-S-NYAN)

Parent: A child leaving ECD level should be able to write... at least, the first numbers, and to identify numbers and letters together with their sounds. This is because, by the time the child leaves ECD without knowing what sounds are, going to class one becomes difficult for this child trying to pronounce those sounds. Therefore, if those sounds are known from ECD level, writing letters and numbers, now it will be easier when joining class one, he/she will start learning other things. (S-FGD-NYAM-S-NYAM)

Respondents underscored the importance of teaching such skills as self-awareness, time management, communication, planning, work-appropriate behaviour and attitudes, team and independent work, financial literacy and entrepreneurship, workplace health and safety, work place rights and responsibilities and customer orientation and satisfaction. Some of the areas potential for carriage of soft skills are entrepreneurship, leadership training, mentorship and experience in starting a business.

Respondent: Let them be able to make basic decisions without fear, e.g. reporting strangers or bad actions to their superiors like teachers, parents, older students, etc. (BUS.MAN-INF-NAI)

Respondents also indicated that exposing children to CRE would help them learn more about God while creative arts would help them develop their motor skills, and basic mathematics.

Parent: I would like when a child is still at ECD level, he/she should be taught CRE, because the child is supposed to know how God created and who created him/her. Also, I would like that child to be taught Creative Arts, because, this will make him/her to fine his/her motor skills, to be strong, through drawing pictures. The child will perfect that as he/she grows up. Also maths is necessary so that as they come every morning, they count their bottles, and growing up to maturity, it will be possible for the child to see how that math is progressing. Also, there is this subject called Social Studies. It is important, because it talks about a family, the types of houses that people built. So the child gets to know their house and those of others, while noting the differences that are there. All these plus the others my colleagues said, will be helpful to the child. (S-FGD-NYAM-S-NYAM)

Respondents expressed the need for young children to develop the skill of self-awareness and self-esteem.

Parent: I think, from ECD we should have a child who has developed her self-esteem, such that when the child goes to primary he or she can approach the teacher, can respond without shying off from what the teacher demands from him or her...(PA-FGD--MUTG-S-KIT)

Parent: the child should be self-understanding, the child should be made eager to understanding why he or she is in school (PA-FGD--MUTG-S-KIT)

Parent: At ECD the child should know themselves. Since this is a new being. They don't even know whether a boy or girl. (PA-FGD-KIS-S-NYA)

It was further suggested that curriculum adopt Spiral approach of content where one builds onto the other. Further, the respondents suggested that The Curriculum should incorporate international and regional best practices on assessing, addressing and promoting the emotional and psychological wellbeing of children. Age appropriate health education content should be taught in line with Articles 10,11 and 24 of the Constitution of Kenya 2010.

The respondents suggested the following learning areas for the ECDE; communication skills, Numeracy ,Creative and manipulation; Social and life skills, Environmental awareness; Respect for and Sanctity of life; Nutrition and health (knowledge and practice); Religion and ethics; Language (including mother tongue); Values related to hard work, truthfulness and integrity; National values, life skills; personal safety (security) knowledge and practice; Values associated with the common good, communal responsibility and respect for other people's property; technology; Emotional awareness, empathy, self-regulation and conflict resolution; Respect for the rule of Law, appreciation for democracy; Creative arts and expression; Literacy and communication;, Cooperation, and innovation; Critical thinking, Reasoning and problem solving; Number sense and operations, Sense and geometry, Patterns and Classifications, Measurement and comparison; awareness of the natural and the physical world, inquiry skills; Public Speaking, Writing; Physical education, Drawing, Simple mathematical concepts, Good manners, keeping the environment clean, washing hands, using courteous language; Vernacular; Basic communication skills such as reading and writing; counting, mannerisms, knowing the environment, socialization and religious values.

Respondent: ...should be able to respect... value of respect and obedience. If she leaves ECD she should be able to have those. (CARW-INF-UG)

Respondent: ...they should be able to differentiate between good and bad habits, and stand out for good habits. Also let them be able to socialize normally with peers; (BUS.MAN-INF-NAI)

Teach Vernacular Languages at ECD and Lower primary levels (up to class4) to ensure we don't lose/erode our culture/ heritage/ traditions as has already in most young urban families. This is to deepen our African/ Kenyan roots (NK-IS)

The respondents further suggested that the curriculum for the level should be flexible to let children be children.

Respondent: The main area of focus at this level is stimulation of the residual sensory inputs. Learners should be guided to explore the environment with a lot of concrete materials for concept formation. Play should also constitute the majority of time spent in the ECDE centres. Routine practices should be maintained for familiarity and confidence building. No meaningful academic work to be engaged rather all the prospected academic work should be introduced at the last level remotely in plays and songs. (OCO-IS).

Other respondents suggested that CRE, social ethics, pastoral programme of Instruction, guidance and counseling, and Health Education to be taught and made compulsory ECDE, primary, secondary and teacher education levels.

Respondent: CRE be a compulsory subject in ECDE, primary, secondary and teacher training colleges....to promote sound moral and religious values among learners. ..guidance and counseling to enhanced and offered in a recognized office in all schools at all levels...the church to be involved in identifying and recommending teachers who are assigned these subjects (CRE, Social Ethics, PPI and Guidance and Counselling). (GA-RI).

Agriculture was proposed to be compulsory in basic education to address the issue of food security in the country. In addition integration of nutrition education, food production and physical activity into the curriculum was emphasized to resolve problems of malnutrition in Kenya. The respondents further suggested that strategies be developed to evaluate nutrition-related learning experiences in each successive grade to assess the children's knowledge on health living and whether they have adopted a healthy lifestyle. In the proposal, they suggested making nutrition education practical in order to ensure that students learn basic skills in nutrition and health. School gardens/farms/livestock projects should be promoted to support and complement classroom nutrition education teaching. Food preparation demonstrations should form part of class work that the students could be required to learn to provide practical skills in applying knowledge in nutrition. The respondent further argued that Physical education be included in the curriculum, even though it is already in the school curriculum.

Respondent: Include physical education in the curriculum. Physical activity has tremendous health promoting and disease preventing benefits and define to a large extent people's health, growth and development. (NDU-AC).

Parent: I would like when a child is still at ECD level, he/she should be taught CRE, because the child is supposed to know how God created and who created him/her. Also, I would like that child to be taught Creative Arts, because, this will make him/her to fine his/her motor skills, to be strong, through drawing pictures. The child will perfect that as he/she grows up. Also maths is necessary so that as they come every morning, they count their bottles, and growing up to maturity, it will be possible for the child to see how that math is progressing. Also, there is this subject called Social Studies. It is important, because it talks about a family, the types of houses that people built. So the child gets to know their house and those of others, while noting the differences that are there. All these plus the others my colleagues said, will be helpful to the child. (S-FGD-NYAM-S-NYAM)

Industrialist...There should be proper focus on the ECD level because the first 6 years of a child are very crucial for a child's development and their foundation is really important for any child later on when they go to primary and secondary (MAN-IND-BAR)

Industrialist...ningewahimizawatotowafundishwe at least kwalughaya mama. Mother tongue nimzuri. Mtotowakatinimdogozaidi, hizimaclasszachini, lower classes, nursery na standard one.... Kingeresahafahamukituganianasema...kingeresakijebaadaye. (CEO-IND-GAR)

Industrialist...pot making is thriving but there is no pot making in school so connecting to that reality so that at least someone sees the real issues in the ground connected to education. (MAN-IND-KAK)

Industrialist...The child should ... be able to read and if you give an exam they should be able to take it and pass...(MAN-IND-NYA)

Industrialist...we need to identify who is better mentally to proceed with some of these learning aspects up there. Because you find a person who is art oriented, is able to do a few things through art so they should also find a way of making a form four of their own so that form four doesn't mean mathematics, but means mathematics, science and physics and whatever. Form four that also means pot making, dress making and something of that kind...So that everyone will be able to achieve their personal potential rather than the kind of straight jacket (MAN-IND-KAK)

Parent: To add on to that, the backbone of any school is the base of preschool education. That is the beginning. .. When you go down the level of kindergarten that is where you see the child's talent. However, we harass children at the lower levels and by doing so we only make things worse. This is because some of them end up dropping out of school because they did not see their talent in education. those talented in math and place them where they are best suited, another may be a good football player, another gymnast; this is where their talents can be seen. From there, in classes 1, 2 and 3 a child may be taken and each child is taught this and that which will enable him/her to be a useful member of society. .. we urge our government to put an emphasis on early childhood education. The teachers of ECD should also be considered and the government should look into their salaries and employ them just like any other teachers. In some cases, some children miss school and only the older ones attend school because here the ECD teachers are paid by the parents. Once we do this, our education system in Kenya will change and we will be like other countries. If a child is good in math, then he should take math, if he is a driver, then he should go in that direction and likewise. (PA-FGD-SENP-NYM)

At the ECD level respondents expressed the need for writing letters of the Alphabet, numeracy social studies, life skills like dressing, spiritual nourishment/Religion, role play, modeling, singing, and dancing, respect for others, honesty, listening, discipline and sharing. They also

indicated that learners should be equipped with basic foundational skills such as Mother Tongue, awareness of the environment, culture and moral values.

Parent: let this child be taught mathematics i.e. counting as well as mother tongue (PA-FGD-DRUP-NRB)

Parent: ...they need to understand their home language before learning other languages. (PA-FGD- DRUP-NRB)

At this level, some participants noted that children should be taught how to make things using clay, colour, paint, sort things, learn songs and sing, story-telling, and write one's name,

Parent: ... these children used to be taught how to make things using clay. They would be able to make even alphabet using the clay. They would mould cows, dogs etc. but today this is not practiced so much. They only use charts. (PA-FGD-UNOAP –MAK)

Parent: ...colouring and painting, they should be able to model and model clay from materials from items such as sport and model clay from animals, they should be able to be sorting things in terms of sizes, shapes and colour. (PA-FGD)

Parent: Basic foundational skills should be taught, also mother tongue should be taught and awareness about environment, culture and moral values. (PFG-ST. JOSE-BUNG)

Parent:Kuandika...naKusomeamwenyewe..(PA-LIKP-LK)

PA:Mtotoanapelekwa pole polendiyoawezekushika, sounds, na,...Sasaukimwonyeshakucholaatawezakuelewa, naakisomailekituanataka soma akimalizanihii, kwasababusisitunaambiawatotoweweunapendakuchezanahujuihiyoni talent yakenaikifungiwahaitamzaidia... (PA-LIKP-LK)

Some participants indicated that learners at this level should be taught how to read and write and some psychomotor skills related to holding the pen and shaping of letters.

Parent: They should taught these small kids how to write and read, ...still young they do not know even how to handle the pens so the teacher is forced to show them, how to write ,how to shape letters on line e.g on exercise books you know there are some lines so they follow the lines and shape letters (PL-CHEBP-UG)

Parent: I think by time the child leaves ECD he should be able at least be able to write simple words. Even if is a word with three or four letters... even he/she knows how to write their names (PA-FGD-MALP-SAM)

Participants were of the view that by the end of this level children are able to read, write, count and memorize the letters of the alphabet, pronounce words and sounds correctly. sort, record, paint and socialize. One should also be able to perform certain tasks by oneself such as washing one's clothes and bathing.

Parent: ...he/she should know this is my father and this my mother, to be able to count from one up to a hundred, to know how to say A - Z this knowledge will help the child to move from where he/she was to the light... able to wash self, to wash her/his clothes, the Nursery class is where the foundation is, he/she should know Maths and all the letters of alphabet. She/he should be one who knows what he/she is doing (PA-FGD- MAKWP –KWA)

Parent: ... distinguished numbers, alphabets, they should be able to match, sort, read, record, reading, writing, paint, record and socializing with other learners... (PA KamoP –MAN)

Parent: Pre-primary, we expect them to be able to read some words, simple words and maybe they can make simple statements or a simple sentence, know a bit of arithmetic; be able to add 15+10 this kind of thing.(PA-FGD-TONP-NYM)

Parent: In ECD the child should be taught modeling because we know that is one stage in life. And there are places, if you go to town schools: there are places I went and found children in upper primary modeling. They had passed this stage and this should be taught in ECD level. Then they should be taught to differentiate letters because others, instead of reading 'sha' they read 'sa'. So the child needs to be taught 'la', 'ra', he finds it the same. You find the child in class three but still he cannot differentiate between 'la' and 'ra'. This stage is when the child should be taught pronunciation of letters.

A number of respondents stressed the importance of the child to know about his/her home environment first.

Parent: pre-unit, he/she starts learning with the surrounding environment. The environment is the first thing that child starts to learn about; what surrounds him/her. So for him/her to understand more, she must understand the home where s/he comes from. That is the first environment. After that then the neighbours; who are my neighbours. That is pre-unit. Who is my father? Who is my mother? Who is my uncle? After that he/she proceeds.(PA-FGD-TONP-NYM)

Parent :.... Their teachers need to know how they will teach the children how to know themselves, how to use the toilet; ... Even things like how to bathe and eat. This also includes working; and that is why these children should be allowed to dirty themselves completely so that they can learn how to work with their hands. Things like running, playing, singing and dancing; ... At this point is where they should be told this is what is bad and this is what is good; ... Moreover, this is where their behavior is nurtured and this is where they start to learn things to do with God. At this level they should be taught that there is a place called heaven where we shall stay forever. All these things are made known. Kindergarten is the foundation of everything.(PA-FGD-SENP-NYM)

Parent: At this level is where they are also taught how plants grow and why it grows in a certain way. This is where they are very inquisitive to the point of asking, this God, how big is He? In the same way, they may ask about the plant, how big it grows and you must also tell them why it bends towards sunlight so that they may understand.(PA-FGD-SENP-NYM)

7.5 NURTURING TALENTS

7.5.1 Identification of Talents

Respondents pointed out the need to identify and nurture talents from the earliest age.

Respondent: on the issue of talents we need to identify talents from when the child is as young as five years. If you look at a five year old child you may be able to know what he or she might do in life. You will be able to identify if he is a runner, a footballer. So maybe you need to identify the talents from a very young age and nurture them for that person to become what he or she wants to be in life (MECH-INF-MUR)

Respondent; we identify them early; we develop them early so that by the time they leave class eight they will have creativity.... (MEC –INFO-NAR)

The identification of talents was reported to be a responsibility of both the parents and teachers. The parents should monitor their children in order to identify what they are good at from an early age.

Respondent...For me I think the ... the major backbone lies with the parents in the first place...because they are supposed to monitor their children, which talents they have... in early childhood... then pass the information to the right teacher who is in that line (**WEL-INF-NAR**)

Respondent; As a mother, when do you know that your child has a talent? As a mother I will know there is a talent when the child starts playing the ball, starts singing, modeling.... (**MEC –INFO-NAR**)

Respondent:Ukiwanyumbanikwako,watotowako...atakamaukonawawili, watatu...ukiwaangaliaunaonahuyuanafanya mambo kama mechanic, engineer amanidaktari, huyuni driver, ni pilot...yaani vile unaona motto wakoakikua. Lakini, vile unamuona, hakunawazo linguine Zaidi yahapounatakiwakumuelekezakwahiyonjiaumeona. Ni rahisisanaku-identify talent ya motto.

(When you are at home, it is possible to identify the kind of talent any of your children may be having. some could have potential in mechanics, engineering, medical field, driving, or even piloting. so it is your duty to help the child pursue the area they seem gifted in. it is very easy to identify the talent of a child.) (**HOT-INF-NAR**)

Respondent:Nawaalimupiani watu wamefundishwa. Haopianiwazazi. Wanaweza-identify huyumtoto, talent yakeniflani. Sasawapangwekulinganana talents, wanafundishwamasomoyakawaida, napiawanapelekwakufundishwakulinganana talent ileimeonekananahaowatoto.

(Teachers are well trained and they are also parents. they can be able to identify the talent in individual children. so the learners can be grouped according to talent areas and nurtured in this area even as they pursue the core curriculum alongside this). (**HOT-INF-NAR**).

Other platforms proposed for talents identification include: annual Science Congress, Games, Arts, Drama and Music Festival, clubs, conferences, sports and games, excursions, field trips exhibitions, Career talks and open days, Student service and attachments, Student mentoring and Student councils. Use of mentors, Teacher/staff nomination, peer nomination, parental information, using community resources and exposure to various activities.

It was further noted that talents can be identified in different settings such as the school, Religious Institutions and at home where the family members can identify unusual abilities in children. In addition, respondents also proposed that the following methods be used in identification of talents.

This is evidenced by the following from a respondent.

Practitioners must be actively involved in the identification of talents at all levels and in all relevant fields. Physical activities, Community service, spiritual activities, arts and crafts, and creative arts are all areas that include search for talents. (**KCCB-RI**).

Other methods of identifying talents which were proposed include: provision of a wide curriculum in the formative years of education; provision of a variety of opportunities for the children to explore; encouraging creation and participation in co-curricular activities; encouraging tolerance and support for petty interests in children; encouraging teachers to have personal interest in learners lives; continuous assessment and exposure to other extra curricula activities.

Parents, teachers and learners can also identify talent.

Industrialist...it may be the student himself, the parents or even the teacher. These can identify the line of this child. But we keep on pumping in them content without caring. And even when we look at some of the things that are taught, they are never applied anywhere in life.(MAN-IND-MAK)

7.5.2 Nurturing Talents

It was also noted that the learners should be provided with career guidance so that they can link the process of talent identification and development to the school experience. The respondent further recommended that clubs be expanded. They further proposed that career guidance departments be tasked with the responsibility of creating pathways for talented individuals to build careers out of their talents.

It was further reported that currently, talent opportunities are limited to drama, music and sports. These alone do not cover the full range of talents that can be developed and exploited in school. It was suggested that the curriculum should broaden or create more opportunities for talents to be showcased and developed. Proposals were also put forth that a repository of ideas and innovations be built. The repository would contain a collection of learners' ideas while expressing their creativity in areas such as science and arts. It equally serve as a pool for interested actors (such as private sector, foundations etc) to pick from and help students develop/nurture innovations.

7.5.3 Mainstreaming Co-Curricular Activities

Respondents proposed that Co-curricular activities should be mainstreamed and made a part of the learners' daily learning experiences. In the same way schools offer swimming as part of the daily timetable scheduling, other activities which could be relegated to clubs should be

incorporated into the main school timetable. Music and Art should not just be club activities but should be taught as part of the curriculum.

In teacher training colleges, the respondents suggested that teacher trainees be imparted with skills on talent nurturing and development. They should also be taught how to appraise and evaluate students' talent development.

Education should create a demand for talents and skills. Initiatives such as talent focused institutions and academies, talent scholarships and media focus on talent achievements should motivate learners to explore and develop their talents and motivate education institutions and its leaders to create opportunities to nurture these talents.

Counties should create education strategies that take advantage of their regional strengths to attract talent to their areas and create opportunities to develop them. For example, schools in and around Iten should attract sports talents and Governors should offer talent scholarships and create career pathways that strengthen the county's standing, and exchange programs should be set up to maximize learners' exposure.

7.5.5 Types of Talents

Respondents identified different talent areas to be nurtured. These talents include visual and performing arts, culinary arts, sports, pottery, Fine Art, music, drama among others. This is evidenced in the following responses:

Respondent: Talents like... music also should be taught at an early stage in schools...I think there many talents but for me are talent for me I just want ports...drawing...(CARW-INF-UG).

Respondents: Example is singing. Those with singing talents should be helped to develop them.
(SHOP- INF-NYE)

Respondent...ainatofautitofautiyamchezo, basketball, football, marathon
nahizizinginehizizakurusharusha,mpila...(Different types of sports i.e. basketball, football, marathon and netball) (MEC-INF-UG)

Respondent:--talents,--- Sports, music, craft, pottery, debates, comedy, Agriculture (META -INF-BUS)

Respondent; anaanzakuundanyunguyakonaanaekahapo,kunamtuakonakipawayakuchongambao

anaanzakuundanyunguyakonaanaekahapo,kunamtuakonakipawaYakuchongambao (Someone can make pots, someone else can be gifted in carpentry) (MEC-INF-UG)

The responses of different participants show an agreement on the different talents that learners may have. They pointed out that after identifying the talents, there is need to nurture them lest they are lost.

Respondent ... I would like to add that when we were young in school we had defined talents in that we were known what we individually likes and we were helped to develop the talents that we had rather than stressing on books where you aren't good. You start nurturing what you're good at from the school level (CAP-INF-LAM)

Respondents suggested that the government should set up talent academies to help nurture varied talents in learners.

Respondents: Maybe we need to set up institutions because not every child is bright with books. So maybe if we set up like football institutions, the main thing in that institution is football though the child will still learn like languages and how to communicate but above all the institution should be there to nurture talent (MECH-INF-MUR)

The respondents suggested that learners should engage in practicing what they are good at.

Respondent; unawaambiawafanyemazoezizaidikamawanajuawakona talent Fulani,
kamanikukiambiaendakwauwanjakimbiakamaniyakuchezampirachukuampirandiohii,alafuwafanye more
practise...(They should do more practice if it is athletics or playing football) (MEC-INF-UG)

Respondent; the Indians when somebody is young, they are given his talent in hand- work so he can make the toy hands and whatever and they sell these things and they are earning from these things.... (MEC -INFO-NAR)

Respondent:...giving children opportunities to practice different things in school,-----teachers have clubs in sports, athletics and run them well. (META -INF-BUS)

Respondent:...Expose them to many things by practical exposure or through wide reading habits (QUAR-INF-MAC)

A respondent noted that parents and teachers can nurture talents by supporting the children and making a follow-up even in school to ensure that there are practical activities that will help promote that talent. Parents also can support their children by providing the necessary resources that can help in nurturing their talents.

Respondent:...Kitumojanikumuungamkonondionimsaidie.

Kituyapilininimkalishechinimuulizekamahiikituumeonakamaikondaniyako? Akikubaliikondaniyake, mimimwenyewenimuugemkonokamanishuleahiyokituikoshuletiliamkazokwahiyokituunatakakufanya. (The first thing is to support him or her so that I can help him. The next thing is to ask him or her if that in deed is their talent. If it is, then I should support him even in school if the talent is offered there). **(BUT-INF-KAJ)**

A respondent suggested that learners should have some free time so that those with special talents can be identified.

Respondent: in terms of sports an early age... the school should offer them morale to develop ,offering part-time free time so that they can select those students who have the special talent insports **(CARW- INF-UG).**

7.5.6 Other Suggestions on Nurturing Talents.

Several suggestions were put forward by respondents on how to nurture talents. These include; provision of adequate resources such as talent academies; creation of incubation centres for innovations; promotion of healthy competition and reward systems ;fair evaluation and appraisal systems provision of a balanced curriculum; rewarding gifted children; offering a market driven curriculum for sports and creative arts ;establishment of talent academies in every county; Talent scouts to identify learners with talents; Schools exhibitions in science, handcrafts, IT, sports , games, music and drama; training talent assessors and trainers; institutionalization of career guidance and counseling; building linkages between industries and school.

PEDAGOGICAL APPROACHES

7.6.1 Practical and Technology Based Learning

Respondents suggested that practical and technology based learning be encouraged to enhance learning and nurture talents.

Respondent: ... giving them more practical lessons, apart from theory ...and also if they improve technology so that those children...technology I think will also help them develop their talent in more efficient **(CARW-INF-UG).**

Respondent: Vile vilehatawaleohuwanajaribukitulakiniingekuawakatiuletunaifanya practical ingekuamzurizaidi. Kwa vile ingesaidia yule mtotokwa vile hiyokituingekuwakwa kichwayangu.

(If those days we had done practicals, it would have been good since it would have helped a learner as the skills would have been learnt very well.) **(BUT-INF-KAL)**

The respondents proposed diversified way of learning such as peer learning, modelling, use of pictures, role play, demonstrations, debates, projects, field work and practical system to be in schools as some of pedagogical approaches to be used and strengthened at this level

Industrialist...more of a practical kind of environment for learning and a diversified way of learning is needed... that's what is lacking currently... identify who is interested in what at an early stage and then help them further thus helping us to explore the potential of the learners in that particular direction. (MAN-IND-KAK)

The key informants expressed the need for teachers to be more professional and up to date with current information and make learning fun and learner centered.

KI... Lets talk about classroom environment, the teacher is supposed to enter in classroom, I think the structure is very clear, using that scheme of work, lesson plans, but the problem is how to deliver, on structured lessons, and here it comes about because most of the time if the teacher doesn't have the objective to deliver he may not know what is not getting out on the lesson, so the approach should be they normally call it, it can be participatory within the content, where the teachers know what the students have not learnt from the previous lesson, it has to be more of the children enquiring from the teacher, than the teacher enquiring but how does the child enquire if you don't give them the task, and you just talk (**KI-UNESCO-NAI**)

Respondents proposed learner centered approaches to teaching as they liberate the learner. They posited that good approaches are those that encourage creativity and are interactive in nature.

KI:I would give a very broad answer and say anything that liberates the learner Approaches that are discursive, dialogic, anything that is interactive, where there is actual interaction not you know for most of our teachers interaction is something like ask a question and the student answers. There is no interaction there..... It calls for creativity on the part of the teacher and it calls for inventiveness..... Then they also need capacity to some kind of reflexivity (**CEB – DR. CHARLES NYANDIGIRISI - NYAMIRA**)

KI: Encourage creativity and activities that they perform. Allow them to participate where they want to. The moment creativity is encouraged in children am telling you they would come with different ideas that you didn't imagine they have at the back of their mind. (**KI-CEB-MIG**).

It was suggested that group activities performed at school can help a teacher to group or regroup children according to their talents. This however happens in a conducive environment where the teacher is cordial to them. A hostile environment inhibits children and this makes it difficult for the teacher to understand the learners.

KI: But if they are given the freedom for creativity when it is time for example P.E. and there is something you want to gauge give them the freedom, it will come up. Teachers should be in a position to be able to know when to do so that they can gauge well. (**KI-CEB-MIG**).

It was also observed that in a competency based curriculum, pedagogical skills should be practical and not those which facilitate rote learning. This is indicated by the following response.

KI: In competency based education we have to develop critical thinking. So that the learners are taught to internalize, think about issues, evaluate and be able to... those are some of the methods that the teacher trainees in this curriculum they can prepare teachers to deliver the curriculum the way it is intended to be. **(KI-TSC-NAI)**

Respondents strongly felt that teaching should be as practical as possible so that the teacher only guides the learner; that is, the children do more. The teacher has to create curiosity to the part of the learner so that the learners can discover the knowledge as much as possible. They said pedagogical approaches should differ according to levels. However, at ECDE the approaches should be child friendly, considering that it is the formative stage of the child that requires more play and humour, to get them interested in school. They also said that at this level they do better using interactive visuals and actively participating in learning. Respondents said that teachers should be competent in the use of information technology. They should also be well versed with the legal and regulatory frameworks in education. Internship for teachers was proposed.

Respondents further proposed that small classes which are overcrowded would make it difficult for teachers to diagnose the strengths and weaknesses in learners.

KI: Teachers should turn around the thinking of the children as the child is as good as what the teacher makes them to be **(KI-CES- BUS)**

A number of respondents proposed additional pedagogical approaches such as peer learning, demonstrations, modelling, exploratory/discovery methods, Field Studies, songs, dance, recitals Participatory learning and learning through role play. They however cautioned that children enjoy learning through play and therefore teachers should limit the use of the lecture method.

KI :Respondent: Letting children do things their own, I mean like research one I talked about and letting children go and research in their own like get a manila paper go and draw a plant involving children not just from the teacher involving the children **(KI HET NAI)** .

KI: even within the country for our students and pupils to see for example what is happening at Webuye paper mill, people from Mandera coming to Sony sugar so that they see that the sugar we take can also be made locally from our place and that in itself would even make them embrace Agriculture as a subject. They'd see the value that Agriculture adds to education **(KI-CEB-MIG).**

KI: making the children do something and taking them out for field studies and all that, going to this place called arboretum during science lesson I take my kids to arboretum I can tell them look at insects so that when I come to class instead of talking about an insect and a child is getting what insect is they can say this is a grasshopper, it has wings, it has six legs. Children look seeing, when they see they remember **(KI-HET-NAI).**

KI. ...We want education that allow students to participate, more students participatory and one of our approach...is lesson plan that student centered, you prepare a lesson plan oriented and they participate more, rather than rushing, lets not just rush to do that but I think how much skills have they developed that every time, every topic we want to develop, and we will be keen in what they have achieved..(KI-CEMASTEANAI)

KI .. Student centred approach for ownership and gender responsive approaches are important. Ways such as drama to be used, talking walls, noticeboards and trees. Practices in using local environment materials and resources should be considered. Use of songs and play. Use of approaches equivalent to Nyumba KUMI initiative. The textbooks should encourage both gender (pedagogy should be gender sensitive). (KI-FAWE-NAI)

KI-The children in their early stages of life should use role plays, songs dance and recitals. (KI-NCC-NAI)

KI:Look at our school, the dilapidated broken down, with no play areas and yet children learn more through playing. Look at me playing this is a dice and believe me this is just to teach a bible verse. Why we gonaplayin class what does a child forget that am in class ...time. They will learn so much more from that life as opposed to me standing there and telling them the bible says, you understand?? (KI CITAM NRB)

KI:Groups work better when students are at school. But individually, homework or takeaway homework will work better. . (KI-CEB-MIG).

KI:The method of grouping the most bright together and the moderate together would not be the best in class. The best method to teach would be mixing the students in class. Of course. You as a teacher you know Okel is brighter or is the most slow learner. The best is to go and put her/him next to the most bright one so that that one can also assist in their discussion maybe in their home work. . (KI-CEB-MIG).

RESOURCES

Resources are important in the learning process and the respondents were required to suggest learning and teaching resources in order for the education to be successful. The respondents expressed the need to provide enough learning resources which include human resources. One of the respondents expressed the need for provision of enough teachers instead of free education. It was further noted that it is critical to provide well trained teachers and ensure that they receive continuous and regular in-service

Industrialist...Elimuinaharibikakwasababuyaukosefuwawalimu. Mimi ningesemabadala yah hii free education, ilepesakidogowananchiwalikuwawanalipa, afadhaliwalipewailimuwakutosha(**CEO-IND-GAR**)

Industrialist...tuwenawatuambaowaowanaweza kuwafundisha...ambao wana ujuzi wakufundisha... (**CEO-IND-GAR**)

Industrialist...Inservice. Hiyoinserviceiangaliwe... Kila term kilamwaka hiyo training iweinaendelea...(**CEO-IND-GAR**)

Respondents expressed the concern that Education Standard and quality Assurance officers should be effective in ensuring that teachers use teaching and learning resources to facilitate teaching and learning process.They also underscored the importance of teaching and learning

materials in ECDE and suggested that the community members should be involved in the development of the materials

Industrialist...Kwasababu school inspector...Anakaandaniyadarasa, anaangaliawalimu vile anafundisha, anaangaliawototo vile anasoma...anaangaliakitabu cha mwalimuamejitayarisha,mambonyingiyalikawayanatengenezwahapo. Lakinisikuhizihakuna. **(CEO-IND-GAR)**

KI.. teaching aids local materials like I went to a certain world vision office down country they have developed local materials reading materials for the children and the community itself they have improvised materials that really help those small kids in the ECD level to learn more so I think that local materials should be developed at the ECD at that level. **(KI – WV - SAMB)**

The respondent advocated for equity in resource allocation to schools to afford every learner the same learning opportunity and so that the graduates are able to compete competitively on the same level in the job market.

KI...social aspect, I'll talk of equity in politics first in Kenya for example we have schools that are marginalized, we have schools that are private and they are rich in facility and we still expect that these students will compete in the same opportunities and the same things that the society offers and so if we look at these developed schools they have enough resources and support and these schools that are in marginalized areas you find that they go for an exam when they've never seen a lab or any facility. For the education sector to grow we have to empower marginalized schools. **(KI-FGD-PWN)**

7.7.1 Play materials

The respondents emphasized the importance of play materials especially for the ECDE learners to nurture talents.

KI. .Need more of playing materials in early grades (ECD –primary) e.g. music. Mostly provide necessary materials to nurture talents. A subject like former handwork needs to be introduced, this subject should be introduced in primary to encourage learners to like maths by using numbers, or blocks to build a house so that a child learns that maths in about playing with numbers. This helps learners develop positive attitude towards the subject. . **(KI – CEC - BUN).**

7.7.2 Physical Facilities

The respondents expressed the need for a conducive learning environment for learners in primary schools especially the school infrastructure

KI...preparedness in the provision of the vital infrastructure it can be a classroom, a computer lab, computers themselves...provision of power maintenance framework **(KI-CA-NAI)**

KI.. universal service fund whose main objective is to facilitate development of ICT infrastructure in places where there are gaps across the country... that fund will focus on is on education to create infrastructure to enable schools

to be prepared to deliver electronic content. Government ..connecting power to all schools.. county government also need to inject resources in provision of that infrastructure . (**KI-CA-NAI**)

The respondents advocated for the establishment of computer laboratories and provision of computers so that ICT can be taught successfully.

KI...If we want to say the about the computers, a computers as a resource, computer laboratory is very important in primary level now that we are agreeing that ICT should be taught as a subject. (KI-SCDE-SAM)

The respondents maintained that it is impossible to talk about resources before internalising what the syllabus entails. However they outlined the various categories of resources in relation to teachers, financial and infrastructural resources.

KI.. .What you need is financial resources, well trained teachers i.e. up to date teachers, relevant physical resources depending on the curriculum, up to date resources in place, printed materials i.e. textbooks depending on the syllabus, upgraded library at all levels. (**KI – CBE – SIA**)

The respondents suggested the following resources as key in media, library, modern facility computer, proper editing suites, video cameras, better environment for learning with ample space, isolated from noise pollution.

KI... You may need very good library, you need modern facility computers,for example if you are in media you need proper editing suites, you needstudios, you know you need cameras you needsteel cameras, you need video cameras, and then you needProper skills in terms of use of computers and designing desktop desktop kind of skills you know so that people can beable to do desktop publishing and all that and ... more importantly also you need some better environment for learning with ample space well aerated, clean space, isolated from the pubs, the markets,(**KI- MCK-NAI**).

KI.. the government should consider the marginalized areas receiving we have great schools in Nairobi and other urban areas but when we go in the low marginalized areas we find that they don't have labs there are students who have gone from form one to form four they are learning about burnsen burners in schools they have KCSE and they have never seen a bunsen burner and chemicals so that that's what I think (**KI STU KAU**).

KI...physical resources we try as much as possible not to crowd very many students in one class so that the teacher can be very effective in delivering the curriculum to the limited number of learners. Physical resources here we are also saying that it is good that we can try to pull up to ensure that at least we have standard physical resources that will accommodate the learner to feel, to appreciate the learning environment(KI-TCDE-NYA)

The respondents indicated that some of the resources required to implement a competency based curriculum include laboratories both for sciences and languages, print materials, quality teachers and ICT and workshops, enough classrooms and play fields. The institutions should be provided

with a very wide and diverse resource based on available means, locally relevant and without and the issue of shortage of teachers be addressed. The learners should also be provided with play materials

KI...It's more cumbersome in secondary school than in primary school where subjects like biology, physics are compulsory so already I know the government is chipping in but sometimes need to be done particularly for the new schools because otherwise our students are not getting equal attention when it comes to other subjects like sciences, even computers. It is theory sometimes when we talk of all secondary schools having electricity they don't have some don't have. **(KI-CEB-MIG)**

7.7.2.1 Teachers Advisory Centres and Libraries

Key informants expressed the need to establish sub-county libraries, revive teachers Advisory centres to help equip teachers with skills

KI.. .. We require library in county-sub-county level where children can access the materials, we also need to revise teaching advisory centre, where we had teaching learning aids were being developed, and teachers in zone can go there and get and share them as a zone... offices to support teachers in curriculum issues. **(KI-CDE-KIT)**

7.7.2.2 Locally Available Materials That Promote Our Culture

Key informants pointed out the need to expose learners to both local and international curriculum materials that relate to areas of interest in our country such as culture, patriotism and even legends. There was emphasis on using the immediate environment for teaching and learning.

KI..learning resources will be guided by the content of the curriculum ..have main course books which are helping the teacher to teach in class ...need to have supplementary materials that are beyond the national level..materials which give a global perspective, which goes beyond your own country it is good to expose the children to resource materials that are not within the country context.. other materials that looks at culture and patriotism, even the material that engage on legends ..children are really exposed to variety of materials,,KI-UNESCO-NAI)

.... Features in the community or we want to learn about the life skills practically so instead of telling them in learning giving theoretically to learners you can take them and let them seek for themselves in the community because the community is available (**KI STU KAU**)

Respondents expressed the need for use of learning materials which are relevant to the local needs. They noted that most of the ECDE reference materials are imported from other countries.

Clear guidelines on textbook since in a subject there are various books written by different authors hence confusing the children.

KI...we need to see how we can even review the book that are sometimes recommended for the students and the pupils to read right now as the industry even people are concerned that even the language is a problem so that means something should be done how is language languages being taught in schools **(KE- CKUJ- NAI)**

7.7.2.3Computers

In the digital era ,respondents expressed the need to provide learners computers and laptops which have multi-media capability, the ability to take pictures, the ability to take a video and the ability to record sound in order for them to create and share own content.The respondents proposed the need for computers.Incorporating more innovative resources such as ICT which make learning more interesting and enhance retention of learnt concepts.

KI...Last week I opened a workshop in Meru about tusomeTAC tutors teachers using this gadget I don't know whether you have seen it.... where a TAC tutor is able to monitor a lesson and this is the in thing and that is why I keep on saying this is the way to go this is a flight and the children are able to.... to read .. **(KI CDE LAI).**

KI.. One of the resources that we need is the computers now that we are in the world that is growing in terms of technology, computers are an essential resource that is needed **(KI STU KAU)**

KI... I would focus on the buildings, outdoor equipment, learning resources likemore innovative resources like ICT Counselors in school to assist in the issue of moral values and spiritual development. **(KI-CEE-KWA)**

KI...The learner acquires 11% from listening and 70% from visuals. Where the learner is involved the learner uses all the six senses. Some of the materials needed can be bought or made locally...In ECDE teachers are trained to make materials. They use sacks to make materials and children enjoy learning using the materials. Where aviation is taken a skeleton of a plane will be required, where engineering is taken they require a skeleton of a vehicle which can be used for a very long time. **(KI-MCDE-KAK)**

E-platforms or online platforms and text books were identified as key resources that should be provided to improve learning in schools. The respondents recommended provision of adequate and relevant materials that promote a child's talents. Teaching learning materials should be appropriate, interesting and responsive to the local environment.

It was strongly indicated by a respondent that government and the community should provide textbooks to learners. It was further indicated that the move to introduce ICT in schools is a very noble idea especially in this era of globalization. However it should not be done on a crisis mode but adequate preparations should be done.

KI..You see some schools without desks, some schools even without classrooms, And then you are talking about IT. We are going to increase the gap between those who have and those who haven't (KI-KNEC-NAI).

Respondents proposed the need to come up with visual resources for various learning areas and establish an institution at County level to develop these resources

KI... We need to develop teaching/learning resources like CEMASTE is doing. We need the visual resources. Come up with an institution to develop the resources even at county level. (KI TCDE-BUS)

7.7.2.4 Tools and equipment, materials and facilities

The key informants expressed the need for a conducive learning environment for learners in primary schools especially the school infrastructure

KI.. .. unakuta class 1 and 2 hazinamlangonadirisa, ukiendahuko, unakutaanakwambia unajuanilikuwanimetengenezahiyo curtain nahakuwaametengenezanawanyamawakaharibu, na hakuwaametengeneza, but you are giving excuse because you have not put the doors, so they should be secured. Kuna other environment that is not conducive they are supposed to match nursery and the lower primary which I believe was a very good option, because hiyo area, that time was huyo motto anakuwa moulded. .. (KI-CDE-MAK)

KI.. We need the funding especially for infrastructures in primary school.. (KI-CDE-KIT)

KI..the important thing like a sport centre and here we have children doing variety of sports that is important and the only limitation in our country is that we may not build it across the whole country we may only have a few schools with those equipment..(KI-UNESCO-NAI)

KI-if students are doing sciences they may require labs so that they are able to undertake practical in carrying out experiment. adequate number of teachers and their respective subjects. ...and of course the general working environment (KI-IED-NAI)

KI.. Facilities for example, room, ...there is a child doesn't even has classroom, the environment is not conducive, there needs to be that classroom, it needs to have enough space then all other....girls do not go to school when they have their menstrual periods because of the kind of toiletsso that environment may not just mean on classroom.... yes the classroom is important enough desk ... (KI-KNHCR-NAI)

KI.. Laboratories, trained teachers, teaching materials like books and teaching equipment for practical subjects. (KI-TCD-GAR)

Respondents mentioned several resources such as computer tables, demonstration workshop, Science kits, drama academies. better equipped laboratories, libraries ,relevant books; language laboratories, media suites and filming studios with related quality equipment as being necessary for the implementation of ECDE curriculum. They further proposed the sharing of infrastructure

among neighbouring schools and establishment income generating programmes in schools to help finance education.

7.7.3 Teachers

Teachers who are well trained, regularly in serviced and motivated as well as high speed broad internet broad were identified as being necessary in order to implement the 21st century skills. Trained counsellors should be brought on board in schools to assist in addressing moral values and spiritual development of learners. In arid and semi-arid areas lack of teachers, lack of commitment from parents and poor facilities were noted as compounding learning achievement.

KI..I propose here that the most important resource is first of all of the teacher and that's why we are still insisting that number one teachers should be motivated from the word go. We are not so much talking about money but we are saying we should try to identify the right person who should be a teacher from the word go with or without what we may call a package teachers who would actually take teaching as there career as their profession (KI-TCDE-NYA)

KI.. .. Another issue is because of lack of teachers and poor facilities, 38% in the schools are not also performing properly, so the parents are not seeing that the one we have taken to school and are not doing anything and they are coming back after dropping out of school so what is then use of taking more to school so that they fail after 8 years so this is a biggest problem that is there...(KI-CDE-GAR)

KI...This needs funding, development of human resources and changing curriculum. We need the human resource, even time is also there as a resource. (KI-TCDE-KAK)

7.7.4 Financial

The respondents suggested the need for financial resources.They acknowledged the pre-eminence of finance, because finance is key to provision of teaching and learning resources. It was however apparent that the utilization of finances in the institutions was paramount to the availability of resources. Respondents stressed on application of sound financial management practices.

KI ..one of the main resources ..you know resources both financial and human these are two resources we require most, because for you even to develop human capacity you need money to train the teacher, you need money to put up infrastructure, so we need both human and financial resources, and in that sense what we are saying the government should put more money to education in the counties because I have noted that the Serem commission has allocated more money, to the education sector whereby now the county government will not only be basically involved in the early childhood training but will also be involved to improve the infrastructure both secondary and primary .(KI-CDE-GAR)

Respondents indicated that economically, the funding disbursed to schools is inadequate because they cannot sustain children from poor backgrounds.. They said due to household poverty, parents may not supplement what the government provides. They observed that children learn in impoverished classrooms and very difficult environments yet they have to compete with those learning under conducive environments. Consequently, the issue of the funds has to be addressed.

Respondents noted that good infrastructure especially sanitation facilities, ICT and feeding programmes are critical for quality education to be realized.

KI..Those children must.....you know during those day there was maziwayanyayo .How I wish that maziwayauhuru could come up to may be standard 3.(KI-CEE-KAK)

7.8 ASSESSMENT MODES

Respondents pointed out that assessment of learners was important in order for the teacher to gauge whether learners have understood the concepts taught. Assessment of learning was also viewed as one of the ways of identifying different potentials in learners.

Respondents ... the performance of children at different levels of competition is very important because along the same line you may realize this child can stand to represent Kenya in different levels ... (CAP-INF-LAM)

Respondent: There's nothing bad with the exams. However, for public schools, they do not compete favorably like their counterparts in private schools. The way I look at it, head teachers are to blame for non-effective monitoring of teachers' class attendance. Other officials should check on performance of schools generally (MAIZ-INF-NYAM)

Observation as a method of assessment was strongly recommended for ECDE learners.

Respondents indicated that learners at ECDE level should not be subjected to examinations rather they should be offered a conducive learning environment with relevant resources where they can be observed by teachers

KI.. .. and there should be no exam from ECD to class 1, akiingia, there is a good environment, nature corner, the garden, environmental corner, which our teachers have neglected, wanasema, unfortunately, the environment might not be conducive.,. (KI-CDE-MAK)

Parent: through observation in ECD chenyeamefanya(PA-FGD-S-KAJ)

A respondent observed that children in nursery should be given homework and as they transit to class one, they should be tested by their teacher for placement.

Respondent: If they come from nursery, they should be tested for placement. ...It (*test*) should be given by their nursery teacher. (SHOP-INF-NYE).

The respondents are in support of continuous assessment tests, observation and projects as assessment modes at ECDE level.. They argued that individual learners learn at different pace and in different ways

Industrialist...the best kind of assessment would be the progressive assessment... The final exam normally captures some kind of a drill program. It focuses on the final lap but the one capturing step by step would be better provided its more inclusive of content. (MAN-IND-KAK)

Industrialist...apart from the national exams I would also go for continuous assessment test. There is nothing wrong with this. It will give continuous feedback. And again, the more you are taught at different classes, the more you understand the language of instruction which is very important.(MAN-IND-MAK)

Industrialist...the best way is to assess these students on what they have learnt, because students have different avenues of learning, there are some who are talented, they can memorize it in short time there are others who will take a lot of time and when they grab the information they are okay with it. What should happen is to assess progressively. For example if it is subject that the student is doing there should be a cat that the student do on the subject that they have been taught also they could put the practical aspect in that a teacher might have taught a certain lesson but he or she should be put in real life so that they try to solve the same problem in a different manner in such a way, a teacher will be able to gauge and assess if the student has go the concept or not. There should be a progressive way to test students..(CEO-RIV-UG).

Some respondents are of the opinion that using CATS will enhance comprehension of the content taught and help avoid rote learning just for the purposes of passing the examinations.

Industrialist...When you think about comprehensivity, the kind of coverage you need to test each area practically more than picking an area and testing it in the final exam. (MAN-IND-KAK)

Industrialist... There are several ways but there is one way I would personally recommend this one for doing an exam is good but it is encouraging something else like people are starting to cram exams and not really internalizing that information i would suggest because if you really want to assist this child not really teaching somebody how to cram..(CEO-IND-NYE)

CONTEMPORARY ISSUES

Respondents highlighted the following contemporary issues prevalent in the society: Drug and substance abuse, life style diseases such as High blood pressure, Diabetes and Hypertension technology, globalization, radicalisation, corruption, cheating in examination, political intolerance and responsible citizenship. In addition they indicated that curriculum need to address un-employment, terrorism and natural disasters. Pollution, communicable diseases, alcoholism and regional integration. Other pertinent issues in society that should be given serious consideration by the curriculum are; gender issues`, early marriages, HIV and AIDS, early pregnancies, Violence at family level and sexual orientation.

KI: ...issues arising from politics, religion, social disorders which should be addressed in the curriculum. If people go to church or mosque why do we have rape cases every day, robbery and yet we are a religious country. There is national cohesion, teachers need to be told what national goals are, subject objectives and objectives of education. We have problems of drugs abuse, we have rape, ethnic cleansing, in vehicles where the young cannot give way for the aged. The freedom of human rights should have limits (**KI-CEB-KAK**)

KI: So would the curriculum designers then therefore pick real issues affecting citizens and those issues become the ones addressed in the classrooms. Not just writing a form one text book, and you tell me what to do in algebra, but how does this algebra apply in my life? Yes! So that, we are not reacting, you see we had peaceful education it ended after the clashes, we had HIV it ended. So I think we, I can't pick one over the other, I think it is being able to embed our today's experiences in each of the discipline that the child is going to interact with. And that contextualized item that we gradily level, remember we did the general paper? It is examined. . (**KI-CITAM-NRB**)

KI: ...for example for me HIV and AIDS, the message should be one, that there is AIDS and if you make a mistake you will die, and that is it because people have died, despite the fact that we have so much of a, of a knowledge....there are drugs and if you misuse drugs, you will die, you have so many addicts, you see....so by now, these very many pertinent issues in this country have done some survey in land rights land is very sensitive, it becomes the centre of everybody's occupation in terms of discussion and even war and fighting, why can't we teach land rights in our, in our, curriculum. (**KI-PWA-UNI**)

KI: The ministry introduced life skills which is not taught in schools now because they feel teachers are burdened. We need to ensure life skills are taught as schools embracing it do not have issues. Other issues coming in require our curriculum to be responsive on a yearly basis. Like now we need to bring on board issues of radicalization going on in our schools. We need to include it urgently. Drug abuse though integrated has not improved, it's now in girls' schools. We need to move with the changing times. How do we prepare our children to respond to disaster? Life skills area need to be dynamic besides teachers implementing everything. I do not know whether the ministry should appoint people to go round and teach disaster preparedness because teachers have let us down. (**KI-CEC-BUN**)

7.9.1 Environment

The respondents emphasized the need for environmental conservations to be addressed by the curriculum. Learners should be made to understand their role as co-creators of the environment with God

KI: Now I am sure what you are up to is the right thing but if you would come up with that curriculum and have the implementers who are able to bring out the human nature in the children it would go without mention that they care for the environment because an integral person who is well formed automatically just sees the beauty of the environment and sees the role of God in it and his/her own role in it being a co-creator with God. So I believe the problem is concerning it still will melt down to the ministry of education. (**KI-CEB- HOM**)

KI: .. how does a child see environmental sustainability, how does he visualize environment, when he sees ground being littered, it should not be that way, then he nurture understanding that I can arrange this environment to be better and make use of that litter somewhere else, that what the children need, to become better in the society (**KI-UNESCO-NAI**)

KI: Now I am sure what you are up to is the right thing but if you would come up with that curriculum and have the implementers who are able to bring out the human nature in the children it would go without mention that they care for the environment because an integral person who is well formed automatically just sees the beauty of the environment and sees the role of God in it and his/her own role in it being a co-creator with God. So I believe the problem is concerning it still will melt down to the ministry of education. (**KI-CEB- HOM**)

7.9.2 Climatic Change

Climate change was said to be the talk of the day and for this reason it is among the contemporary issues affecting the society.

Respondent: Climate change is at the fore of most international discussions nowadays, and the consequences of this change are becoming evident every day. Students should be enlightened on this, and on measures they can internalize and do on a day to day basis so as to have an overall positive impact on climate change in the long run, e.g. they can be trained on how they can make it a habit to plant a number of trees each year. If everyone did so, the impact would be very positive. **(BUS.MAN-INF-NAI)**

Pollution

Respondents pointed out that noise pollution from bars located in the vicinity of schools as a has a negative effect on learning.

Respondents: Na hiipombe, sioetiikombalisana, ikokaribuna institutions, ikokaribunanyumbanikwetu, ikokaribunamashule. Hiyonikitupiainachangiakurudiamendeonyuma.:bar, hizi clubs zakupigakeleleana, hizo. The easy access to alcohol due the location of bars near schools and homes and noisy bars and clubs has had a negative effect on development **(HOT-INF-NAR)**

Respondent: Yeah, for example environmentally, for example ... the more industries are being developed the more pollution **(CARW-INF-UG)**.

Respondent:...I think education ... can address environment at school ok at an ECD, primary and secondary level, Kitambo in parts of cleanliness children were taught on how to keep the environment clean. That's one way. And also if students are taught more technology, technology that cannot pollute more environmentsif there is a special subject that teaches people on how to deal with environment at school level **(CARW-INF-UG)**

7.9.2 Security

Respondents pointed out that terrorism is problem that needs to be countered and the youths could be equipped with some paramilitary skills at the NYS. They also expressed the need to counter the narrative that leads the youth into joining terrorist groups

KI: ... Under the issues of counter terrorism we should have training for college instructors, in other , although it will not protect you on gun shots but the best things we are saying, the US every one is a military, because all knows how to handle a gun, so it mean those students who are finishing schools they should know how to handle weapons, and pass through NYS.. KI.. has not come out is the narrative given to the youth to the level that they want to go and explode themselves, Because when you know this type of cause effect, what causes this, remedy, you can be able to get a solution, because we have not known, why should Mohammed, go to do this, because we have seen a child abuse his father that he is nonbeliever

and needs to be killed... (KI-CDE-GAR)

KI: ...insecurity, radicalization, inter clan conflicts and terrorism are some of the most common barriers to learning in our region (KI-CCO-MAN)

The respondents observed that education in some regions has greatly been influenced by insecurity in the region. He especially singled out cattle rustling to be a major impediment to education. He suggested that peace education should be addressed in the curriculum.

KI: Yes. I think like the, our area of operation is a place that is prone to insecurity and I think, even tomorrow I have a training for the teachers and then to peace education I think you know what I have learnt watotoukitazamasahizithere is a school called amahia primary Samburuhawapelekishule that school kwasababu, because of that issue between Samburu and Pokot. The border so I think even teachers wanaogopakujakufunzahuko because they fear of their lives and also intimidation of tribes from enemies because they call them enemies. So I think peace education. (KI – WVS - SAM)

Industrialist...we have got ethnicity.You find that in a company it's only a group that is there,if it is the Abagusii,it is the Abagusii only that are there. (MAN-IND-NYM)

7.9.3 Radicalization

The respondents indicated the need for learners to have lessons on the effects of radicalization

KI:waaaaa!!!There are so many emerging issues, for example in our days there was no radicalization... we should have lessons on effects of radicalization (KI-CEE-KIL)

KI: how we should fight terrorism should also be included because Alshabab is a major problem to us and we don't know how to react the problem with the government yes they have those studies but they come only once ...I don't think we understood how we can handle when we find ourselves in those situations... (KI-STU-KAU)

KI: ...Curriculum should embrace issues to do with lightening, banditry and radicalization. Disaster management should be a subject of its own. (KI-MCDE-KAK)

7.9.5 Alcohol and drug abuse

Respondents expressed the need to have the curriculum address issues of drug and substance

abuse, smoking and moral behavior. It was also noted that it is important to have consultations between the parents, teachers on learners behaviour.

KI: .. In the past class, has not addressed the issues of competency and it is spoiling, once emerging issues that the system of education should address, because children are lost because of drugs, smoking, moral behavior, an controlled way of living. Students have been left almost alone because out of school you don't know where they are between the school and home, I think there should be a consultant between parents, teachers and students. **(KI-AIC-KIT)**

KI: ...issues arising from politics, religion, social disorders which should be addressed in the curriculum. If people go to church or mosque why do we have rape cases every day, robbery and yet we are a religious country. There is national cohesion, teachers need to be told what national goals are, subject objectives and objectives of education. We have problems of drugs abuse, we have rape, ethnic cleansing, in vehicles where the young cannot give way for the aged. The freedom of human rights should have limits **(KI-CEB-KAK)**

Respondent: Mambo menginenipombe, jamboambalonihatarisana. Ni hatarikuanziawenyekupikapombe, wenyekuza, na wale wanakunywa. Na hiipombe, sioetiikombalisana, ikokaribuna institutions, ikokaribunanyumbanikwetu, ikokaribunamashule. Hiyonikitupiainachangiakurudiamaeendeleonyuma.

(Alcohol is dangerous to the one who makes it and the consumer. it is easy to access it since it is easily accessible in most neighbourhoods of schools.) **(HOT-INF-NAR)**

Respondents...pia mambo yasigara, vitukamahizo. Na watuwanakubaliwa, atakamaniwatoto, kujiingizakwahizovitu. Unakuta motto wamiakakuminatano ,kuminasita, kuminasababadoanakunywapombe...nawatuwazimawakohapo**(HOT-INF-NAR)**.

Respondents: Alcohol is one major concern. Children are freely consuming alcohol and this will hinder our country's development **(MAIZ-INF- NYAM)**

Respondent...The drugs issues actually are a nuisance to our children thus Lamu County should be clearly checked and a number of the rape case perpetrators are the persons under drugs influence **(CAP-INF-LAM)**.

Respondent: alcohol... parents should be involved,...should work together with schools to take care of this. **(MITU-INF-NYA)**

Respondent; The father comes home drunk and makes noise to the children and fighting in the house. **(MEC -INFO-NAR)**

7.9.6 HIV and AIDs

The respondents indicated the need for learners to learn about HIV and AIDs

KI: HIV the problem with us is that we teach one thing for a year and nothing else, then suddenly stop, or forget. Like right now we talk so much about politics, we emphasize on issues "occasionally like a wedding", then suddenly stop **(KI-CEE-KIL)** .

KI:Okey I support them and I think that HIV and Aids awareness should be eeeeh.....included in the curriculum

HIV and Aids its drugging us behind and the prevalence is high (**KI-STU-KAU**)

7.9.7 Early Marriage and FGM

Respondents indicated that FGM and early marriages are some of the issues that hinder effective learning in several Counties.

KI: ... early marriages, FGM, Corruption of all forms and nepotism leading to unfair resource allocation affect learning in our area (**KI-CCO-MAN**)

KI: In my county, early marriages, the number of successful women is low because of early marriages. People who we went to school together, fell off along the way because of early marriages, and now have grandchildren. These things are there (**KI-CEE-KIL**)

KI: ...In my county, early marriages, the number of successful women is low because of early marriages... (**KI-CEE-KIL**)

7.9.8 Leadership and Integrity

The respondents expressed concern about poor leadership practices and wished that curriculum addresses the issue of leadership, corruption, general apathy among the youth and the issue of unemployment and poor work ethics /idleness.

KI: When a child has done a mistake punish the child do not bribe a child with a sweet, so the child grows up knowing that if I need to keep quiet I must be given this. So when he becomes a police officer or a teacher outside there and you want to be given something so as to do the other way round and that's where the corruption is. So our curriculum should be clear on the levels of corruption starting just from the parent and growing up and if the parent can stop it from that level am sure we can be able to reduce corruption in Kenya. (**KI-DDE-MUR**)

KI: Character building is our biggest problem. Character has failed us completely because that is the root cause of people..(becoming)..dishonest employees, corrupt employees, corrupt government, name them in every sector, this corruption has ...(cut).. across the board yeah..
..(**KI-KEPSHA-NAI**)

7.9.9 National Values

Respondents also proposed the need to include National values in the school Curriculum

KI: ..National values mainstreamed in the curriculum and institutional managers and teachers be provided with necessary resources to deal with emerging issues such as substance abuse, violence and national values and cohesion (**KI-CBK-NAI**)

7.9.9 Technology Cyber- crime and Pornography

It was noted that challenges associated with technology should be addressed. Guidance on the use of computers and internet was emphasized by the respondents. Not all content should be allowed to be accessed by the learners. This will address the issue of cybercrime, pornography among other vices.

Respondent: The onset of the Internet has created a great rift between the “analogue” and “digital” generations in Kenya and Africa at large, with the awed older parent generation unable to guide their computer savvy children into a digital world they know nothing about. The internet-exposed youth therefore lead themselves into all kinds of extreme mischief as they “learn” from the net; traditional social structures have broken down, resulting in amoral society on all fronts. Control of children’s interaction with the internet should thus be paramount, with the government leading the way in providing guidance and necessary controls and regulations towards this end, and the education system weighing in with structured lessons. Conservative China has demonstrated that this can be done by blocking unsavory content from the internet, unlike the liberal West that believes in “absolute freedom”. It is to be noted that the West has strong remedial support systems and traditions in case of adverse exposure of youth as well as adults to negative traits, unlike in Kenya where there are very few professional guidance and counseling experts or remedial centers, and it is stigma in Africa to be seen to have been “treated” for waywardness of any kind. (**BUS.MAN-INF-NAI**)

Respondent: I think it is affecting our country because ... most people spend most of the time on technology. They don’t have time for their family, so if people are taught on how to control their time with technology, I think it will help For example, students they don’t have much time to study. Parents don’t communicate with their children well so it really affects them. I think technology if people put it correctly it will help... people spend most of the time with for example phone (**CARW-INF-UG**).

KI: ...ICT institutional framework be strengthened to allow efficient integration of ICT in the entire education sector...Provision of technical backup in ICT initiatives in government learning educational institutions... (**KI-CBK-NAI**)

KI: Through the use of ICT technology but has to start from that early age so it is not an emerging issue it is an ever evolving issue. because technology now transcends and cuts across all facets of the economy ...tourism ,agriculture. Preparedness for farmers to prepare their farms. One shouldn’t learn when they get to university. (**KI-CA-NAI**)

KI: ...when you listen to people talk is like corruption has become like our culture and when you talk about culture, culture is like something that is practiced by all people in the community you are talking about. So corruption in our case has become a way of life ok, and then you know even if it’s a way of life you know what it means so I think whether invaded in another curriculum it is an area which needs to be tackled by any means. (**KI-REG-LAU**)

Industrialist...when you think about technology, we think about the mobile phone. I look at it as a serious emerging area that needs to be handled. (**MAN-IND-KAK**)

Industrialist...we have technologies that are not being utilized....the youth are coming up with new things and ideas but no support. Too much freedom without responsibility.(EMP-IND-BUS)

Industrialist...technologically, we have hacking of the systems.(CEO-IND-NYE)

7.9.10 Lifestyle Diseases

The respondent proposed that diabetes was an emerging issue as there are young children who are having diabetes.

7.9.11 Parents' Programme

Respondents indicated that there is need for parenting education so that the parents can be able to bring up their children in an appropriate way.

KI: let me add on the part of moral part I think we should introduce something like a programme where parents are enlightened because aaah..... no matter how much the administration or the students themselves are advised on what to do I think parents too should also play their role eeeeeh(KI-STU-KAU)

Industrialist...sikuhizi, wazaziwameuzawatotokwawaalimu. Hakunamzazianafuatiliamtoto wake. Na kamamzazhufuatiliimtotowako, ninaniatafundishahayomaadilyotekwa motto... (MAN-IND-NAR)

Industrialist...wamamawanakataatuwatotowakaenyumbani.
Saswansemwachwalimuwang'ang'ane... washugulikenaye. Wanafanya busy...
Watotowanafanywamaabusu. Motto anapelekwasakuminambilshule.
Mpakasaakuminambiliamasaakuminanusu. Mtotoambayehawezikukaamdahuoyote...(CEO-IND-GAR)

7.9.12 Career Guidance

It was also recommended that career guidance be included in the school curriculum.

KI: Issues of counselling is very important and if we can have people who are role models so the children can feel very free to emulate that person and they can openly talk to them. I felt from young age that we need to come up with booklets (KI-CPD-NAI).

7.9.13 Peace and conflict resolution

some the key informants expressed the need for peace education as it contributes to cohesion and national integration.

KI:... education as an issue that is an emerging, and I can pick issues of skills in understanding and behavior skills because you have to make sure children understand their behavior and identify good behavior from bad behaviours, these are skills..(**KI-UNESCO-NAI**)

KI: Issues concerning conflict resolution be included, assessment should be comprehensive. (**KI-KPSA-UG**)

Industrialist...do national integration and that would be very important. We want to see our daughters and sons from western Kenya joining those schools in Mandera so that at the end of the day they may know Mandera is also their home. (**MAN-IND-KAK**)

7.9.14 Gender and life skills

Respondents expressed the need to address gender and life skills in the curriculum as emerging issues since they relate to real life situations among the learners

KI: ... The gender components also is an important component where they are able to recognize that they are equal and are able to participate equally within their self without being biased and also by understanding the difference in their body changes, because a girl with menstruation the boy should appreciate, these are things that look simple but they are critical....if somebody have not heard proper life skills it will be a problems, you will be having good grades but they will not help you to deal with life...(**KI-UNESCO-NAI**)

Respondent: Mtotomsichananamvulana...hawaelekezwikwanjiasawa. Haponyumakidogo, vijanawalikuwawanawekwambele. Concentration nyingiilikuwainawekwakwa motto wakijana. Sikuhiziwameanzakugeuka, wananeda vice-versa, sasawana-concentrate sanakwamtotomsichana. Na tukiendeleahivyo, hatutakuwana imbalance. Tunaendakupatawatotovijanawameachwambali, wasichanawameendamble. Kama wangewezakupelekwapamoja...kimasomo, ki-talents, tunawezakuwanajamiiambayoitatufuatayenyetakuwanaelimunaujuzi, nahiyosasaitapeleka county mbele

(The boy and girl child are not being directed well. Earlier, the emphasis was on the boy child. Today, things have gone vice versa and concentration now is on the girl child. If we go on this way, then there will be an imbalance with the boy child being left behind. If they were both given the same attention in education and I talent development, the country would develop well.) (**HOT-INF-NAR**)

Industrialist...we need to talk about gender and look at the needs of the girl child and the needs of the boy child and ask ourselves whether these meets their physiological development or needs to be met (**MAN-IND-KAK**)

7.9.15 The Constitution Of Kenya

Key informants indicated that the Constitution of Kenya should be explored by learners in order to understand the issues of Devolution and how to take advantage of the same.

KI: The constitution and the changing constitutional framework and the requirements for example public officers in the realm of ethics...include the changing legal framework to a devolution is ..capacity among the citizens to take up this opportunity other than reliance on national. (**KI-CA-NAI**)

7.9.16 Peer Pressure

Respondents pointed to peer pressure among town youth in contributing to their involvement in

social vices such as alcohol consumption and absenteeism.

Respondents: Peer pressure, given this is a town set up, keeping bad company can also contribute, for example, drinking alcohol. It is mostly bad company, leading to school absenteeism (**MAIZ-INF-NYAM**)

7.10 SUMMARY

7.11 Needs in the School Curriculum

In terms of needs for social development a respondent suggested that education should address social, environmental and individual characteristics that improve quality of life. It should address the professional requirements for a functional society as well as religious values, technological changes, conservation and moral values to address things like corruption, radicalization.

Curriculum should be relevant to every community in terms of resources of the catchment area. Experts from every county should come together to curriculum that is holistic in nature, thus addressing the physical, social, psychological, spiritual, intellectual, moral, character formation and values education as contained in the constitutional of Kenya.

On the same breadth respondents suggested that the Kenya's social and development need should lay emphasis on literacy, numeracy and foundations for lifelong learning (emphasis on learning to know, learning to do, learning to live together and learning to be). Emphasis was also put on volunteerism, social education, personal obligation and respect for environment to meet sustainable development (ESD) principles. Education should equip learners with life skills in order for them to participate in national and international matters, live and grow in a healthy, safe and nurturing learning environment .They should also be exposed to information on various fields of work and activities in the global community. The learner should be enabled to appreciate and tolerate cultural and individual differences to promote peaceful co-existence.

7.11.1 Needs for technological development

On digital literacy, a respondent indicated that learners at ECDE level should have basic exposure to ICT skills such as identifying sounds and colours using technology as well as being able to manipulate basic ICT devices.

A respondent suggested that; the society need people who have hands on skills, rather than the current status where education seem to focus more on knowledge and cognitive development.

7.11.3 Needs for economic development

Learners should be taught food security in relation to climate change so as to address, poverty and ignorance, indigenous crops, livestock and farming systems, environmental conservation, water pollution and Job creation to address the problems of unemployment especially among the youth.

7.11.4 Values and attitudes

Respondents expressed the desire to work with learners who have positive attitude and pointed out that this should be inculcated in the learners during their formative years. Similarly respondents suggested that environmental values, honesty, the fear of God, harmonious living and hard work should be introduced at ECDE to make education holistic.

7.12 COMPETENCIES

On competences, respondents noted that innovation, creativity, teamwork and virtues such as hard work, honesty, must be nurtured in the learners at all levels. These must be demonstrated and not taught theoretically hence, teachers should be good role models to the learners.

ECDE learners should be equipped with practical skills such as cleanliness and social skills for example being able to recognize when they are in danger and take appropriate action. They should develop language of communication, play and associate with others, be conscious of the things around them and have a sense of relating with God.

Expression in music and play is important for learners' physical and cognitive development. This is evidence by a respondent's view that a child should enjoy going to school, be able to learn through play within experiences, socialize by appreciating others, discovery and inquisitiveness. Curriculum should also impart values such as respect ,kindness and honesty.

Respondents further noted that the current ECDE curriculum is devoid of necessary skills that support learners in their day to day living. According to key informants, certain subjects that were removed from the curriculum had a role in assisting children to become responsible adults. They suggested that, learners should be taught basic hygiene, basic life skills, communication skills, basic arithmetic and responsibility.

In summary respondents proposed the following competencies to be acquired at ECDE level.

- Ability for clear logical thought and critical thinking
- Self-expression, self-reliance, self-discipline and full utilization of a child's senses
- Acquisition of suitable basic foundation for the world of work in the context for economic needs of the society
- Development of the desirable social standard and attitudes
- Development of constructive and adaptive attitudes to life based on moral religious values and responsibility to the community and the nation
- Appreciation of ones and other peoples cultural heritage
- Ability of the child to grow towards maturity and self-fulfillment to become a useful and well-adjusted member of the society

7.13 LEARNING AREAS

The respondents suggested the following learning areas for ECDE curriculum; communication skills, Numeracy, Creative and manipulation; Social and life skills, Environmental awareness; Respect for and Sanctity of life; Nutrition and health (knowledge and practice); Religion and ethics; Language (including mother tongue); Values related to hard work, truthfulness and integrity; National values, life skills; personal safety (security) knowledge and practice; Values associated with the common good, communal responsibility and respect for other people's

property; technology; Emotional awareness, empathy, self-regulation and conflict resolution; Respect for the rule of Law, appreciation for democracy; Creative arts and expression; Literacy and communication; Cooperation, and innovation; Critical thinking, Reasoning and problem solving; Number sense and operations, Sense and geometry, Patterns and classifications, Measurement and comparison; awareness of the natural and the physical world, inquiry skills; Public Speaking, Writing; Physical education, drawing, Simple mathematical concepts, Good manners e.g. throwing litter, washing hands, using courteous language; Vernacular; Basic communication skills such as reading and writing; counting, mannerisms, knowing the environment, socialization and religious values.

Agriculture, nutrition education and food production were proposed to be compulsory in basic education for food security in the country.

7.13 NURTURING TALENTS

7.13.1 Identification of Talents

Respondents pointed out the need to identify and nurture talents during the formative years of learners. The identification of talents was reported to be a responsibility of the parents and teachers. The parents should monitor their children and be able to identify what they are good in from the time they are very young in early childhood.

Other platforms for identifying talents to include: Annual science congress, Annual term games, Arts, Annual drama and music festival, Use of mentors, Teacher/staff nomination, Peer nomination, Parental information, Using community resources and Exposure to various activities. It was further noted that talents can be identified in different settings which include the school, in the religious institutions and at home where the family members can identify unusual abilities in children.

Other methods of identifying talents include: Provision of a variety of opportunities for the children to exploit their talents, Encouraging teachers to have personal interest in learners lives, Continuous assessment, Talent scouts to identify learners with talents, Training talent assessors

and trainers, Development of talents identification center, Development of talents identification tools.

7.13.2 Nurturing Talents

It was also noted that the learners should be provided with opportunities to nurture their talents. It was further reported that currently, talent opportunities are limited to drama, music and sports. These alone do not cover the full range of talents that can be developed and exploited in school. It was suggested that the curriculum broaden or create more opportunities for talents to be showcased and developed.

Other respondents proposed that a repository of ideas and innovations be built which should be a collection of learner's ideas while expressing their creativity in areas such as science and arts. This repository should serve as a pool for interested actors (such as private sector, foundations etc) to pick from and help students develop/nurture innovations.

It was also proposed that Co-curricular activities be mainstreamed in the daily learning experiences. Other activities which could be relegated to clubs should be incorporated into the main school timetable. Music, art and programming shouldn't just be club activities but should be taught as part of the curriculum.

In teacher training the respondents suggested teacher trainees be imparted with skills in talent nurturing and development. They should also be taught how to appraise and evaluate students 'talent development.

Education should create a demand for talents and skills. Initiatives such as talent focused institutions and academies, talent scholarships and media focus on talent achievements could be used to motivate learners to explore and develop their talents. It was further proposed that Counties create education strategies that take advantage of their regional strengths to attract talent in their areas and create opportunities to develop them. Some of the talents identified to be nurtured include visual and performing arts, culinary arts, sports, pottery, fine Arts, music, drama among others. Other suggestions on nurturing talents include; establishment of talent academies, provision of adequate resources, Create incubation centres for innovations, schools exhibitions in

areas like science, handcrafts, IT, sports, games, music and drama. equipping teachers with competence to identify and nurture talents, realigning teacher education to produce teachers in all the potential pathways of academic, technical and vocational, sports, creative arts among others, Establishing pathways early enough to nurture sports, music, performing and creative arts andcrafts.

7.14 PEDAGOGICAL APPROACHES

Different methods are used during the learning process. Respondents were required to suggest methods of curriculum delivery and it was noted that practical and learner centered methods be emphasized. Use of technology was also suggested

7.15 RESOURCES

Resources are important in the learning process and the respondents were required to suggest learning and teaching resources in order for the education to be successful. The respondents expressed the need to provide enough learning resources which include human resources. It was further noted that it is critical to provide well trained teachers and ensure that they receive continuous and regular in-service

The respondent explained the importance of teaching and learning materials in ECDE and suggested that the community members be involved in the development of the materials

The respondents emphasized the use of play materials especially for the ECDE learners to nurture talents and a conducive learning environment.

The respondents indicated that some of the resources required to implement a competency based curriculum include laboratories both for sciences and languages, print materials, quality teachers and ICT and workshops, enough classrooms and play fields. The institutions should be provided with a very wide and diverse resource based on available means, locally relevant and without and the issue of shortage of teachers be addressed. The learners should also be provided with play materials

The respondents suggested the need for financial resources, establishment of sub-county libraries, revive Teacher's Advisory centres to help equip teachers with skill.

7.16 ASSESSMENT MODES

Parents suggested that learners in ECD should be assessed entirely by observation method. The respondents pointed out that assessment of learners was important in order to know how much the learners understood what was taught. The assessment was viewed as one of the ways of identifying different potentials of learners. Respondents indicated that learners at ECDE level should not be subjected to examinations rather, they should be offered a conducive learning environment with relevant resources where they can be observed by teachers

7.17 EMERGING AND CONTEMPORARY ISSUES

The respondents stated that drug use was an issue Drug and substance abuse, HIV and AIDs, Religion, corruption, early marriages, Citizenship and patriotism, Cyber- crime, pornography, conflicts, leadership, general apathy among the youth, unemployment, work ethics and Sex Education should be addressed in the school curriculum.

The respondents further identified conflict (peace building), environment, Religion, HIV and AIDS, Social cultural norms, cybercrimes and insecurity as issues that should be addressed by the curriculum. They further noted that globalization is one of the emerging issue that should also be addressed in the curriculum. Due to globalization there is a lot of connectivity which exposes learners to a lot of information.

Kenyan Constitution, Pollution, communicable diseases, lifestyle diseases, terrorism, alcoholism and regional integration are some of the pertinent issues in society that should be given serious consideration by the curriculum.

Further, the respondent pointed out that gender issues`, early marriages, violence at family level and sexual orientation affect our society and yet nobody talks about them.

CHAPTER EIGHT:

FINDINGS: QUALITATIVE DATA:

PRIMARY LEVEL NEEDS

8.1 Introduction

This chapter presents findings on the needs of the primary school level that the curriculum reforms should address. The findings focus on thematic areas that relate to the general primary needs, requisite competencies and the necessary learning areas. Information is also presented on identification and nurturing of talents, pedagogical approaches in the teaching and learning process as well as appropriate assessment modes. The chapter ends with a discussion on emerging and contemporary issues that need mitigation.

8.2. General Primary Needs

The general needs for curriculum reform tended to focus on the disconnect between education and the realities in Kenya. These include the social, economic, political as well as the technological contexts. Pupils and parents underscored the need for education to help learners to relate curriculum content to real life, so as to solve problems and address real challenges affecting the country.

Parent:to me I feel the gap is that even when we are teaching we don't relate that content or real life,of-course the gap is that, we don't emphasize that the moment you teach everything in class let the child see the same in real life. There is a disconnect between the content and child experience. Maybe as we come up with the curriculum, we will see the ways of emphasizing that it is not the objective of getting things right but also the objective of applying every content you teach in real life.(PA-FGD-St.JPP-LK)

In relation to the scope of the curriculum content, the pupils indicated that the Kenyan curriculum had too many subjects unlike in countries like Japan where a few subjects are taught. The curriculum content was made more complex by the fact that children had to learn another language to understand the subjects.

Pupil: I think our curriculum is too hectic for us for instance in Japan you find that they learn a few subjects during the day before noon and in the afternoon they learn things like music arts and they are taught in their language they don't have so many languages to learn (P- FGD-St.RUK-HB).

Local communities appealed for education to target region specific needs in order to address the prevailing needs in various contexts. The populations settled along the coastal strip affirmed that

they did not get education that equips them with knowledge related to the sea and associated economic benefits that could improve their lifestyles.

Parent 1: like in our coastal area in our place, we have very good people in fishing but they don't have enough education or certificate to work in the sea... they could benefit a lot in this, and also those who can do farming they could be taught about farming. Women should be educated to avoid getting manual working, our people have no enough knowledge about the sea. **(PA-FGD-MFG-LAM)**

The need for equity in urban and rural schools nationally was emphasized. This was mainly as a result of perceived disparities between urban and rural schools, and the ensuing disadvantages, experienced especially among children in rural schools. Additionally, parents were of the opinion that the inadequate number of teachers in primary schools compromised quality of education.

Parent: What I would like to add we need to standardize with what happens in the urban school should be standardized with what happens in the rural schools. I could say that every time transfers are done the teacher who is in town they normally don't want to go back to local. I wish to say that because their ideas which they are implementing in primary schools where they are if they go out they may implement all those programmes in local primary school to catch up with the town schools. **(PA-FGD-LAKP-HOM)**

The frequent interruption of the pupil learning resulting from the teachers' strikes should be reduced by listening to needs of all players in education.

Pupil: The school should listen to the opinions of different persons, an increment of the salary for the teachers to avoid teachers' strike which slows the learning phase. **(P-FGDP-HVA-KIL)**

8.2.1 Social Needs

According to parents, education was not fulfilling its role in fostering peaceful coexistence among different communities or countering other social ills which disrupt the general well being among people. They stated the need for education to enable learners live together by encouraging learners to attend school away from their local environment.

Parent: Education should promote unity and make our nation peaceful. However the current education system which allows quota system has confined learners and teachers to their local environments undermining interaction and cohesiveness unlike in the past. People used to fear hurting others because the society and schools had people from different communities. **(PA-NMWP-BUNG)**

Corruption was brought as a serious social vice that had negative implications on the overall development of the country. There was a general call for the nation to come together to stop the vice.

Pupil: Stop corruption so that people might have better life in future... stop being selfish and we should do the things according to Christian ways and we should always follow instructions as given so that we

can help the poor, we can help to lift the poor from their poor situations and be we will be equal and the country will (P-FGD-SSNPP-MUR)

Pupil: We need to demolish corruption ... do away with corruption so we eradicate corruption ... We should not steal others thingsFor example how Kenya is taking the Eurobond we should use the euro bond money well and wisely (P-KARINP -NYE)

Access to quality education was seen as a means to eradicate poverty. This according to the findings would be established by bridging the poverty gaps that made children drop out of school due to lack of basic requirements like food.

Pupil: You get that there are pupils who are very poor at their home and they need to work and earn money and get food. You get a child is an orphan and he needs to do the work for him to get lunch and supper. And they have small kids who need food. It makes them drop out of school to search for money and then come back for school when they have money (PL- GESP-NYM)

The prospects for developing social amenities and improving the overall quality of life by preventing diseases were pegged on a good education. Pupils affirmed that being well educated enables one to participate actively in the development of their society.

Pupil: Education can also make us be employed and raise our county... Education can also help people in preventing diseases. (PL OLMP-NYM)

Pupil: When I will finish school, I will like to become an engineer...After that,I will be helping building roads...buildings and hospitals. (P NYP-NYM)

Pupils however decried lack of accountability by the leaders with regard to resources and cited it as impacting negatively on facets of the country's social development. The pupils were of the view that the country needs serious leaders.

Pupil: ...We need serious leaders who will account for people's money (PL-91MP-LK)

Harmful cultural practices were further identified as factors that are disruptive to the well being of the society. According to pupils, these practices like Female Genital Mutilation prohibit learners from continuing with their education and deny them a future.

Pupil: If people are educated they leave the bad cultural practices and so, many girls will finish school (PL-LOGP- MAR)

8.2.2 Economic Development

The challenge of the ever growing population amidst limited opportunities for jobs has necessitated a skills based education that can lead to job creation and make Kenyans economically independent.

Parent: Earlier you could survive without education but nowadays the country is overpopulated so we are trying to educate our children to be skilled, able as well as possess some attributes which will enable them in this tough life (**PA-FGD-MARP-BAR**)

Respondents were of the view that Kenya's economic development was dependent on how well education addressed the requirements of Vision 2030. Consequently, the primary school curriculum needs required to be fashioned around the expectations of these development goals, with a bias towards skills for industrialization and self-reliance.

The parents suggested the need to include technical education in the curriculum by offering subjects such as art and craft, carpentry, masonry and agriculture for self-reliance. This will also give opportunities to pupils who do not join secondary schools.

Parent: As parents there are education skills that need to be incorporated like for example most students missed slots in the form one selection and there is a problem since there is the question of where all these children will go. The art and crafts should also be re-introduced in the curriculum since pupils are gifted differently. The technical work was dropped which is vital carpentry, masonry and pupils need to learn these courses. From the primary school stage the agricultural sector is also not emphasized enough in terms of starting at primary level (**PA-FGD-MIRP-HOM**)

The parents suggested that education in Kenya should focus on self-employment and creating employment rather than creating job seekers. They indicated that such education not only equips individuals to apply knowledge, but also develops them to become innovative, start business and develop their own societies. It consequently ensures the overall economic growth of Kenya.

Parents: I think Kenya needs a curriculum that does not address issues of white collar jobs alone. Issues that affect our people down to the rurals, for example we don't need to train our pupils or students in order to compete for a certain job but we need to train them for them to earn their living even when they do not have employment. We train this person in order to create employment for others but not to be employed..... (**PA-MARP-NY**)

8.2.3. Political Development

Kenya's political advancement was analysed in relation to the political leaders in place as well as certain prevailing practices. The disunity among political leaders was blamed for contributing to nationwide instances of disunity among citizens, who were their followers. Learners were of the view that politicians should work together, not engage in hate speech, tribalism, favouritism to avoid post election violence and other related political issues. They therefore indicated that the curriculum needs to include civic education so that learners are taught how to choose good leaders and avoid those who incite people and spread hatred through hate speech.

Pupil: We need... People who are development conscious, those who will bring peace (P-FGD-SMTP-NAR)

Pupil: Other issues that affecting us in Kenya are some politician incite people, they say hate speech in rally in the name of supporting somebody and you find mostly in Kenya you vote for the person because they come from your tribe. I think we can be taught so that we depend on these politician so that we can vote for leaders I mean politics of our future life because many times the adults have been told don't vote for somebody because he is a Kikuyu like you or a Luo like you but it is still taking place in Kenya because they were not taught at early stage. (P-FGD-OLE-SANP-NAR)

As a result of the continuous arguments between the candidates in opposition and incumbent leader, the politics of the country was seen to be declining and jeopardizing peace in the country.

Pupil: they should be more working less arguing because the country is in a bad status people are suffering without jobs he has made promises he hasn't fulfilled I would urge him to fulfill his promises before he steps down from the seat because he needs to show he is a reliable leaders so that he can win peoples votes next time if he doesn't people will think he is unable to perform as a leader. (P-FGD-KATP-MAK)

In addition to disunity among the leaders, the negative impact of corruption was cited as a drawback to political development. The pupil leaders called for concerted efforts and stun action taken on the perpetrators to stem the vice in the country. They further encouraged the use of legal mechanisms to ensure that the perpetrators of corruption faced the necessary legal action.

Pupil: I think if Kenya wants to have a well-developed country politically, the leaders should stop being at loggerheads with each other, and also they must support each other so that we stop corruption... make sure those leaders who are corrupt are taken to court and be judged by the law. (PL-OLMP-NYM)

The findings showed that the overall success of the political development in Kenya was dependent on the integrity of the leaders in place. In essence, leaders in Kenya have responsibility to chart the political landscape and positively affect the other components of development in the country. This as has been depicted in the findings is because the social and economic stability of this country also rely on the political stability.

Pupil: The leader should give what they have promised totally. They should follow the rules that make country to develop politically. (PL-NDAP-KIT)

8.2.4 Technological Development

Responses on technological development were mainly focused around the use of computers in schools. Suggestions for technological advancement centered around the provision of computers

in schools and ascertaining that pupils started using them. Early initiatives in the use of technology in schools were found particularly advantageous for technological development in the country.

Pupil: We should introduce computers in at least every school especially to young children as young as about 10yrs or even 8yrs. (PL- FGD- KIP-UG)

Another benefit according to parents was that the use of technology can contribute to the improvement of education by giving pupils an opportunity to do their own learning by carrying out their research.

Parent: teach pupils in computer because if they teach them how to use the computers may be they could enable them for example to research more about the education they get like subjects they learn more about them (PA-FGD-BOOKP-KAK)

Despite these advantages, other respondents faulted the use of technology in schools. They observed that technology is misused sometimes. They pointed out that it has aided the leakage of national examinations.

Parent: ... It is sometimes used negatively. For example leaking of exam is largely through technology. (PA UnoaP –Mak)

The findings show that both learners and parents highlighted the transformative role of education and reiterated the importance of ensuring that it is inclusive to give Kenya a brighter future. It was however observed that owing to poverty levels and the extra tuition time that class 7 and 8 are subjected to, barriers are erected in the path of learners who pursue the path to education. The learners' suggestion for the government's control of the additional charges in schools points to some controls that should be put in place to limit chances of exclusion from education.

Pupil: Education is the most important thing in our lives so that in our future we may live well and our life will be good. (P- FGD -MANP- NAR)

Parent: we need an inclusive education not only taught to pass exams. And it touches all aspects of life (PA- FGD- KANP-THA)

The inter-relationship between the various forms of development was also brought out by the findings. The respondents stated that social development depended a lot on a corruption free environment where leaders exhibited integrity. From the study findings, it was further noted that politicians impacted heavily on national development. The parents were of the view that

politicians should reduce politicking and concentrate on development work. Similarly, security and peace would spur economic development. It was clearly demonstrated that certain social challenges were an upshot of the vicious cycle of poverty, which had denied some children a chance the opportunity to continue with their education.

Parent: For Kenya to develop better, it needs educated people, Kenyans to be educated... children are smoking bhang, the chew miraa, they fight, the steal, what I am saying is Kenya should protect us because the country is not safe, poverty is high, and that's why people are killing one another, a lot of robbery, most of them are poor they cannot help themselves. (PA- MAKP –KWA)

8.3. COMPETENCES

This section shall present findings on competencies that the respondents found necessary for inclusion in the curriculum. The competencies cut across a combination of skills, abilities, values and attitudes that are considered relevant for the primary school curriculum.

8.3.1. Skills and Abilities

8.3.1.1. 21st Century Skills

The development of skills and abilities were given prominence by the respondents. They particularly advocated for development of skills that enhance life in the 21st Century.

KI: Soft skills, 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, logical thinking; computer and digital literacy; innovativeness, and teacher professionalization programmes through mentorship. (KI-CEM-NBI).

The array of skills listed for proper functioning in the 21st Century seem to include the cognitive, affective as well as the psychomotor domain. However, they deviate in their application to enhance individual's capacity to be adaptive to different circumstances as they evolve.

8.3.1.2. Practical Skills for self reliance

Parents observed that the curriculum currently in place favours learners who progress through secondary school and university. They expressed the need to teach skills that enable those who do not proceed to secondary schools to earn a living. Parents faulted the kind of education that is

offered for having a lot of book knowledge that cannot help learners who do not go beyond primary school. Skills such as tailoring and agriculture would help them earn a living.

Parent 1: lakini kuna wale watabaki kiwango yao imefika..mwisho wao in class eight. sasa ni afadhali tu-involve the way nimesema iyo skills ili asaidie huyu mtu hajaendelea. for example, mambo ya technical skills, hii ya kutumia...ya kufanya kazi kwa mkono...mambo ya kufanya tailoring...hizo vitu zingine zenye at least ata-survive nae. kwa sababu akiacha class eight, hapo ni mwisho yake. labda arudi nyumbani, aanze mambo ya farming. na labda in primary, hatukuona mambo ya agriculture...ilitolewa. mambo ya music, tunaona watu wengi wako na hiyo talent lakini haiwezi fanyiwa primary ionekane. (**PA-FGD- OLOL-NAR**)

The concept of self reliance was considered quite an important outcome of the practical skills that education should inculcate. The respondents were therefore of the opinion that alongside academic knowledge, children should be in touch with realities of life like feeding animals and farming. This according to parents, should also manifest in the ability to make real things that are used in day to day activities.

ME: They are learning too much academic, and forgetting to associate with the normal life. They should be involved, exposed to practical life integration such as feeding animals at home and farming. Within the locality they belong to, they should do what is done there(**ME- INF-NYE**).

Parent: this is where they should be able to make real thing like baskets, ropes, mwiko. Today people with these skills are scarce. (**PA-FGD-UNOP –MAK**)

INF: I can only begin by saying that they should be creative ...Just like 8.4.4, in our time when you got to class six we had practicals of making funny things such as mats and it was depending on how creative you were. That time you find that children are motivated by what is being done. (**MEM-INF-UG**)

8.3.1.3 Self care and Personal Development Skills.

Parents and learners felt that education should equip the child with skills that give them a sense of responsibility over themselves and help them navigate through their daily life. Parents and learners attributed the improvement of self-care and personal responsibility to the teaching of Home Science at primary school. They observed that the teaching of the subject at the primary school level would impart skills necessary for daily living.

Parent: This issue really hurts me because whenever clothes are torn, however minor, these children cannot repair them. They would rather throw away the clothes since they lack the skill of repairing them...They cannot also replace a button... During my time we used to be taught in school. We learnt how to sew clothes using a needle and that is the knowledge I use even now (**PA-FGD- DRUPP-NBI**)

Pupil: I think they could not have cancelled the home science because most children like our class you can find most children you can find a class eight pupil doesn't know how to sew their shirts when they are torn, they do not even know how to fix their buttons because they are not taught. They still wait for someone so that they can be taught. I think they should teach these things for our better future when we will be independent and require such skills in our life (PL-SOSP-UG)

The parents wanted a curriculum that equips learners with the ability to read and write, to be self-reliant and independent. They reinforced the need for self care skills like personal hygiene and domestic work. The learners could also be encouraged to extend their services to the community. The learners further indicated that it was necessary for the primary school curriculum to equip them with knowledge to facilitate transition into secondary school.

Pupil: You should be able to have knowledge because what you learnt from class one to eight you will be able to continue it in secondary school. (PL-KIAP-KIA)

Parents: as he exits primary school, should be self-reliant in basic skills such as hygiene, social and community work. He should be one who can be self-dependent (PA-NYAP-NY)

The skills were justified because they lay the foundation for any other pursuits, beyond the primary school, that a learner chooses to undertake.

Parent: A child who is able to read and write, be able to interact with others and be self-reliant even if they terminate their learning at this level they can carry on with life... if it is farming, the child will use those skills in farming and also other aspects of personal growth. The child will now know how to plant various crops such as vines, cabbage (PA-FGD-KIAP-MUR)

8.3.1.4. Skills for Career Development

The findings from the study outlined certain broad skill areas that the curriculum should expose learners to. In the context of career development, the various fields would help them explore their areas of interest and finally guide them to a particular area. This contributes to differentiation amongst learners by allowing those with inclination towards certain areas to choose their paths.

Parents: At least a child should have basic knowledge of various aspects of life, basic knowledge be it business, science and technology, carpentry, art craft such like things, even mechanics. He should be able to have basic knowledge that will help him or her develop interest in a particular thing (PA-FGD-LAKP-HOM)

It was additionally pointed out by respondents in the informal sector that skills that are needed in job market should be focused on at all levels of education, including primary schools. It was

expected that education at this level should develop self-driven, all-rounded graduates who are able to comfortably go for self-employment as an alternative to formal employment, considering the increasingly reducing opportunities in the job market. This could be achieved through linkages with industry to establish the specific gaps in the labour market and tailor education towards the development of such skills.

Respondent...Education should ensure that learners who leave school at different levels all the way from Primary school to University have interest in skills at those levels that are required and now missing in various industries and which they can easily learn. This will lead to quality output at all levels in industrial work, and inject some certainty in the prospects of improved and regular incomes for all workers who attain some skills. This can be achieved if a thorough research is done on skills required in various industries at all levels **(ME -INF-NAI)**

Apart from supporting their engagement in the informal sector, pupils suggested that there was need for skills and knowledge that will prepare them for careers in the formal sector such as journalism.

Pupil: When I finish class eight, I want to get a good education grade and join university, and do a good course of journalism. **(P-MASP-NAR)**

8.3.1.5. Social and Inter-personal Skills

Social interaction skills were considered paramount for developing the ability to live with others. The skills were required to make learners live in their communities peacefully and behave appropriately. Respondents in the informal sector noted that these skills were critical for any meaningful relationship in the world of work. They criticized the bias in just teaching Mathematics and English which may be absent within the social environment in which learners are bound to find themselves. Other values suggested were integrity, appreciation for other people's culture and interrelationships.

Inf: They need clear understanding of proper inter-personal and social relationships, including the long-term consequences of poor decisions to an individual and the society at large. We need a workforce with strong resentment towards corruption and well equipped to fight it morally and otherwise. A workforce that appreciates the ethnic diversity and is able to amicably integrate in all engagements..**(BUS.MAN-INF-NAI)**

Other important competencies that relate to social and inter personal relationships were negotiation and communication. It was necessary for the curriculum to in build the modeling of these competencies as a composite part of the teaching and learning process.

ME: Competencies related to life skills development in areas of negotiations, communication, relating to strangers are crucial for young children. For those who are training as their teachers need to be more careful to exhibit the very values desired of the children. **(DBK-IS)**.

Key informants and pupils were all in agreement that modeling desirable behavior would inspire others to emulate what they had seen and carry it on. In addition, respondents pointed out that discipline should be enhanced in schools so that boys and girls can carry themselves in line with societal norms, even after they leave school.

Pupil: ...have good moral values in future and become a good leader that people intend to look upon and say we want to be like you **(PL-ANCPP –UG)**

Inf: Discipline....they should learn social discipline....Girls these days are coming from school but move about carelessly. This can be boosted alongside schooling but also at home by parents. There should be a subject to teach them good conduct, both boys and girls, about conduct ... There should be a subject to teach them good conduct, both boys and girls, about conduct **(SHOP- INF-NYE)**.

8.3.1.6. Technological Skills

Respondents expressed the need for learners at the primary school level to acquire technological skills. Digital literacy was viewed as a means of enhancing communication and cooperation. They made suggestions that the start should be as early as ten years.

ME: Digital literacy should be achieved at 10 years of age. This includes understanding communication principles, how to operate computers, internet usage skills and understanding of the basic principles of digital technologies and issues surrounding use of digital use (security and privacy, digital citizenship). **(ME-ED-AC)**

The practical mode of delivery of content on technology was considered most productive because it allowed children to use realia.

Moreover, working through hands on experience was seen as a better means of yielding results.

Parent:..... in Japan, small kids dismantle the TV's and re assemble them... So learning is practical... when our children are left at home, they are only in touch with is what they see on the television ... we need to bring our children to the real thing,if it is going to the shamba, let them dust the soil from lower....Let them start as early as ECD.....**(PA-stJPP-LK)**

The parents reiterated the need for an early start of ICT related education.

Parents: I would say people should be taught technology related education such as ICT. It should start from class one **(PA- NYA-NY)**

However, there were reservations on the use of mobile phones.They were of the view that phones are interfering with learning

Pupil: Parents should not give their children phones because some times they cannot sleep because of use of phones to other people ...(PL-EMPP-NAR)

8.3.1.7. Entrepreneurship

The idea of entrepreneurship was prominent given the current situation of unemployment being experienced in the country. Parents expressed a desire to have children who are independent and able to do something in order to earn a living. Setting up a business to propel one's specialization was seen as key to reducing the dependence syndrome, since it would make people stand on their own.

Parent: ...children to develop skills on entrepreneurship such as ICT and on business matters. We also want to develop positive skills and talents in business. (PA-FGD- KAMOP –MAN)

Parent: such child should be independent, someone who can do things for her/himself. Those are children who should be able to do something to earn living ... they should have skills even in business. A very independent child. (PA-FGD-UNOAP –MAK)

While focusing on the curriculum content, secondary school students on their part reiterated that at primary level, Home science, Art & Craft, Music should be learnt so that learners can be able to use the skills learnt in life, earn a living from the arts and also to nurture their talents early enough.

Student: So, I would propose that Home Science and Art and Craft be introduced. The latter helps learners to be able to make things ...because these drawings, once completing primary school and the child continues with that subject, finally, he/she will become a person who is making those things that can be sold, bringing in good money. (S-FGD-NYAMS-NYAM)

The findings generally show that parents advocated for an education that imparts skills that focus on the holistic development of a child.

Parent: I think we should have all round children, so that when they leave class eight they are approaching adulthood. Some may not have the opportunity to further their education so they should be all round so that they can survive. The knowledge they get and what they learnt from the syllabus from the school should make them be responsible when they leave school (PA-FGD-LAKP-HOM)

8.3.2. Values

The respondents expressed a general view that the society had lost most of its values. Special reference was made to the negative impact of corruption which had adversely affected our society. They expressed the need to deal with corruption through high levels of integrity.

ME: Values are eroded in our contemporary society. There is need for a curriculum that emphasizes on reviving values like honesty, kindness, love, unity, trustworthiness in young children. Such values will uproot corruption which is the cancer of the nation. **(ME -DBK-IS)**

Parent: ... Corruption is finishing this nation. I don't know where we shall get leaders of integrity. The courts are corrupt. Law breakers are taken to corrupt court. Judges are corrupt. Where is integrity? Those who set exams are teachers and are the same people who disclose the questions. Very high integrity is needed in this area. **(PA-FGD- UNOP –MAK)**

They added that the curriculum should embody civic responsibilities and the national values as enshrined in the constitution. They proposed that curriculum should revive the values like honesty and love.

ME: The curricula at different levels should aim to enhance accountability, integrity, responsibility, peace, commitment to work, negotiation, acceptance and environmental preservation. This can be achieved by involving learners in community service at all levels during holidays hence inculcating nationhood in learners. **(ME- OCO-IS).**

Learners identified values like humility, kindness, respect, hard work, patience, love, peace, responsibility, honesty, obedience, kindness, truthfulness, good morals and integrity that would lead to good behaviour as a result of discerning right from wrong.

Pupil: ..To have respect and love each other as well as have peace...**(P-FGD-StANNPP-MIG)**

Teachers and parents in their lead role as people who can be emulated were expected to act as role models since learners would likely look up to them to model behavior. Values identified include: discipline, organization, cleanliness, respect, patriotism, obedience, respect of other people's opinions. Parents in a rejoinder indicated that the transmission of values would only be successful if practically demonstrated. Since children could only emulate, what they saw, it was the responsibility of teachers and parents to model good values all the time so that children would best learn through observation.

Parent: Teachers to be united this will help the children to take them as their role models. Also the parents at home should refrain from bad behaviors which can lure the children. The parents should set a perfect example to their children. Knowing that child will emulate what the parents do **(PA-FGD-MARP-BAR)**

The parents indicated that values should be taught from an early age since they form the learners' character and cited some of the values to be included in the curriculum like discipline, respect, politeness and hard work.

Parent : At the lower level is also where behavior begins. The way you teach a child is the way he/she will become. If you see a child needs correction, this is when you should correct the child. If you want the child to go to church, then take him/her to church and he will learn that he should attend church. The child should also learn to respect his/her elders, their teachers as well as those who follow him/her. The child should also be taught what is bad and that is how we will get rid of rudeness amongst our children. A major contributor towards spoiling our children is the way we pamper our children. We pamper our children so much to the point where when they go to upper classes and the teachers address them harshly, some end up committing suicide. We as parents need to take the responsibility of instilling good behavior in our children alongside the teachers.**(PA-FGD-SENP-NYM)**

The respondents also felt that discipline was an important element in the formation of learners. Support from home would bolster values. Parents suggested that learners should also learn religious values in order to equip them for the world of work.

Parents: discipline is the key factor, if they come from school with it, it should also be supported from home.**(PA-FGD- KAMP -NYM)**

Parents wanted the return of the cane as a form of punishment to deter indiscipline and instill moral values in children in primary schools. They were also of the view that if guidance and counseling were strengthened, values such as obedience, honesty, cooperation, dedication and responsibility could be acquired by learners.

Parent: The removal of corporal punishment and human rights requirements, have made it difficult for teachers and parents to instill expected values. However, if guidance and counseling is strengthened values such as obedience, honesty, cooperation and dedication to responsibilities should be emphasized to a great extent. **(PA-FGD-St.JOSP-BUN)**

The values that have been suggested for inclusion are twofold. One category targets those values that enhance good citizenship and include issues of integrity and accountability, among others. The other category fulfills some criteria for peaceful and harmonious relationships among members of the society and include traits of obedience, kindness and honesty. It is however evident that that they are not mutually exclusive since the absence of any value leads to some disequilibrium in the society.

8.3.3. Attitude

The importance of education as a transformative tool was articulated by industrialists who suggested that education should first of all develop the person. According to them, change of mind sets was a key factor in giving knowledge that what they learnt in school should alter their thinking and enable them to create jobs, not just rely on white collar jobs. There is need for education that will change people's mindset and help them realize that the knowledge acquired in school can be used in various ways, not just in white collar jobs

Industrialist...change the mind set and get a different mentality ...because why we end up all looking for white collar jobs.. .that has caused so much unemployment... there is more to education rather than you getting a job.... passing exams is not the only thing in life ...you can live...happy life not necessarily through cheating your way into the system and having all the shortcuts that people are taking...Let people learn patience, to value honesty and above all to know that they should be accountable for whatever action that they do ...later on they will pay for them dearly . **(MAN-IND-BAR)**

Pupils suggested that it was necessary for people to develop positive attitudes towards certain subjects that do not necessarily interest them, teachers and life in general. In addition pupils should be confident and cultivate a sense of independence.

Pupil: ...the blame can also be put on us because we have negative attitude towards the subjects and also towards the teachers when we don't understand... I would like to be a singer but if the teachers will not show us an example of how singers do we will be afraid and say I can't do this because if the teachers can't do even me I can't do... The teachers should not be abusing us because, let's say you've not done the work the teachers has given. Now when you go apologize to the teacher the teacher tells you, "So. You go move away from me." You will feel fear from the teachers in class and you will not understand **(P-FGD-BJMP – MUR)**

They also suggested that education should help learners to develop positive attitudes for application in their future, including helping others. Such an attitude should be directed to both self and others. They also pointed out the need for attitudes that foster unity, cohesion and nationalism.

Pupil: I would like to have values like honesty, love for people, intelligent, trustful... I would like to be able to help others who are in difficult situations and help them get solutions to their problems **(PL-BUNP-LK)**

Respondents indicated that pupils should be encouraged to appreciate one another despite their varied backgrounds since some live in the slums. Further, respondents suggested that orphans and most vulnerable children should be cared for and accorded equal opportunities.

Pupil; we should be taught on how to live with orphans despite our different family backgrounds."**(SL-SOSP-UG)**

Learners would like to see their teachers committed to their work, serve as role models and not just salary matters.

Pupil: We need teachers that do not just need money but they are ready to teach us what is good and what we should not do. (P-FGD- BJMP –MUR)

8.4. CONTENT /LEARNING AREAS/ PATHWAYS

8.4.1. Learning Areas

8.4.1.1. Presentation of Content

Some of the key informants interviewed suggested that the curriculum should adopt the spiral approach in presentation of content at the Primary School Level as well as incorporate international and regional best practices on assessment, addressing and promoting the emotional and psychological well being of children.

8.4.1.2. Languages and Communication

With regards to language, the respondents were of the opinion that language should lay emphasis on comprehension, written expression, writing, oral and reading fluency. The learners in primary schools suggested an improvement of their interaction with the outside world through foreign languages. The languages include German, French, Arabic, Hindi, Russian and Chinese.

Pupil: We should learn foreign languages like German, French, Chinese, Russian, Arabic, india ... so that we can be able to communicate with foreigners (P-FGD-HVAPP-KIL)

Learners expressed the need to learn English and Kiswahili in order to be able to communicate and prepare them for careers such as law and journalism as well as for transition to higher education. Some respondents were of the view that public speaking, writing, research and good manners should form part of the curriculum. Further, basic Fasihi ya Kiswahili and Literature in English and indigenous languages should be introduced in middle classes and should later be offered as optional in upper classes. Simple class readers can be prescribed in achieving this objective. Parents highlighted the need for Kiswahili to be emphasized for the role it plays in communication within East Africa.

Pupil: To become a lawyer you should know English to communicate with those who do not know other languages (**P-MASP-NAR**)

Parents emphasized the role of mother tongue as laying the foundation for communication and the need to anchor it in the curriculum just like in countries like Japan.

Parent.....countries like Japan, India, Korea, they all speak their language. In our country, mother tongue should not only be taught but also doing an exam in the same. (PA UNOAP –MAK)

8.4.1.3. Practical, Technical and Vocational Subjects

The respondents, including learners, parents and key informants decried the removal of practical subjects such as Agriculture, livestock rearing, Home Science, Creative Arts and Music, from the Primary curriculum. Vocational courses such as engineering, carpentry, masonry, handcraft, wood work, motor vehicle mechanics, needle work, cookery, knitting, tailoring were also proposed to form part of the curriculum at the Primary School level. Respondents credited food security to Agriculture and suggested its inclusion at the basic level as a compulsory subject. They suggested examination of those subjects.

Student:... Home Science, was a good subject for the learners. A child even when still young should be taught how to clean one's body, taking care of self and the kind of foodstuffs to eat. Also, this will help him/her as he/she grows. Things like cookery used to be there. Mostly, you find children completing primary or secondary school, not knowing how to cook. So, I would propose that Home Science and Art and Craft be introduced. The latter helps learners to be able to make things (not audible) because these drawings, once completing primary school and the child continues with that subject, finally, he/she will become a person who is making those things that can be sold, bringing in good money. And Music, in most cases, it is taken from form one. But I would like that the subject is taken from either class one at primary level, so that a good foundation is laid for that subject, and continuing with it, there will be no much difficulties to be faced. That is why you see music is very essential for our children and anywhere else. Therefore we would like our children to be taught music skills. (**S-FGD- NYAM**)

KI: .. And also another thing is that I will say that most of the economic activities of the community is livestock so if they can be taught something that is related to livestock, the drop out from the school can be useful to these nomads and at least when they drop out if they come back to the animal they don't become a burden to the parents, but they can help to keep livestock which is the economic activity of the people so that will also be a great assistance so that they are taught what they are brought up with instead of going to agriculture and things that are very rare here....(**KI-CDE-GAR**)

The advantages attributed the technical subjects are mainly their ability to raise levels of economic empowerment at the individual level and also contribute to the overall economic development.

8.4.1.4. Physical Education

The respondents laid emphasis on the importance of Physical Education in the school curriculum. Its importance was however down played by exclusion during implementation.

Parent: What about the physical education, if it is there it is very minimal; I don't think they teach it. It is only that during the break time they take a break. (PA-FGD-COMP-MIG)

8.4.1.5. Financial Literacy and Entrepreneurship

Financial Literacy will enable the learners to acquire skills to save, spend wisely and invest. Equally, the respondents underscored the role of entrepreneurship in spurring economic growth and industrial development.

Pupil: ...what about the person who scored D? Where do they go? If you are taught how to become an entrepreneur they obviously will have an idea of making ends meet that is starting small and then growing big.” (SL-SOSP-UG).

8.4.1.6. Technology and ICT Related Subjects

The respondents underscored the need for technology in education especially in this digital era. They added that this would make children adaptable to the technological evolution in a world where everything is being computerized. It was observed that the information should be imparted early, to equip learners with the skills earlier, instead of waiting until they had advanced beyond primary schools. The element of teacher preparation came to the fore as a means of ascertaining that learners were not ahead of their teachers in technology.

KI: ...if we compare developed countries and developing countries, countries like U.S U.K these young children are exposed to these things so they grow up knowing them so they can come up with new ideas if you are exposed early to these things you can develop your talents e.g. when you grow up you can come up with a lot of apps and whatever basing that you had these things earlier in your life. (KI-FGD-RONU)

The parents also observed that there is need to look at a framework for implementation of ICT in the curriculum in anticipation of the challenges it may pose in relation to acquisition of linguistic skills. It was important for education to develop ICT skills without jeopardizing the quality of language that learners are expected to acquire.

8.4.1.7. Health and Hygiene

Respondents underscored the need for health education including good grooming, Ebola and other emerging health issues. Some key informants were of the view that age appropriate health education content should be taught in line with Articles 10, 11 and 24 of the Constitution of Kenya 2010.

Pupil: ...because some pupils in boarding school don not even know how to make their bed, bathing and washing (PL-SAPP-MIG)

8.4.1.8. Social Sciences and Geography

Learners and parents preferred the teaching of History, Geography, Social Studies to raise the learners' consciousness of the different cultures nationally and internationally. They suggested that learners should be taught relationships between nations as well as basic history of their country. Respondents were of the view that in Social Studies topics about economics should be emphasized rather than cases of human evolution

Parent: So in primary children should be able to find out who she or he is really is, to value others, know human relations, the reason why nations are related to one another at least should there, should know the basic history of their country and country's development, should also be able to speak and write good English and good Kiswahili, apart from international thing... that child should be able to do basic mathematics, should be able to do some work in science to understand himself, plants some form of agriculture at this level the child should be exposed to every form of a stage sine if you denies the child that kind of a ability then at higher stage when he narrows down to specific area, there are areas which will miss overall. (PA-FGD-MOIG-S-UG)

8.4.1.9. National unity/Cohesion

Learners stated that unity should be taught in schools. An organization proposed that a new subject be introduced to cover positive attitudes, mutual respect, harmony, nationalism, patriotism and religious tolerance. They suggested that this new subject could replace CRE.

Respondent: There needs to be a new subject to cover these three values where the various cultures will be studied for the purpose of understanding how they can be moulded into nationhood. This subject should replace religious education at primary level, which can be best taught as an optional pastoral studies. (ME-RI).

Pupil:...They should also work together , do team work because as they talk they don't remove that hate speech because that is what brought 2007 post-election violence leading to peoples misplacement from their country and from their homes and it brought enmity to everyone (PL-SOSP-UG)

8.4.1.10. Value-Related Subjects

The respondents suggested that CRE, IRE and HRE should be given priority in the curriculum reform, since religious education is a guardian of values and morality. Some were of the view that CRE should be a standalone subject unlike the current status where it is integrated with Social Studies. Additionally, pastoral programmes, social ethics and guidance and counseling should reinforce religious subjects in promotion of positive values in the learners. They also observed that while African Traditional Religion is taught in the current CRE syllabus, it is misplaced and therefore should be taught as a separate entity. However, they suggest that it can be mentioned as an introduction to what Africans believed in before the advent of Christianity.

Respondent: The syllabus seems to exhaust the African Traditional Religion (ATR) with claims that learners need to understand their religio-cultural roots. While this is a good idea, ATR is misplaced in the CRE Syllabus. ATR cannot be Christian Religious Education. These are two completely different religions and should be taught differently. A little bit of ATR can be mentioned in CRE just as an introduction of what Africans believed before Christianity but not to take an unnecessarily long time. (BSK-RI).

Respondent: CRE be a compulsory subject in ECDE, primary, secondary and teacher training colleges....to promote sound moral and religious values among learners. ..guidance and counseling to enhanced and offered in a recognized office in all schools at all levels...the church to be involved in identifying and recommending teachers who are assigned these subjects (CRE, Social Ethics, PPI and Guidance and Counselling. (GA-RI).

However, a learner indicated that CRE should not be taught in school citing the multiplicity of religions existing in the school context.

Pupil: we should also learn science English, and many more. A subject like CRE should not be learned because in our school we have many religions like Muslims and Hindus....we should not learn religion in schools. (PL-TEMP-NY)

8.4.1.11. Mathematics and Sciences

The respondents affirmed the vital role played by Science and Mathematics in relation to employment, innovation, food security and prevention of diseases. In addition, some respondents

Pupil: to learn about economic activities like farming...Mathematics will help to know quantities and follow instruction to mix eg waste in farming.....I think Science will help me know how plants grow (P-FGD-St.ANNPP-MIG)

Pupil: ability in science and Maths so that I can make a clone of human being ...we should learn sciences to avoid transmission of diseases, mechanism (P-FGD-HVAPP-KIL)

8.4.1.12. Social and Life Skills

Additionally, the respondents emphasized the importance of including social and life skills such as self-esteem, critical thinking, self awareness in the curriculum in order to prepare learners to deal with day to day challenges.

Parent:there is the subject that started called ‘ life skills’ it was started and died afterwards.... If life skills were taught today, some of this social problems we have could have been taken care of, it taught children how to take care of themselves and others people.It taught them how to have interpersonal skills and how to treat about other people... .(PA-St.JPP-LK)

Pupil: ...good manners, social values... health education... interaction with others... life skills..., so that Kenya isn’t left behind. (P-FGD-NANP-LK)

8.4.1.13. African culture

Parents observed that there is general neglect of the African culture and the curriculum should therefore ensure that content in this area is provided so as to avoid a situation where the Western culture will take over the youth.

Parent:.....long time age kama ni husband and wife they seriously loved each other but when they were walking one is three steps away from the other, that is our African culture. Then western culture is deteriorating our culture, can we have a subject called African culture. (PA-FGD MARP –NYM)

8.4.1.14. Emerging Issues

The emerging issued identified by the respondents for inclusion in the curriculum encompass: climate change, environmental conservation, effects of internet use, alcoholism, prostitution, HIV and AIDS, girl-boy relationships, corruption, current affairs, safety, homosexuality, drug and substance abuse and the effects on individual and society at large.

Pupil: ...be taught and practice how they can conserve the environment (PL-MUGP–MUR)

Parent... the areas of safety, escape when there is fire at the school. (PA-COMP-MIG)

Pupil: by creating awareness about the dangers of drug abuse ...teachers talking to pupils about those effects of the drug abuse and the effects of peer pressure. (PL-TEMP-NY)

8.4.2. Pathways

Respondents suggested that drop-outs from primary schools should join Technical Institutions and that pupils should have more free time to learn.

Learners are of the view that those who are not good in class can be taken to polytechnics for particular skills training

Pupil: ... Educated person can go somewhere, look for work and help other people like in youth polytechnic where they do the best because if there are people who are not educated they can go there and be taught what they must do and to practice more. (PL-KAIRP-MUR)

Respondents correctly observed that not all children are academically gifted. Consequently, children should be helped to identify the right career path that would lead to self-sustainability, realization of their dreams and potential.

Parent: By re introducing hand work, woodwork because if a child was good in these skills at school, they can continue well at the polytechnic. (PA- FGD-MLVPA- KAK)

8.4.3. Summary

The respondents indicated that the curriculum should be reformed to encompass a paradigm shift from the current focus on the cognitive domain. They prefer a curriculum that offers learners a broad range of a variety of subjects and content that takes care of their potential, interests and choice of careers, as well as prepares them to deal with every day challenges. As a result, the emphasis is on subjects that are practical, vocational, technical, languages and those that allow them to develop their talents.

8.5. IDENTIFICATION AND NURTURING OF TALENTS

8.5.1. Benefits of Talents

The learners indicated that education should provide for nurturing of talents so as to enhance their popularity .The importance of talents as an option for easing the current situation of unemployment and poverty in Kenya was seen by parents and learners as an opportunity that education can exploit to improve the livelihoods of many citizens.

Parent 1: we can nurture the talents of students who are not good at class work but they could perform very well in other fields, if we could change the syllabus such that it can accommodate this kind of students, our society could be better off, such that if the student don't continue with his studies he could have something to do for earning after class eight.(PA-FGD-MFGP-LAM)

Interviewer: once we know that somebody has a certain talent how can we continue nurturing that talent...?

Pupil: by teaching him to, telling him how it can make him a great person and how it will improve their families...how he will improve his talent, by giving him instrumentsfilm to check out...so that they can remove a CD [the learner intended to produce a CD] (PL- OUTPP-UG)

8.5.2. Identification of Talents

The involvement of many stakeholders in the identification of talents was mentioned as a way of ensuring that children got support from home and school as their talents are identified.

Parents: Talent identification is a process involving certain parties, I will start at the beginning, and the first person to Identify child's talent is the parent, then through sports in the schools and the way the child performs in the sports the teacher will identify this talent. The afterwards the teachers and the parents will meet and help the child get the right education as well as helping them nurture their talents, through getting them the right materials and resources. (PA-FGD-MARP-BAR)

The learners indicated that co curricular activities like music festivals, drama, games and sports can be used to identify talents in visual and performing Arts as well as games and sports among learners. Pupils for instance, suggested that talents in dancing, singing can be identified during competitions and choir practice.

Pupil: Our choir master told me that am best in singing. The choir master in church or here school..... (P-FGD-MASP-NAR)

Parent: ...these include games like football, netball, volleyball, athletics all sports and games. These are important to the learners because after games, the child is too tired to go out for bhang smoking but if he/she does not games he/she has the time to join the bad groups. (PA-FGD-MAKWP –KWA)

Parents were of the opinion that children should be monitored in order to know what is best for them.

Parent: ... But if a child can be monitored to know what is best for them, it would be very good. They should not be left thinking all children are the same (PA-FGD-UNOAP –MAK)

Parent: Some talents can be identified as early as STD 1. Through exposure to various activities where they show interest or capability (PA-FGD-KIARP –MUR)

Pupils expressed the need to provide a variety of opportunities to enable them display their talents so that they can be recognized and appreciated.

Pupil: I wanted to say that, I may be talented like am funny I can be a comedian, and I want my talent to be seen by people and I want to be famous, and I want people to know that I have a talent, I want our teachers to give us time, I can make people laugh, entertain people and they can laugh so we want free time so that our talents can be seen by other people. (P-FGD-OLE-SANP-NAR)

Pupil: By practicing it.....By showing it.....(P-FGD-BUNP-LK)

Pupil:....May be if you are talented in sports you can show in competitions. .(P-FGD-BUNP-LK)

Pupil: I think that we pupils should have free time one day so that those who have talents can show you can find someone for example if you are telling this dancer. You can find someone saying I miss dancing I like dancing but you do not have time to show (PL MIR PHB)

The pupils indicated that their teachers play an instrumental role in helping them to identify talents related to dancing, singing, drawing, athletics, poetry, and playing football and observation of their behavior and unique characteristics can be a means of identifying talents. They also expressed the need for the teachers to exhibit personal interest, tolerance and support as well provide encouragement to the learners.

8.5.3. Nurturing of Talents

The overloaded and broad curriculum was viewed by parents as an impediment to early specialization in specific areas of interest, thus limiting the development of talents. They posited that when children have a few subjects to concentrate on, there is a likelihood that their talents will be nurtured adequately. This would also make it possible to clearly determine the pathways that are suitable to what they would be inclined to.

Parent: ... let's specialize early... to add on that, students should not be taking too many subjects and they will just specialize on just few, they should be taught only subjects they will specialize on. I will give an example of India, they have so young specialists on every field because they check on the talents of the student and teach only what is best to nurture that talent.(PA-FGD-MBGP-LAM)

In spite of the push for subjects that are relevant to learners' talents, the parents equally reiterated the importance of basic education. They added that all talents require some form of basic education.

Parent: It is important to allow the child to complete education. Let him finish class 8 na tumsukume amalaze form four tu (let us push him to finish form four). When he has class 8 and form four certificate, he will have gained more in education. Furthermore, the child needs basic education even in whatever talent. He/she should be able for example to communicate effectively. (PA-FGD-KATP-MAK)

As opposed to having many subjects, the idea of having subjects that could lead to the development of talents was pre-dominant. Learners expressed their interest in subjects like music and urged that schools should offer them.

Pupil: In music there are many schools there are many talented students in singing and if it is not taught they will leave their talents but if it is taught they will teach themselves a lot about music and when they grow up they will be better musician (P-FGD-MISP-MAK)

The learners' opinions affirmed this view that talent can be nurtured through extra- curricular activities. The introduction of clubs and societies that engage learners in a variety of activities was therefore found critical in nurturing the talents.

Pupil: The government should ensure that the 8-4-4 is not fixed thoroughly so that most of the people should get chance to develop in co-curricular activities and maybe they can end up being famous sports men like for instance David Rudisha... Co-curricular activities should be given ample time **(P-FGD-HVAPP-KIL)**

Learners suggested that talents can be nurtured through competitions and having positive attitude. Role models/mentors/coaches for example, famous musician can be invited to schools to assist learners to develop talents. They however indicated that caution should be exercised in identifying these role models.

Parent: ...we can invite people to school to show learners these skills...so that by the time they are out of school they can go and practice these talents...i agree but we need to be cautious on the credibility of the persons. some people can come in with bangi!we also agree that we need to make our school environment conducive for talent development. yes.....**(PA-StJPP-LK)**

Pupil Leader: Nurture them within the school environment. Provide musical instruments, balls for the players and nets... you give them the instructions of what they are supposed to do and they will do it. **(PL-UNOP-MAK)**

Pupil: Let says for example ,The children who are out there, most of them in our school we are too many and it is not very easy to discover once talent, so I think they should just that thing of bringing other people from other places and bringing them with other children who have talents. When they meet with other schools they will compete and see who is best in that.

Pupils suggested the need to establish centres, clubs, incubation centres and for curriculum to provide enough time for sports so that learners can develop related talents. They also indicated that the curriculum should identify pathways early enough to nurture sports, music, craft performing and creative arts as well as consider providing adequate materials and facilities to facilitate nurturing of talents. should be provided and talent based clubs established.

Pupil: If they can construct or build a talent show it would be good and will have support from other people and parents.....**(P-FGD-MASP-NAR)**

Pupil: ... introduction of them in school. provision of materials availability of talent clubs... practice..... encouragement. competition with other schools....availability of big playing field and facilities.....be given hope. **(P-FGD-NANP-LK)**

Learners would prefer to have lessons for learning to develop their talents. Additionally, the curriculum should be changed to incorporate technology in education

Pupil: There shouldn't be always lessons; there should be one lesson to show them how to develop their talent. (PL-MBIRP –MUR)

Learners: By providing ICT lessons, by providing the lessons like in China where students makes phones

Interviewer: So you're saying Kenya should go the Chinese way? Just explain it ...

Learners: They should set a day when learners should try to invent even their own things

Interviewer: So you're saying learners should be given chance to invent things like the Chinese does.(P-FGD-HVAPP-KIL)

Parents observed the critical role played by teachers in identifying talented children. It was necessary to train teachers in order to equip them with the requisite competences to enable learners develop talents.

Parent: ... If we have music subject, a teacher is able to know who can sing well.... But even if music is taught, there need to be ways of moving on with the skill after primary. If it can be taught in primary and above, let's say secondary and college that would be good. A child can take such line and pursue it. ... There are children who can compose songs and sing them even with dancing. They are very creative. (PA-FGD- UNOP –MAK)

Parent: ...child is in school after realizing he has a certain talent, it should be nurtured and the child helped to develop it because we can't all study to become teachers or doctors. (PA-FGD- DABP –KIL)

Parents also stated that teachers ought to identify talents from an early age and help nurture them. Additionally, parents would like learners to be provided with opportunities to compete with other schools as well as provision of requisite facilities and equipment for sports, drama and Music.

Parents: ...kids in std one and onwards need to be given time to discover their talent...so that by std 8 the know their talent..that i can sing...i can do homescience and so on. so we have seen that children can be profiled by engaging them in varied activities .yes but also I can also say even exposure..the teacher can help the learners to do a variety of things like take them where people are doing things like making music...making pots.or they can have a place in the compound...a small shade where they can go and paint...or even paint, drama...we need to widen it.(PA-StJPP-LK)

Parent: You know when you give them this practical work you will know their talents. Because you will know the talent if the child is not good at class work but good in practical work. We are too much centered on theory not practical work except in sciences which is very shallow(PA-stTERP-MIG)

Parent: We can nature them by giving them time to show their talents. You can encourage them through a club for Agriculture, Home Science

The learners indicated that talent could be identified through a person's interests and hobbies and performance.

Pupil: there are things that a person likes doing at his free time. When people got play football most of them are not interested in playing football they are doing their things like dancing, and all of those like drama all that is where you can discover a talent (PL-KIAP-KIA)

Pupil: ... Parents and teachers and the government and the whole country should join hands in making the students who have talents nurture them (PL KBUP-KBU)

Parent: ECD and Primary school level students should be exposed to various talents, then government should think of coming up with talent academics .Probably in secondary school level where various talents are developed and if we had talent academicsI may propose drama in subject level; the most talented person is not the best actor of drama you may find someone who is not talented is best in the theory of drama. So I suggest we have talent academics in future. (PA-FGDPP-MOI-UG)

Parents observed that learners need to balance their interest in the areas they are talented in and the other knowledge based aspects of the curriculum.

Parent: Sasa mimi kama mzazi niko na watoto wawili wamemaliza shule amebaki mmoja, na my first born alikuwa na talent ya kupiga mpira, nilikuwa naona akiwa primary, niliona ile jambo iko ndani yake, hata kama nilikuwa na zuia, nilikuwa namwambia ndiyo piga lakini masomo angalia. (PA-LIKP-LK)

The parents suggested the learners be exposed to games and sports, building and construction, hand work, textiles, knitting.

Parent: Some do not do well in academics but they do well in talents... we should have an all rounded child, not only good in books or looking for employment. If they have talents in building and construction, hand work, textiles, knitting and such , they should be provided for in order to develop their own self .(PA-NYAP-NY)

Learners would like to develop their talents by way of participating in clubs, festivals and through practice. Also, the requisite resources should be provided.

Pupil: They should go to performing or music festival or any other festival. (PL- MbI-P –MUR)

Pupil: participating in activities and practice frequently...Schools should provide facilities e.g. drums, key board, guitars ...in sports there should be a playing field... provide net balls and games kits... clubs e.g. journalism clubs, talent and fashion shows. (PL SPAP –BUS)

Support

More support for talents could be achieved by learners being encouraged not to hold back their talents and the establishment of talent schools/academies by government.

Parents affirmed their support for developing talents among their children. They cited the avenues that they would use to grow whatever talents their children had.

Parent: you know, not all children are talented in things of education. There are some who are talented in other areas like sports, singing. By the time a child goes to secondary, the parent should be able to know the talent of the child. And such a child can be taken to technical colleges or polytechnics to get skills related to what is able to do, skills of manual work like carpentry. So the parent should be keen on this in order to help the child. (PA-FGD-KATP-MAK)

Interviewer: how as a parent do you support a child talent i.e. singing dancing running playing football?

Parent 1: if he or she is a singer I will let him participate in Sunday school to do away with fear

Parent 2: if am capable I will take them to talent shows?

Parent 3: the ones who can be able to plait I will first take him to schools and during holidays I will let him be with his friends in saloons so that he or she can learn more and add skills

8.6. PEDAGOGICAL APPROACHES

The respondents advocated for teaching and learning approaches that shift focus from the teacher and place the learner centrally in the learning process. Some of the methods they suggested include practical, differentiated, exploratory and discovery methods as well field excursions.

8.6.1. Reversal of traditional classroom practices

The key informants expressed the need for teachers to be more professional and up to date with current information and make learning fun and learner centered.

KI... Lets talk about classroom environment, the teacher is supposed to enter in classroom, I think the structure is very clear, using that scheme of work, lesson plans, but the problem is how to deliver, on structured lessons, and here it comes about because most of the time if the teacher doesn't have the objective to deliver he may not know what is not getting out on the lesson, so the approach should be they normally call it, it can be participatory within the content, where the teachers know what the students have not learnt from the previous lesson, it has to be more of the children enquiring from the teacher, than the teacher enquiring but how does the child enquire if you don't give them the task, and you just talk (KI-UNESCO-NAI)

8.6.2. Practical teaching Approaches

The respondents were equivocal in calling out for reforms in pedagogy that are learner centred creating a paradigm shift where the teacher plays the role of a partner in the learning process and creates room for learners to learn through practical modes.

KI:There is too much of spoon feeding. The students are rarely left on their own to delegate even more work for themselves. So I would like a situation where the teacher is only a guide and supervises as the students do it practically themselves (KI-MCDE-NYA).

Respondents emphasized on the need of having continuous research to improve curriculum delivery methods. In addition they stressed on learner centered methods.

The respondent recommended anything that liberates the learner. He explained that good approaches are those that are discussive, dialogic and interactive

KI:I would give a very broad answer and say anything that liberates the learner Approaches that are discussive, dialogic, anything that is interactive, where there is actual interaction not you know for most of our teachers interaction is something like ask a question and the student answers. There is no interaction there..... It calls for creativity on the part of the teacher and it calls for inventiveness Then they also need capacity to some kind of reflexivity **(KI-CEB — NYM)**

The respondent suggested that creativity should be encouraged.

KI: Encourage creativity and activities that they perform. Allow them to participate where they want to. The moment creativity is encouraged in children am telling you they would come with different ideas that you didn't imagine they have at the back of their mind. **(KI-CEB-MIG).**

It was suggested that group activities performed at school can help a teacher to group or regroup children according to their talents. This however happens in a conducive environment where the teacher is cordial to them. A hostile environment inhibits children and this makes it difficult for the teacher to know what they really are.

KI: But if they are given the freedom for creativity when it is time for example P.E. and there is something you want to gauge give them the freedom, it will come up. Teachers should be in a position to be able to know when to do so that they can gauge well. **(KI-CEB-MIG).**

A respondent observed that in a competency based curriculum, pedagogical skills should be practical and not those which facilitate rote learning.

KI: In competency based education we have to develop critical thinking. So that the learners are taught to internalize, think about issues, evaluate and be able to... those are some of the methods that the teacher trainees in this curriculum they can prepare teachers to deliver the curriculum the way it is intended to be.**(KI-TSC-NAI)**

KI:Practical work is very important. Schools should have the primary science kit and also quality laboratory because there are experiences for the children understand since practicals enable students not to forget. We should not use pictures in practicals instead get the real equipment's needed in practicals.....Teachers should use group works this groups should be practiced from primary because it gives the children a clear understanding when they discuss they help one another. Again the size of the classroom is also important we should not overcrowd in one class for the teacher to attend to all of them and identify the student's strength and weakness. . **(KI-BOM - KIVS- NBI)**

The respondent said that learners need to manipulate items from the local environment such as wires, parts of bicycles, old automobiles to sustain development of the competence.

KI: We need children to manipulate ...wires, parts of bicycles, old automobiles...from the local environment ...to sustain development of the competence. **(KI-CEE-BUS)**

Technology

Regarding pedagogy, the respondent pointed out that there must be rationalization of classes, so that the teacher can be able to provide individual attention and meet the diverse needs of the learners

KI: So I think to me we really need to rationalize, thus, the teacher is teaching a learner but not teaching multitudes and a teacher can evaluate learners and identify strategies of giving individual **attention (KI-SGKN NAI)**

KI: I think we need to have a paradigm shift from that by insisting that our learners should be willing to do independent study, where I went in the US something called independent there is minimal interactions with the instructor, you are taken through guided learning and at some point you should be able to stand on your own, even in lower level of training we should encourage our students to grow like that **(KI-DVC-CHU)**

The respondent suggested the following approaches for use in teaching and learning.

KI: people learn differently.....lecturer method works up to a certain way... you actually need to let those children know whether it is to explore you.... there group work, role play, discussions, experience sharing... ..methodology really needs to change and you know if that happens, then even the size of the classes need to change, the number of the teachers **(KI-KNHCR-NAI)**

Pupil: most students get shocked when introduced to subjects they have never handled in primary schools (Chemistry, Biology, and Physics). **(PL-St. JP- BUSIA)**

8.6.3. Exploratory/Discovery Methods

The respondent noted that learner centred methods, which involve discovery or investigative approaches are more suitable than the traditional lecture methods. The lecture methods could only be applicable where the number of students is very large. These approaches emphasise “how to learn” instead of “what to learn”.

KI:We would like child centred approaches, you would want where the child learns by doing themselves the discovery efforts, the investigatory efforts more than the lecture approaches” **(KI-HQUASO PWANI UNIV)**

KI: making the children do something and taking them out for field studies and all that, going to this place called arboretum during science lesson I take my kids to arboretum I can tell them look at insects so that when I come to class instead of talking about an insect and a child is getting what insect is they can say this is a grasshopper, it has wings, it has six legs. Children look seeing, when they see they remember **(KI-HET-NAI).**

KI : Letting children do things their own, I mean like research one I talked about and letting children go and research in their own like get a manila paper go and draw a plant involving children not just from the teacher involving the children **(KI –HET- NAI).**

8.6.4. Differentiated Methods

The respondents suggested the use of differentiated teaching and learning approaches such as multi-grade and task based teaching to take of the learners' interests, abilities and learning differences.

KI: Revive multi-grade, multi-shift not working. **(KI-TCD-GAR)**

8.6.5. Field Work/Excursions

The learners preferred use of participatory approaches, experiments and field trips in order to make learning more real. They also suggested that subjects like Mathematics, Home Science and Social Studies adopt a practical approach.

Pupil: In Social Studies you go out there to see the real things like when you are told there is a river and it flows towards that way, you will want to go there and see. Then that is why we have educational trips.

(PL- TEMP-NY)

Pupil: like in social studies we talk about physical features we should be able to go to see them. We also need practical's in home science and in Mathematics **(P-RUKPP- HB)**

There could be exchange programs for children to see what is happening in different parts of the country.

KI: even within the country for our students and pupils to see for example what is happening at Webuye paper mill, people from Mandera coming to Sony sugar so that they see that the sugar we take can also be made locally from our place and that in itself would even make them embrace Agriculture as a subject. They'd see the value that Agriculture adds to education **(KI-CEB-MIG).**

KI.....We want education that allow students to participate, more students participatory and one of our approach...is lesson plan that student centered, you prepare a lesson plan oriented and they participate more, rather than rushing, lets not just rush to do that but I think how much skills have they developed that every time, every topic we want to develop, and we will be keen in what they have achieved.. **(KI-CEMASTEANAI)**

The respondent indicated that learner-centered approaches should be underscored as opposed to lecture method. The approach should enable learners to identify their abilities. They are more stimulating and make them more innovative, using local materials. **(KI-MCDE-BUS)**

8.6.6. Technology-based Approaches

The parents proposed computer based teaching as a preferred mode of improving content delivery. The use of Technology was preferred as a way of improving delivery of content.

Parent:a computer is making the learners and teachers work easier. Children will not be carrying those very books to school since they will put their notes in their computers. Teachers will not have to write too

much since their office will be in their computers. The teacher will also get information from other sources. Technology is not a bad thing. It is a very good thing and will help a lot. **(PA- FGD-LOTP- SAM)**

8.6.7. Use of Audio-Visual Method

They also suggested the use of audio-visual materials such as video clips could be used to help pupils conceptualise the magnitude of the effects of drug abuse as well as make abstract concepts real

8.6.8. Debating

Parents suggested that there should be debating in school and 4k-clubs.

Parent: there should be debating where there are opposers and proposers to develop their positive debating and socialization skills **(PA-KAM-NY)**

The pupils also indicated that suitable approaches should be used to identify and grow talents like football.

Pupil: I think it is wise for the government to introduce these things or rather to buy them so that to bring up children in a way that they bring up unknown talents from the young ones so that even as they grow up they be like mariga rooney **(P-RUK-PP-HB)**

Regarding pedagogy, teachers should be friendly and apply the practical approach to teaching. However; respondents said some teachers had poor teaching techniques with some using mother tongue as the medium of instruction. They proposed strengthening the capacity of teacher from teacher training level. There was a general emphasis that teacher's strikes could be averted as well as the mass transfers through proper remuneration.

Pupil: some teachers abuse students and others comes to class to make stories till the lesson is over **(P-FGD-GZEP- KIF)**

8.6.9. Summary

The preference for pedagogical approaches that are participatory, application oriented, practical and based on local resources was quite clear among respondents. In addition, the benefits of the approaches will be better realised through well trained teachers and continuous research.

8.7. TEACHING AND LEARNING RESOURCES

8.7.1. Teaching and Learning Materials

Respondents were of the view that both the government and parents should provide resources like geometrical sets, textbooks, exercise books, charts, globe, current world maps, the flag, calculators, encyclopedia, chalk, blackboard, classrooms, paper, and revision papers, sports and games kits, revision books, digital content, audio visual materials, newspapers and uniforms because some parents may not afford, others were of the view that parents should and only those from poor families should be provided with books.

Pupil: Parents should buy supplementary books to help the pupils read wider and for something like Social Studies, classroom should be supplied with something like maps and charts and a globe (**PL-TEMP-NY**)

Pupils: There are few textbooks and revision books. We are told to buy them whereas they are very expensive and poor students can't afford them. When we are sent home sometimes we miss very important topics that are very crucial and come in the main exams. (**P- FGD-GZEP -KIF**)

Pupil: Their parents should buy those books or the materials they need in school. They should not use broken things like desks. And their classes should be well maintained (PL MBI P MU)

Pupil: Their parents should buy those books or the materials they need in school. They should not use broken things like desks. And their classes should be well maintained (PL MBI P MU)

Pupil: For the current pupils who are poor they can be provided with the books and in future try to make them the best so that they will earn a decent living when they grow up. (**PL-TEMP-NY**)

Parent: provide uniform because there is some psychological torture when the child is not in uniform. The child will not be comfortable while in school in old uniform, may be the shirt is torn or short as a parent we should provide a new one so that the child could be comfortable psychologically (**PT-RUK-PP-HB**)

Parent:The child learns better by seeing, the charts for the children are very few like the revised world maps.(**PA-St.JPP-LK**)

Respondents decried lack of adequate resources, both financial and non-financial which hamper proper learning. They equally observed the inadequacy of teachers.

Parent : they are not enough, parents are poor they can't support the schools well, due to low income, so to solve this all counties should be given equal support by the government concerning education. It should be affirmative(**PA-FGD-MFGP-LAM**)

KI: learning resources will be guided by the content of the curriculum ..have main course books which are helping the teacher to teach in class ...need to have supplementary materials that are beyond the national level..materials which give a global perspective, which goes beyond your own country it is good to expose the children to resource materials that are not within the country context.. other materials that looks at culture and patriotism, even the material that engage on legends ..children are really exposed to variety of materials (**KI-UNESCO-NAI**)

The learners and parents suggested that the people in charge of textbooks should ensure accuracy of the content.

Pupil: I think the text books I think the people in charge should sit down and go through them and be sure that this is the thing that is required they come up with one idea because we were having some challenges in some books you find that this one they are not just on the same line. (P-FGD-St.RUK-HB)

The participants indicated the need to provide computers in schools for both teachers and learners to use to avoid problems in future. They also identified libraries, television sets and radios.

Pupil: we should, some of the schools does not have computers and we would like to use them so that in future we do not have a problem in it. (SL- OUPP-UG)

Pupil: I would like for the teachers and for the learners so that teachers can so us how to use them. (PL-KAIRP –MUR)

Pupil: television sets and radios should be provided... libraries and computer labs (PL-SPAP –BUS)
Learners indicated the need for provision of resources for drama to enable them to present, interact and to compete nationally and internationally. Pupils were of the view that the government should provide adequate learning resources since some parents cannot afford to provide for their children owing to their socio economic situations. Print materials and recreational facilities such as playground were cited as important educational resources. To cater for the gifted and talented music materials should be made available to such pupils. The learners need fields for games to encourage them to participate and compete

Pupil: We need fields, big fields...so that we can practice and compete with other schools (SL-OUTPP-UG).

The learners also suggested provision of teaching aids to that would explain abstract concepts or illustrate learning contexts. They also underscored the role of a teacher as one who can improvise and use the readily available resources in the environment.

Pupil: the teacher could come up with the necessary accessories in order to explain whatever he or she is explaining can be seenlike in the breathing system the teacher can come up with a model make of the breathing in order to explain better. (PL-TEMP-NY)

Parents decried the expectation on them to buy curriculum support materials, which in their opinion change often, and therefore makes it costly.

Parent :... There is a problem we always have with the approved books for subjects. You find a book has been approved and it goes for maybe two or three years and they say, no, we have now stopped this we are using this. Why don't we have some books for a consistent time before the change because this change I'm sure a books changes from one style to another makes a difference in learning because the framing of learning, questioning and even the expected answer may be different from one writer to the other. What are you doing as curriculum developers to make sure that you learn....I remember when we were in school we were doing safari course, safari course was there for so many years and we used the same books for long but now they keep on changing. What are you doing as curriculum developers so that we can have a consistent book for some time?(PA-FGD-TONP-NYM)

8.7.2. Time as a Resource

Parents indicated that learners should have adequate time to study and not be engaged in child labour at home.

Parent: they should have adequate time as a resource; parents should let them have time to learn. Books and time to study. Children in upper primary are sometimes serving as house girls in the evening...the girls from class six are subject to this abuse. (PA-KAM-NY)

8.7.3. School Fees

Parents decried the unregulated way that learners are sent home for school fees.

Parent:Kusuhu elimu kitu kizuri kwa shule ile watoto wasome, mambo ya watoto wanavyo anguka, waalimu na parents washikane, ili wazaidie watoto, na pia watoto kufukuzwa kwa sababu ya kukosa pesa na mzazi, hakuwa ameabiwa kuhusu iyo fees, kama ni hiyo mitihani, na activity fee mia mbili kwa kila mtoto, kama unakuta watoto wa Likii, wasulula huko kwa sababu wazazi wameenda kutafuta mapema hawako, naona ni vizuri, mzazi anandikiwa karatasi, na anaenda shule wanazikizana na mwalimu vile atalipa hiyo pesa badala ya kufukuza watoto..(PA-FGD-LIKP-LK)

8.7.4. Human Resource

8.7.4.1. Teachers

Respondents emphasized that the Government should employ more teachers to teach subjects that are rarely taught such as life skills.

Pupils expressed the need for the government to employ more teachers and provide for more books.

Pupils: Employing more teachers .Publishing more books for us to read and understand.(P-BUNP-LK)

Learners observed that for learning to be interesting, then there was need to have enough teachers .

Pupil:....Enough teachers for teaching. (P-FGD-St.ANNPP-MIG)

8.7.4.2. Support from stakeholders

Learners indicated that they needed support from parents, counsellors and the government, BOM, education offices, NGOs and religious bodies in enabling them to learn well and that more children should have access to bursaries. Specifically, they singled out parental support in terms of allowing them to attend school and love them while governmental support focused on lowering of the school fees.

Pupil: I would like to be loved ... some are not loved by parents (PL-St.T- Busia)

Pupil:.. I would like the support from the government because other people fear coming to school because they are in menstruation period because they don't have pads to school. The parents are poor they cannot afford (PL: LAK –Busia)

Parent: you heard what the government is saying about pastors. You may not know the pastor who is coming to preach whether he is qualified or not. Whether he has the right spirit or not. Whether he will come to distort what the children has learnt or not. If we had a **counselor** who can harmonize these things (PA-FGD-KBUP-KBU)

Pupil: More children should be given bursaries (PL-91MP-LK)

Pupil: I would like the parents to allow the pupils to be coming to school so that they can get education....Lower the school fees....(P-BUNP-LK)

Pupil: ..Parents play a big role because they are the ones who discourage children from reading and also in return they can give us a positive attitude about studies (PL-BUNP-LK)

8.7.5. Sanitation

The learners stated that their school toilets were not hygienic , and required some improvement.

Pupil: I think they should rebuild our school help paint our school walls, make the school toilets more hygienic plant more trees develop food projects and programs in schools (SL- SOSP-UG)

The pupils felt that the government should provide food and sanitary towels, electricity and clean water.

Pupil: the government should provide enough food for the students for them to concentrate in school and also sanitary towels for the girls should be provide by the government... the government should supply electricity to the school.... The school should be supplied with clean water to drink and also the school should have clubs, societies and scouts uniforms. (PL KAMP NY)

8.7.6. Infrastructure

The parents indicated that learners needed adequate resources like science laboratories, libraries, science equipment, charts and computers, laptops uniform, internet connectivity, electricity, Television, Radio, desks, singing rooms, Musical instruments, sewing machines, toilets, tap

water, mattresses and beds. Comfortable place to study classrooms with enough desks better windows and roofs.

Parent: they also need science labs, libraries, science equipments, such as those showing parts of the body, computer. (PA-NYAP-NY)

The learners also underscored the importance of rebuilding schools, making the school toilets more hygienic, planting more trees, initiating food projects and programs in schools.

Pupil: I think they should rebuild our school help paint our school walls, make the school toilets more hygienic plant more trees develop food projects and programs in schools (SL- SOSP-UG)

The pupils suggested that equipment and facilities such as desks and chalkboards should be availed.

Parents suggested that learners should be provided with computers and audio visual materials,

The government should also build community libraries to create a reading culture.

Learners suggested that more equipment should be provided to allow them discover new things.

Pupil:...need to have more equipment so that children can discover new things(PL- 91MP-LK)

8.7.7. School Feeding Programme

The parents proposed introduction of food programmes in school, since some parents are unable to feed their children.

Parent: There are many challenges that people face. I recall during our time we had “Supro” which was a school feeding programme. For some people feeding the children and even livelihood is an issue. Therefore the government has the greatest share and also should support the parents {PT-KAR-PMU}

8.7.8. Learning Environment

8.7.8.1. Child-Friendly Schools

Learners cited provision of security and lighting as a concern that needs to be addressed in order to make the learning environment secure. Further learners underscored the need to have disability friendly schools.

Pupil: .. security in school for the boarding students...They can also have generators to help when lights go off...(P-FGD-St.ANNPP-MIG)

Pupil: By having power in schools for the disabled in Kenya, this will help the disabled people in Kenya to work well.(P-FGD-KUJP-MIG)

Some other respondents indicated that resources key in creating an enabling learning environment include: media resources, libraries, modern facility computer, proper editing suites, video cameras, ample space to avoid crowding and locations isolated from noise pollution.

KI... You may need very good library, you need modern facility computers, for example if you are in media you need proper editing suites, you needstudios, you know you need cameras you needsteel cameras, you need video cameras, and then you need ...Proper skills in terms of use of computers and designing desktop kind of skills you know so that people can be able to do desktop publishing and all that and ... more importantly also you need some better environment for learning with ample space well aerated, clean space, isolated from the pubs, the markets, **(KI-MCK-NAI)**.

KI.. the government should consider the marginalized areas receiving we have great schools in Nairobi and other urban areas but when we go in the low marginalized areas we find that they don't have labs there are students who have gone from form one to form four they are learning about burnsen burners in schools they have KCSE and they have never seen a bunsen burner and chemicals so that that's what I think. (**KI-STU-KAU**).

KI...physical resources we try as much as possible not to crowd very many students in one class so that the teacher can be very effective in delivering the curriculum to the limited number of learners. Physical resources here we are also saying that it is good that we can try to pull up to ensure that at least we have standard physical resources that will accommodate the learner to feel, to appreciate the learning environment. **(KI-TCDE-NYA)**

8.7.8.2. Teacher-Pupil Relationship

Parents have observed that, relations between the learners and their teachers should be one of cooperation. This cooperation should be extended to include all stakeholders

Parent: ... to get better education there should be co-operation between the teacher, the parent and the child... all the education stakeholders to continuous inspecting even school for the children to get good education. **(PA-FGD-MAKWP-KWA)**

Parents would want to see teachers being firm in order for the learning to take place.

Parent: ...teachers to be firm, to teach children all that what needs the child to know. In education because the child cannot get education when the teacher is lazy. **(PA MakwP –Kwa)**

8.7.8.3. Parent-Child Relationship

Parents should support their children in order for learning to take place.

Parent: First I prepare the child at home, she must have good environment, where she sleeps is clean, she gets food everyday and not going to school while hungry, she will not be attentive, ... when the child comes home from school, I go through all his books and ask him their learning was, help him if there is homework to be done... if paraffin is not available, I buy it and remind him/her that she/he read every evening. I should also make sure I see his/her teacher, to ask him/her about the progress of the child. **(PA MakwP – Kwa)**

8.7.8.4. Support for learners while in school

Respondents were of the opinion that the school administration should provide channels of communicating with parents; introduce parent visits to improve learners stay in school. They should also give basic need like cloths and food besides supporting their children in getting good quality education.

The government should strengthen supervision at school level, employ more teachers especially those specialized in Special Needs Education as well offer scholarships, bursaries, and subsidies to those learners who are in need

Respondents raised concern about bullying in school, physically use of vulgar language, pupil rivalry and the ill-treatment of pupils by teachers. They said the issue requires to be addressed

Pupil: I think the big boys and girls in school should not disrespect the small ones hence they should respect them so that they can respect them instead of bully them. So the bullies should be taken to their own school like for 1 or 2 years to be taught good behavior then they come back to school (**P- FGD KAHP- - NYE**)

Pupil: I think they they should have their own special place place back here in school, their special section to be having their own teachers to be taught about good behavior and everything. I also think most drop outs here in our are a drop out because of being abused by teachers who come from around. They are abused by their parents name and everything and their background that's why they drop out. (**P- FGD- KAHP- NYE**)

Parent: ikiwezekana masomo yakibadilishwa pia mazingira yabadilishwe (**PA- FGD KAWIP- KTU**)

“If it is possible as education is revised the learning environment should also be changed”

8.8. ASSESSMENT MODES

The learners and the parents addressed both summative and formative assessment modes of assessment with varying opinions. They were of the general view that both types of assessment should be used to assess learning.

Ind... apart from the national exams I would also go for continuous assessment test. There is nothing wrong with this. It will give continuous feedback. And again, the more you are taught at different classes, the more you understand the language of instruction which is very important. (**MAN-IND-MAK**)

Learners indicated that examinations should not be viewed as an end to themselves but as a tool of measuring the extent to which learning takes place. They envisage a scenario where learners from both public and private schools are equally considered for secondary school places.

Pupil: Pupils should understand we are not coming to school to pass the examination. We are coming to school to learn and to gather skills and knowledge so that we may make our country develop. (P -BMJP – MUR)

College student: Give equal opportunity to private and public schools to join schools in secondary school. (CS-FGD-NTTC –NAR)

From the parents’ observation, assessment should not be used to terminate the education of a child.

Parent: it can start from primary and secondary. But this testing should not be used to terminate the education of the child. Those who don’t do well in the test don’t mean they are stupid. They also have their potential... It would be better if we had people assessing those who are able to make baskets and allow them to pursue that line. (PA UNOAP –MAK)

8.8.1. Formative Assessment

The respondents posited that continuous assessment should be used to assess what the learners have learnt. This can be done by administering tests at the end of the term tests, Mock Exams, CATs, exercises, oral questions, interviews, monthly and commercial exams as the best modes of assessment. Learners also identified self revision and use of open ended questions as a way of getting feedback on what they learn. They underscored the importance of working under close supervision of the teacher.

Pupil: You can take papers and revise by yourself (P-StANNPP-MIG)

Pupil: Like in our case we are given an open ended question will help us know what we have understood (P-StANNPP-MIG)

Industrialists were in agreement that best results about the overall attainment of learners would be attained through formative assessment.

Ind...the best kind of assessment would be the progressive assessment... The final exam normally captures some kind of a drill program. It focuses on the final lap but the one capturing step by step would be better provided its more inclusive of content. (MAN-IND-KAK)

Formative assessment was viewed as a fair way of recognizing individual differences among learners.

Ind:the best way is to assess these students on what they have learnt, because students have different avenues of learning, there are some who are talented, they can memorize it in short time there are others who will take a lot of time and when they grab the information they are okay with it. What should happen is to assess progressively. For example if it is subject that the student is doing there should be a cat that the student do on the subject that they have been taught also they could put the practical aspect in that a teacher

might have taught a certain lesson but he or she should be put in real life so that they try to solve the same problem in a different manner in such a way, a teacher will be able to gauge and assess if the student has got the concept or not. There should be a progressive way to test students. **(CEO-RIV-UG)**.

Respondents added that formative assessment gives continuous feedback about learners and builds their capacity to understand the language of instruction. Additionally, it would discourage rote learning.

Ind: apart from the national exams I would also go for continuous assessment test. There is nothing wrong with this. It will give continuous feedback. And again, the more you are taught at different classes, the more you understand the language of instruction which is very important. **(MAN-IND-MAK)**

Ind:...it is encouraging something else like people are starting to cram exams and not really internalizing that information i would suggest because if you really want to assist this child not really teaching somebody how to cram..**(CEO-IND-NYE)**

The parents underscored the importance of continuous assessment as a way of taking stock of the learners' progress. The use of multiple choice items was faulted, since it could lead to guess work. Parents also raised issue with the integrity of examinations in the country.

Parent : to add on exams, the teacher could be asking questions in class to see whether they have understood what was taught, on exams, some students use guess work on this national exams, the leakages are so many and we are just worried about our professionals if they cheat in exams, let exam have some explanations rather than multiple choice so that a child can read and understand before attempting the examination, like the way secondary is done, let primary be done the same. There is no need of doing away with this exams **(PA-FGD-MFG-LAM)**

The pupils indicated that oral exams/questions can also be used to test mastery of content within each topic.

Pupil: We should be given oral examinations...we should be asked questions after the teacher has taught, so that the teacher knows if the students were active in class**(SL- OUPP-UG)**.

Pupil: A teacher who is teaching the learners should always make sure they have understood by asking them questions and giving them tests to do. **(PL-MBIRP –MUR)**

A pupil expressed fear in the KCPE Examinations and preferred continuous assessment.

Pupil: ... We fear KCPE, let's do the CATs and proceed with learning **(PL: LOGP Marsarbit)**

Another mode of assessment suggested by the pupils involves inter- school competitions to assess if pupils are learning.

Pupil: For example, when there is a maths contest or a science contest, those ones help to know if the children are reading and understanding well. (PL-TEMP-NY).

Parents suggested that the best way of examining learners is through continuous assessment that is holistic, thus evaluating all aspects of learning such academic work, behavior and talents.

Parent: In my view assessment should not be pegged on one final examination, more so, talents, attendance, behaviour can also be examined and this will encourage learners to work hard in all aspects. (PFG-StJOSE-BUNG).

Parent: continuous assessment is the best way in analyzing an individual qualification to the next level but corruption in the system renders the act unreliable. Checking school work on a frequent basis at home (PA-NYAP-NY)

Parent: continuous assessment in the beginning, middles and end term to note the weakness and strengthen of pupils in all levels of education but with the retention of KCPE and KCSE. (PA-NDAP-NY)

They also cited the need to take regular exams that will form the final assessment grade for purposes of credibility and comprehensiveness.

Parent...we need to take regular exams that build up...so you don't do one exam that seals your fate. (PA-FGD-StJPP-LK)

Parent: ...Should anything happen such as sickness this is likely to affect performance. The tests should be national but continuous with marks counting towards the final grade. This is the only time the true performance of the learner can be determined (PA KiarP –MUR)

Parents pointed out the need for school based examinations that are practical and value oriented. They also indicated that written examinations can be given alongside these.

Parent...think if we could do school based exams with most being practical ...so they are assessed on practical skills along with written...this may be credible.so that we can see you doing it yourself.(PA-StJPP-LK)

Parent: I think it could be better if there is evaluation to test children if they have passed especially in values, may be standard four exam time and then standard eight that would be best. (PA-FGDPP-MOI-UG)

However, some parents raised the issues related to integrity with regard to school based examinations. There were misgivings about cheating in examinations and the credibility of professionals selected to undertake certain prestigious courses, through examinations that are not considered credible. The use of CATs as they are perceived to be easily manipulated through biasness, corruption and favoritism. Further probing about the efficacy of assessment with regard to practical subjects showed that learners do encourage exploration of options for assessing.

Parent: ...well the question of honesty may still make school based exams even worse! (PA-stJPP-LK)

Parent: ... Except in our time getting a Grade A was very hard, only three or four pupils could, but now we get thirty, forty, fifty Grade As because of leakage. So supervision should be enhanced (PA-COMP-MIG).

Parent: one if we do it annually it may come back to the teachers who are teaching that school and my worry to the teachers teaching same school is that they tend to favor their own students and that is why they are even tempted to cheat for students so if you use that as a tool of assessing the students may be everybody will be any achiever, my suggestion would be this, assessment institutions that we have in this county especially KNEC should be given a proper mandate to conduct various forms of assessments, not just academic but they can do other different forms under that cycle and they make it official that this time we do particular assessment. (PA-FGDPP-MOI-UG)

Parents came up with a suggestion that exams should be done at the end of every class. However marking of these examinations should be carried out by other teachers who teach other classes and learners should be anonymously identified using random numbers.

The parents suggested that there is need to have national examination in standard 4, 6 and standard 8. The learners should also do a general paper to assess their understanding of contemporary issues.

Parent: The teachers can give national examination in standard 4, then 6 and standard 8, similarly KCSE examinations can be structured into two. The ECDE learners only need Continuous Assessment tests only.

Parents have a part to play in the assessment of their children.

Parent: The parent must watch the child and his/her school work daily (PA-FGD-WAAP –KWA)

They further said that the government should organize monthly examinations per zone or district. Reading logs, debates, speed test, inter-class questions competition with other schools/learners were preferred at the primary level. However, learners decried the numerous examinations that they were subjected to.

Pupil: When we go to standard 7, for 1 month, they do 1 to 3. But for std 8, they do the exam in serious. In 1 month, 10 and above examinations because the head teacher want us to....want us to.... Like KCPE, we get high marks. If we wait for midterm, we shall not get high marks because the teachers will come with like std 8, only 9 questions in standard 8. We are supposed to do so many exams combining from std 4 to standard 8 (P: FGD-KARP-NYE)

8.8.2. Summative Assessment

The respondents viewed KCPE as an important examination because it is used to assess pupils as they join secondary school. It helps parents to determine whether or not learners were working hard in school. Respondents suggested that tests should be given at appropriate stages in class 4,6 and 8. In the event of a transfer of either the learner or teacher, performance records will be

evident. The respondents also suggested that the continuous assessment marks should count towards the final KCPE grade.

Pupil: Because there are some teachers who will be or some people are transferred to other schools so the details will not be gotten. (P- FGD- GZEP- KIF)

Pupil: because we have heard many cases of pupils stealing KCPE the best thing is they bring out the KCPE papers the child does but the must remember other exam s which they did in those exams the pupils did not steal they must take all the marks for the whole term and take the average then add to KCPE that way they will be true evidence that the pupil didn't steal the exam. (P-FGD- NGUP MAK)

Pupil: testing from ECDE the teacher to teach and assess them but teachers from different schools within county. At Primary and Secondary there is a lot of cheating, Exam setting should be done secretly. (PFGD-TUR)

Pupil: ... there is no other way. And if you fail it means you didn't learn anything from class 1 up to 8 and you were never serious....(PL-BUNP-LK)

Parents were equally of the same view that summative evaluation was necessary for equality purposes.

Parent: .. I think we should use KCPE because they copy when they are doing Cats. KCPE will promote peace, they are treated equally. It is well set (PA: STC – BUS)

However, some pupils and parents expressed the view that summative evaluations by themselves may not give an objective evaluation of what the learners shall have learnt at any one given level and should th.

Interviewer: What about KCPE? (PFGD-CHEP-UG)

Pupil: should remove them, because the previous examination we have had that almost one hundred did not join High school. If the government could come up with another idea so that every child can have a chance of joining a school (PFGD-CHEP-UG)

Parent: ...the current kind of assessment we have will be the end of class eight end form four at times it may not give us a clear picture of who this child is because you see a child will be going to examination room being affected by different environmental factors, they may get in examination rooms may they are not feeling well may be there are some examination leakages like the ones we have seen in our society today you see that child will get may be 300 marks instead of 400 and something that child will be bitter, so we can have different assessments, we can have assessment for attitudes, achievement generally may be after every one year we can assess. (PA-FGDPP-

Parents expressed the views that KCPE and KCSE should be scrapped and in its place have assessments at class 4, class 6 and class 8.

Parent 1: By the current Kenya now, ukiona mambo ya exams, it is almost becoming valueless. Reasons are, unaona hii maneno ya leakages. Watoto wetu wanadanganywa. Kwa sababu labda wapate leakage mahali, wafanye mtihani, wapate mia nne na...aende shule...hataweza huko mbele. So vile mimi naona mambo ya mtihani, KCPE na KCSE...wangetafuta system ingine ambayo, for example, wafanye Continuous Evaluation. For example, they can say from class four. They come to class four, they evaluate; they come to class six, they evaluate, and then eventually class eight, they evaluate. Kama ile ya university.

At the end of the eight-year course, wafanye sasa the mean ya hiyo exams zote wamefanya. Kwa sababu tukiwa na one main exam, we are focusing on class eight...KCPE. Hapo ndio watu wanaanza mambo ya cheating. Because they will force our children to pass in a cheating way. So I think, waone njia ingine ya ku-evaluate. Kama waanzishe continuous assessment. (P-FGD-OLE-SANP-NAR)

With regard to the examination paper format, parents preferred structured to objective questions. They mentioned the advantage of structured tests as helping to determine the ability of learners to express them in writing. They further proposed National examination at every education level

Parent: That final assessment is not enough. You might find a child who has been good from the lower levels but might get a time, might be he/she is affected psychologically. This means he is not able to continue performing well. The expectations in the final exams fail. When such a person performs badly, we forget about him or her completely. There is need for learners to be assessed early, such that, in case they get to a point that they relax, we get to know the problem so that we can work together to prevent losing a child. You might have a child doing well from class one, but when he/she gets to class six or seven, they change. This stage could be adolescence. He/she will disturb in class seven, eight, form one and two. On reaching form three, they start being good. If assessed at the middle and the average done, such a person will not get lost. (PA- FGD-MLVPA- KAK)

They proposed that the examinations given should be meaningful and to the level of the learner

Parent: There should be practical examinations even at the primary level so that individuals talents can be identified. Because writing of examinations is not the answer, there could be some people who have gone through class one to standard eight and they do not know how to read, but in the farm such a person is number one. So if evaluated on farming, the person will become number one. But in written examination they may become number one, but it will be understand where their talent is. (PA- FGD -MLVPA -KAK)

8.8.3. Summary

In view of the challenges associated with summative examinations alone, it is apparent that respondents suggest a certain method of assessment that takes into account progressive tracking of learners''' attainment and also providing a national comparison of learners' performance.

Ind:..There is need to marry the two because normally those continuous assessment will say what a student was some years back but its important to know that there is development and the time they are leaving the institution the person have developed...(MAN-IND-KAK)

8.9. CONTEMPORARY AND EMERGING ISSUES

8.9.1. Pollution

8.9.1.1. Noise pollution

Schools located near the road are affected by noise from cars and Lorries motor bikes. The parents raised concern that noise pollution affects learners as they travel to school and back home.

Pupil: It is the bike and the cars and the Lorries which make a lot of noise it really effects on our education (SL- OUPP-UG).

Parent: we talk of noise, pollute the environment for example our kids going home in the evening they board a matatu. The matatus they make a lot of noise. You see the kid arrive home very tired and thinking about the music he heard somewhere (P-RUK-PP-HB)

8.9.1.2. Land pollution

Parents expressed the need to teach learners on the importance of living in a clean environment and the dangers of environmental pollution. They also indicated that Pollution from industries affects soil through acidic rain. Parents also raised the issue of environmental degradation through pollution and poor waste disposal.

Parents: For us to fight against pollution those affecting the environment we must tell pupils “don’t throw papers around and don’t do this and that.” So when you tell them don’t do this it is reflection of what is in the society (PA-SiTERP-MIG)

8.9.1.3. Air pollution

The learners indicated that dust affects them in the learning process.

8.9.1.3. Water pollution

Pupils expressed the need to keep rivers clean to avoid water pollution and identified pollutants as wastes emptied into the rivers and use of aerosol sprays.

8.9.2. Environmental Conservation

8.9.2.1. Environmental Cleanliness

Learners expressed the need to be taught how to keep the environment clean in order to be responsible. Pupils were of the view that it is important to address environmental issues in the curriculum for sustainable development.

Pupil:..When you have been taught on how to keep the environment clean, and on the compound there are some papers, you will be able to collect them and put them in a bin and maintain cleanliness,.(P-BUNP-LK)

The learners also observed the development of slums, harsh climate, water shortage, dirty environment, dirty toilets, blocked sewage, poaching of wild animals as affecting learning and need to be addressed. A pupil suggested communal clean-ups to keep the environment clean.

Pupil:. The government to set two days to clean up our country and provide county dust bins (**PL-StP Ame- Busia**)

Parent: for example those pollutions, they should be taught that all the things they should not be left hanging in the rubbish they should be burnt always, you know when we live that as we are young, they will grow up knowing that the heap of rubbish should not be there, so it will at least reduce (**PA-FGDP-OUT-UG**)

The learners would like environmental conservation and global warming to be addressed in school. The learner is of the view that environmental education should include how to control the environment and conserve it, forests, mountains, and all the physical features in our surrounding.

Pupil: Yes I think it should on how to conserve the environment coz we have the issue of global warming. We should be taught on how to control the environment around us and conserve it. (**PL-TEMP-NY**)

Pupil: “We have been taught how to keep the environment clean but up to now I never understand why we keep throwing wrappers of food stuff everywhere” (**SL-SOSP-UG**).

8.9.2.2. Planting trees

The pupils also indicated that there would be need to teach learners the consequences of deforestation and the importance of planting trees.

Pupil: They can be told not to cut off the trees because when we cut them the environment, will not be good and we shall lack a lot of things. So we can try as they say when you cut one plant two. So if you cut it plant another one. (**PL-KAR-PMU**)

Parents suggested the need to train learners on conservation of forests through afforestation.

Parent 1: So, according to me, I believe that if somebody is educated on that issue, atakuwa na njia ya ku-prevent, na njia ya kufanya kama ni kitu mzuri. For example, afforestation...mambo ya forests...kuchunga mazingira. Kama ako na knowledge, atajua kupanda miti ni mzuri...itanisaidia kwa hii na hii. Kama ako na knowledge kutumia drugs ni mbaya, itaniharibu kwa njia hii na hii. So education is the best way. (**P-FGD-OLE-SANP-NAR**)

8.9.3. Road Safety

There are no road signs leading to accidents that in turn affect the country as a whole.

Pupil: ... and also, also on accidents, it affects our country and most of the people die and we should give them road signs on the road, yea (**SL- OUPP-UG**).

8.9.4. Safety and Security

8.9.4.1. Insecurity

Parents raised concern about the issue of insecurity and how it impacts on education. In areas where there are conflicts as a result of different ethnic communities, parents observed that their children are unable to learn well.

Parents: There are communities around ... Some communities have tribal clashes and those tribal clashes affect the children going to school and they are not able to learn they feel that there is no security in the schools. (PA-FGD-BOKPP-KAK)

Similarly, due to terrorism and radicalization, pupil leaders observed that teachers from other regions were not willing to teach them and risk their lives. Due to that, many of their schools were under-staffed.

Pupil: There is lack of security. Most of the teachers go. Like those who are non locals have gone away. The children are left alone. So I think many teachers should be increased in schools also the facilities. Nationhood (PL-FGD-ALFP-GAR)

Teaching about nationalism, national cohesion, and the issue of tribalism were a worrying trend that student leaders paid attention to.

8.9.4.2. Radicalization/Terrorism

Parents pointed out the need to sensitize learners on the issue of radicalization.

Parent: ... some end to make groups which affect them in education like going to class just to bear with situations as they grow up (PA-StTERP-MIG)

Parent: there is an upcoming trend of grouping and radicalization, the young people feel like heroes in doing what is wrong (PA-KAM-NY)

Parents have observed that unemployment contributes to cases of terrorism.

Parent: ... They end up in some criminal activities, such as terrorism and other activities. You see our children are involved in that area because they don't get employment. You educate the child, he completes secondary, you pay school fees, they go to university. After finishing the university, there is no job... we want it to develop positive attitudes so that our learners are not involved in terrorism and radicalization ... there is social unrest in our area. People will say.... "Tonight will I sleep, should we be comfortable at night today, Are we going to be safe in school? ". (PA-FGD- KAMOP –MAN)

8.9.5. Tribalism

The learners and parents underscored the need for the curriculum to address tribalism. They cited it as the cause of unnecessary conflicts, killings, discrimination and as impacting learning negatively in certain areas.

Pupil: To eliminate terrorism... people should stop killing each other because they are from different tribes. (PL-TEMP-NY)

Pupil: so people are discriminated because they come from a different place or they may be of different tribe than the ones who would share with them something (PL-TEMP-NY)

Parents: There are communities around ...Some communities have tribal clashes and those tribal clashes affect the children going to school and they are not able to learn they feel that there is no security in the schools. (PA-FGD-BOKPP-KAK)

8.9.6. Alcohol and Drug Abuse

Learners identified irresponsible consumption of alcohol as impacting negatively on professionals like lawyers doctors and called upon the authorities to ban it. Parents in a rejoinder indicated the serious negative effects both alcohol and substance abuse bear on both the individual and society and the need for the curriculum to address these issues alongside peer pressure.

Pupil: Like in Kenya we have very many lawyers, doctors, lecturers..... who are down here because of the alcohol. They should ban totally". (PL-SOSP-UG)

Parent:...na mimi nyumbani nitamwambia hii pombe sitaki, kama ni sigara sitaki, disco sitaki... jambo la kwanza ni kuwa kuna magojwa..(PA-LIKP-LK)

Pupil: In the society you can find some people smoking cigarettes and they want you to join the category of smoking cigarettes by drinking, alcohol and some other drugs. (PL-GATP-NY)

Parent: they should learn about drug abuse this is rampant problem in our society (PA-KAM-NY)

Worth noting, is the association of insecurity, murder, Alshabaab insurgency, HIV and AIDS as well as early pregnancies to the abuse of substances.

Parent: When we talking such issues to me, my opinion these things such as Alshabab are here in different families, HIV and Aids, drugs, Miraa... children killing their own parents, because the child has taken drugs, this is brought about by the people selling these drugs and the government knows them. (PA-FGD-MAKWP-KWA)

The challenge of alcohol abuse had also pervaded primary schools with peers influencing each other to leave school.

Pupil: Rafiki zake ,Wanamwambia aache shule akakunywe pombe.(P-FGD-KEBP- NYM)

Pupil: Friends, tell them to leave school to go and drink alcohol.(P-FGD-KEBP- NYM)

The respondents singled out the coast region as a hot bed for drugs and suggested the need for provision of adequate trained staff and counselors to meet the shortfall currently experienced in schools. These experts will give learners the much needed individualised attention and mitigate risks associated with substance abuse that threaten the well being of the society as a whole.

Parent: we should have retrained teacher's counselors who are not less than three to do the work effectively. In environment we should have people outside to council our pupils, outside counselors should be training those who are outside to stop taking drugs, counsellors on inside should train student about what will happen to them if they start taking drugs. All educational level should play that role of ensuring that students grow morally upright, let them be properly motivated. Like in Europeans school every school has many counsellors, fewer lessons and every student should be well attended personally and after may be a month some changes will be seen on that child. So we will be moving together **(PA-FGD-MFGP-LAM)**

In terms of approach, there was also the need for a multi-pronged approach, at home, at the school level and at the national level. Learners observed that some responsibility to make a change lies with the parents.

Pupils: the parents should monitor their children and take care of things like phones. **(P-FGD-HVAPP-KIL)**

The parents stated that all subjects should support the fight against drugs and other contemporary issues in society. It is however evident that these initiatives are already in place and could be stepped up to bolster the efforts already in place.

Parent : they should be taught subjects which could be of help them, although this one is not taken seriously. If we talk about drugs, we have a lot of topics in science so if it's possible it should be given more time or have something we call interdepartmental, they should interact well and everyone do the work effectively, things like gender violence, early marriages let them come to the world, we have this people who do just do one task and after that they sit on the staffroom doing a lot of nothing. It is time for administrators to do their job and fire them. All government resources should be geared towards this contemporary issues. So the ministry should strategize and solve the problems of common people on the ground send specialists to solve specific issues e.g. gender violence we should have a person specialized for that, security officers to check on responsibility of parents, if all this departments will integrate and work together then in three years we will have total change in Kenya. **(PA-FGD-MFGP-LAM)**

At the national, the suggestions for a multi-sectoral approach are viewed as a rapid solution to the myriad of contemporary and emerging issues in society. The parents go on to suggest that specialized personnel are allocated duties that are relevant to the specific underlying problems in the society. In their view, the blame should not just be targeted to the children taking drugs. The peddlers should be arrested as well.

Parent : we should not only be blaming our children for taking thing like drugs, those drug smugglers and peddlers should be arrested first, those who are selling too should also be arrested, 'like in coastal region we are highly affected because our Men are not performing their responsibilities because of this drugs, they are marrying like four wives and every day they are fighting. So what do you expect the children to be doing? Children becomes psychologically affected, Women marrying each other. **(PA-FGD-MFGP-LAM)**

8.9.7. Technology

The respondents underscored the relevance of technology in the digital era. However, they observed that it was important for the curriculum to address the emerging issues in technology including proper usage of such resources.

8.9.7.1. Use of Technology

Pupils suggested that appropriate use of technology should be included in the curriculum in order to void over-indulgence at the expense of learning.

Pupil: Parents should not give their children phones because sometimes they cannot sleep because of use of phones to other people..... (P-MASP-NAR)

The learner would also wish to be taught how to use technology positively, since most youth and teenagers use it for pornography, to spread hate speech and develop bloggers.

Interviewer: What about technology? How should it be addressed by education?

Head girl: it has been addressed but most youth use wrongly, it should be used in the positive way not in negative ways like most youths and teenagers who are in school go there for pornography, spread hate speech and develop bloggers...(not given)

Pupil: Technology things like when we were told laptops will be given to schools there should be discussions to see if learners will cooperate with them, and how to use them and not the bad things that go with them because the technology has those bad things like bad pictures. The learners should be told not to go to those things because they are too young for those things. (PL-MBI- MU)

8.9.7.2. Etiquette in Use of Electronic Media

The parents indicated that the curriculum should address issues on electronic media and its influence on the learners.

Parent: You see if you watch TV. Most of the things you watch, they are not supposed to be exposure to our children because children since morning to evening they just watch No. 2 if you are talking about politics it is as if our society wake up in the morning we eat politics and in the evening we still eat politics and sleeping with politics...There are some current issues should be talked about on air, like education. We have come up with things like internet, Facebook, phones are there nowadays even when you go to matatus instead of talking to him or madam everybody just talking to the phone ... I don't know where we will be as far as much we want ICT we are also destroying the society and our children(PA-FGD-RUKP-HB)

8.9.8. Remedial Teaching

A learner indicated that remedial or tuition should be part of the school.

Pupil: The issue of remedial or tuition should be brought back (PL-TEMP-NY)

Owing to the extra tuition time that class 7 and 8 are subjected to, the learners suggested that the government should take control over the additional charges in the extra tuition fees charged. The frequent interruption of the pupil learning resulting from the teachers' strikes should be reduced by listening to needs of all players in education.

Pupil: The school should listen to the opinions of different person, an increment of the salary for the teachers to avoid teachers' strike which slows the learning phase. (P-FGD-HVAPP-KIL)

The issue of access to education was raised to include the rich and poor alike. Parents in private schools urged the government to move into slum areas and identify school age children who are not currently registered in schools. They also suggestion the construction of schools in the slum areas to take care of the eligible children who were not attending any schools. Similarly, the parents raised the issue of selection to secondary schools which appeared biased against children who registered for KCPE in private schools. The parents admitted that due to the unfair placement of children in secondary schools, parents of children in private school engaged in unorthodox practices. These include seeking registration in public schools for children who have been in private schools, just to do examinations. This way, the parents are assured that their children will get the marks that will enable them to get placed in good national schools.

8.9.9. Teachers' Strikes

The perennial teachers' strikes are also a source of concern among the learners in primary schools. In their assessment, the strikes interrupted learning and the time children spent at home unattended subjected them to unnecessary risks. They felt that a permanent solution to the strikes should be sought.

Pupil: teachers strike.

Pupil: how did it affect you?

Pupil: we lacked education

Pupil: you had no one to attend to you? Isn't it? What do you think should be done to avert another strike?

Pupil: the minister should find a solution on how teachers should come back to school as fast as possible because when the pupils continue staying at home they will do many bad things they won't remember to catch books, others will search jobs to work in other people's houses and they won't come back when the schools open (**P-FGD-MISP-MAK**)

Pupil: I request the teachers to stop striking because if they strike in January and come back to school in March we will not be able to finish the syllabus and you go to the next class and you do not know anything because you did not finish the syllabus in the other class (**P-FGD-SENP-NYM**)

8.9.10. Guidance and Counselling

The parents were of the opinion that learners should be supported through guidance and counselling.

Parent: counseling, proper support of teachers and parents in dealing with wanafunzi to..... (**PA-NDAP-NY**)

8.9.11. Street Children/Families

The participant expressed the need for parental education as a way of addressing the street children menace.

Pupil: ...we have street children who are unable and they do not have homes and their parents don't love them and chased them, we would like to take the children back home to teach and to tell the parent the importance of how that child will improve him(**PL- OUTPP-UG**).

Pupil: the government can take those street children and give them education. In that way they can know the talents that those kids have.....people who live in the slums or other places can get more stable. (**PL-TEMP-NY**)

8.9.12. HIV and AIDS

Learners stated that the curriculum should address the prevalence of HIV and the need to provide love and support to both the infected and affected. Lack of medicine for those affected learners was cited as an issue affecting learning. Parents felt that there is a need to teach learners about HIV and AIDS in carrier subjects such as Social Studies and Science.

Parent: This should be done from an early age. to the children coz corruption is so big...we should start from ECD. (**PA-FGD-StJPP-LK**)

Parents indicated that certain myths associated with AIDS should be addressed by the curriculum e.g. having sex with a virgin.

Parent: ...the way we talked about Aids...we should have a way of introducing the message is on corruption to the children coz corruption is soo big...we should start from ECD.(PA-FGD-StJPP-LK)

Parents also indicated that alcohol consumption around the school neighbourhoods is becoming a problem.

Parent: ... Children from school are finding their relatives, neighbors drinking near the school. If government wants to improve the schools, no bar should be close to any school. The environment of school should be safe. (PA-FGD-UNOAP –MAK)

8.9.13. Unethical Behaviour

The respondents made reference to rape, stealing/theft, being in bad company, use of vulgar language as some of the immoral behaviours that the curriculum should address. Another issue that needs to be addressed regards boda-boda operators impregnating school girls, who later drop out of school.

8.9.14. Female Genital Mutilation

Harmful cultural practices that limit the advancement of members of society were also condemned. According to learners, these practices prohibit learners from continuing with their education and deny them a future.

Pupil: Female genital Mutilation should be eliminated so that girls can have chance to make their future and go to school.(P-FGD-HVAPP-KIL)

8.9.15. Sexual Harassment

The learners expressed strongly the need for cases of sexual harassment to be dealt firmly.

Pupils: Most of the primary schools the government should strictly address the issue of sexual harassment in schools. (P-FGD-HVAPP-KIL)

8.9.16. Parental Guidance

Pupils emphasized on the need for responsible parental care and guidance so that parents can act as good role models for their children at home.

Pupil...They say like father like son or daughter. What you are is a picture of your parents. The parents should be addressed on how to behave in front of their children.”(SL-SOSP-UG)

The respondents observed that some learners are orphans and street children. Further, some parents abuse their children by beating them. Others parents neglect their children. The respondents were of the view that parents should be taken to the police and/or counselled in

order to create awareness on parents' roles and other issues such as child labour that affect learners.

Parents also observed that some parents do not have knowledge and skills to guide their children and tend to impose harsh restrictions on their children that affect their children's education.

Parents: ...too much restriction from parents without proper direction leading to fligs that that cause teenage pregnancies due to lack of information on their life developmental issues. This is especially during puberty. Parents dismissing girl child education due to pregnancy. **(PA-NDAP- NY)**

8.9.16. Early marriages

Pupils felt that the girl child's education is affected by forced marriages by parents while still young.

Pupil: Am a girl and through with my primary level education and I have passed and then my parents they don't want me to go to the next level there is a rich person, rich man who is old and am young and they want money, they want to have many.. livestock,,, many cattle. And I don't want to get married and they force me to get married. The government can change that. Young girls

8.9.17. Sexuality/Sex/Health Education

Learners and parents suggested that prostitution should be one of the social ills to be addressed in the curriculum both for parents and the learner, so that they don't view it as a means of earning a living.

Pupil:...we can teach children in school that prostitution is not a way of solving poverty also these children in our schools can go and teach others and show them that education is more important than money.**(PL-BUNP-LK)**

Pupil: ..some parents will tell you that education doesn't matter you can go and be a prostitute and you will still earn money they just tell us that we are going to waste their money and they can use it for other things. They should be educated and shown that education can help by solving their basic needs and we can help them in a great deal in their future....**(PL-BUNP-LK)**.

The learner would like sex education to be taught in schools from standard 6 to 8 and advised on how to prevent STDs, HIV, early pregnancies and abortion.

Pupil: We have the learning of sex in school. The children should be advised on how we can avoid contracting STDs and also HIV, early pregnancies or even how abortions or even infertility in future **(PL-TEMP-NY)**

They also indicated that girl boy relationships should be addressed by the curriculum in order to avert early pregnancies.

Pupil: Okay as a pupil I want everyone to have discipline and those issues of relationships in early age should stop. For example in the news girls from mumias class seven and eight got pregnant because the boys cheated them and I think that one should stop. (PL- MIRP-HB)

8.9.18. Life Skills

Parents suggested the teaching of life skills to counter some of the social ills facing our country such as child insecurity and molestation.

Parents: ...I think Life Skills has a lot of these issues.. there is this issue about child security...how you defend yourself from getting molested..how to know that someone is likely to take advantage of you....but i feel we should now tell them that the world is very rough.it may be your parent...it may be your teacher..how do we take care of yourselves?millions of children are suffering but nobody knows.it is until you see this child crying in class coz she is not able to tell anyone what is happening...so the moment we know this is happening what are the methods of helping such a child?...so we are talking of child security.(PA-StJPP-LK)

Parents: we also need to set good grounds for our children to live in harmony with one another, people of different communities. When communities conflict, the children suffer. We need to set an environment that allows them to learn (PA-NYA-NY)

8.9.19. Poverty

The learners and parents indicated that poverty can be a hindrance to acquiring education.

Pupil: One thing is poverty. Poverty can really affect and so in order to do that like this, we know that there are children that their parents they pass on then after that they are left with to their guardians, so others see that they were depending on their parents, then now the source of income has gone so those children need to support them because poverty it can be a great hindrance to education. . (PL-KIAP-KIA)

Parent: One of the issues affecting the learning is poverty. Besides having free primary education some pupils still are unable to attend school. The little money asked by school the parents are not able to raise. So poverty is a major problem. (PT-MIRP-HB)

Pupil: for me anything the problem is the children we have around here most of them come from the slums, majengo which is near. The teacher asks for books but most of them can't afford them so they are forced to be beaten for not completing homework (PL-TEMP-NY)

Learners indicated talent could help them get their families out of poverty.

Interviewer: once we know that somebody has a certain talent how can we continue nurturing that talent...?

Pupil: by teaching him to, telling him how it can make him a great person and how it will improve their families...how he will improve his talent, by giving him instrumentsfilm to check out...so that they can remove a CD [the learner intended to produce a CD (PL- OUTPP-UG).

8.9.20. Equality/Gender Issues/ Rights

The parents decried lack of uniformity in the provision of education to learners as a result of poor supervision of the learning process as well as facilities. They also raised concerns that the girl child seems to be favoured over the boy child.

Parent: I think we should have problems in equality, where some schools have others don't have and at the end of the year they give some results so the one which don't have really go under loose, secondly in some schools you find teachers are there but they don't teach the supervision is poor hence at the end of the year

Parent: Child rights can be beneficial or negative to the society.....the people are just about girl child while the boy child is being gradually forgotten

8.9.21. Child Abuse

The parents also indicated that some of the learners suffer abuse of varied nature from parents and guardians therefore affecting their learning.

Parent: The only option negative is sexual abuse like guardians, step parents abuse some of the children and this makes the life of that child very difficult. In some schools some of the male teachers take advantage of the children The only option negative is sexual abuse like guardians, step parents abuse some of the children and this makes the life of that child very difficult. In some schools some of the male teachers take advantage of the children **(PT-MIRP-HB)**

8.9.22. Cultural Practices

Learners have observed that there are many immoral acts happening around schools. Other issues affecting learning include cultural beliefs associated with HIV/AIDS, rape, stealing/theft, emerging and social media e.g. face book, spend time on face book this distracts learning, boy /girl relationships, adolescence changes, early/child marriages, environmental degradation

College student:: ...culture because it is affecting education, for instance the county where girls are being undermined, and are forced to marry instead of going to school ... curriculum developers should do away with the culture ... can be abolished, like early marriages, circumcision. (CS-NTTC –NAR)

Pupil: Some practice bestiality, others practice incest others prostitutions. (PL MugP –MUR)

Pupil: Yes, like stealing and pride and do not know how to relate with one another. They do not have respect for teachers (PL SAPP –MIG)

Other issues that are of concern according to parents include pastoralist practices, civil wars, gender disparities.

Parent: ...warming, you can see Mandera how hot it is, there is terrorism or radicalization, pastoralism, our children are not in school full-time, they move from one place to another, when their parent do move they too move with their parents, there are no proper boarding schools, all those things, there are those conflicts; the Somalis are always at war ... parents are not sensitized by the teachers, and also the local chiefs, and D'O's, they do not sensitize the parents on the problems of marrying off these girls while they are supposed to be at school. **(PA-KAMOP –MAN)**

8.9.23. Family issues

Learners and parents identified drunkenness, lack of parental love and care, loss of parents, young household heads, increased poverty, School dropout due to early pregnancy and drug abuse, discrimination of the girl child, lack of food and insecurity, child labour, and lack of shelter among others are some of the contemporary issues affecting children in school. Parents termed emerging issues such as hugging in public, sex in buses, diseases, same sex marriages and radicalization as a disaster in the present times.

Pupil : If your father drinks everyday so every night there is a fight in a family(PFGD-CHEP-UG)

Learners would like their parents to bring them up responsibly. Parents would partner with other stakeholders to do this.

Pupil: ...plead with the parents to bring their child in the better way so that they would be able to live out there with other people because for example if the parent dies he will live the child to the community and it will be difficult for the child to cope with life out there because he or she is used to getting whatever she wants... call pupils to a seminar and teach citizens about illegal drugs and effects of being unfaithful if you are a couple and the good effects if you are a youth of abstaining from sex be patient enough so that you cannot get the HIV or the STIs (P-FGD-SNPP-MUR)

8.9.24. School-related Issues

Emerging issues raised by pupils related to the school context include: lack of provision for nurturing of talent in that particular school, examination cheating, corporal punishment, high school dropout rates, bullying, large classes, lack of meals, heavy homework that act as impediments to learning,

Pupil: talents aren't nurtured, i.e. there was PE but nowadays there is none. Teachers use PE as further teaching lessons and students don't play. (PFGD-TUR)

Pupil: Exam setting should be set by identified people who shouldn't leak out the exam. (PFGD-TUR)

Pupil: Harsh punishment like caning small children should be stopped. (PFGD-STRP-TUR)

Pupil: In life.... Is education, so each and every person whether a boy or a girl they must be given a chance to learn. Because it seemsthat now days they are talking more about girls and they are forgetting boys that is the reason why you find that more boys they are dropping out of school and they are starting to take drugs so there should be equality among the boys and girls and they should not favour. (PL-KIAP-KIA)

Pupil: betting is also menace, and it should be spoken of it in the local radio stations. (P-FGD-TUR)

Pupil: Schools should cook for the children. (P-FGD-TUR)

Parents: tunashida ya discipline.wato wanastahili kuwa na discipline na hio inasaidia.....watoto wanaradaranda kwa kosa discipline... kwa maonin yangu guidance and counseling haisaidiikuna wakati wakucounsel na wakati wa wakuchapa (PA-NYAP-NY)

Parents would like their children provided with milk.

Parent: The children should be given books especially in public schools, stationery and milk. (PA-FGD-SAPP-MIG)

Parents have observed that, children's character can be moulded by way of talking to them openly. The county and national government should also be involved.

Parent: As a parent at home, I should sit with my children, to inform them that in the world today there is bhang smoking and telling them not do that... both local and central government to organize seminars for both children and their parents to inform them of the effects of the drugs, and that drugs destroy the lives of those who take them. (PA MakwP –Kwa)

Parents have urged the government to address the issues of teachers and teacher-learner ratio. Teachers should be well remunerated.

Parent :The Central Government to help the County Government with more teachers, because the schools have more children while teachers are few. Also children should be put in groups of about fifty per class and not seventy. (PA WaaP –Kwa)

Parent: The government should also provide sufficient resources as well as improve remuneration of teacher (PA KiarP –MUR)

Parents are further calling on the government to strengthen inspection of learning institutions as well as fulfilling the laptop promise.

Parent: ...why are children faking in exams. Let's not leave the teachers out of this problem for example we who live in the rural areas, education officers don't visit teachers at all, and if they come, its ones per year. There is a problem here, the parents are illiterate, they don't know what is happening at the school and officer don't inspect the teachers to know what is happening in the schools, teacher teach the way they want, and learners fail the exams; because teaching here is very low ...(PA MakwP –Kwa)

Parent:... the provision of laptops our children will be ICT learners literate *exactly*. We want our children to be digital.... (PA Kamop –MAN)

The learners identified payment of school fees as one of the emerging issues to be addressed, since some parents are not able to pay for their children and need sponsorship. They called upon the government to provide school fees, food and non-paying schools for the orphans and needy in society.

Pupil: parents should not pay too much fees for the pupils..... and also there must be sponsorship for all students. (PL-KAMP-NY)

Pupil: Because if one parent is not able to pay your school fees and provide you with learning materials and also food... Orphans may be affected because of thinking of their parents that do not have employment in the school so that they first go to look for work so that they can get money. (P MugP –MUR)

Pupil: The government should introduce free schools so that there are some parents who are unable to pay who don't have money so that the pupil from that parent can have a chance to go to a school. (P-FGD-BJMP-MUR)

Learners underscored the need for teachers to recognise and appreciate learner differences as well as create an enabling environment for learners to thrive.

Pupil: We should have teachers who accept every kid performers and non-performers (PL-NYAMP – NYE)

Pupil: You see me when I grow up I'd like to be an engineer but there are some teachers who are a bit harsh so I may start fearing and trembling. And when my mother asks me, "what would you like to be in future?" I may say an engineer but I'll tell her the teachers make me have some fears so I cannot achieve my dream when I become big... teachers should still have cooperation with us so that we don't have negative attitudes with them. (P-FGD- BJMP –MUR)

Learners are urging the government to introduce free schools in order to support the needy.

8.9.25. Unity

Parents wanted children to co-exist with others peacefully.

Parents: we needour children to live in harmony with one another, people of different communities. When communities conflict, the children suffer. (PA-FGD-NYA-NY)

8.9.26. Indiscipline

Parents identified indiscipline both at home and school as matter that needs to be addressed by curriculum decrying the ineffectiveness of counseling on its own and suggest that it should be used alongside the cane.

Parents: tuna shida ya discipline.wato wanastahili kuwa na discipline na hio inasaidia....watoto wanaradaranda kwa kosa discipline... kwa maonin yangu guidance and counseling haisaidiikuna wakati wakucounsel na wakati wa wakuchapa (PA-FGD-NYAP-NY)

8.9.27. Child labour

The learners identified child labour and school dropout as contributing to failure of children to learn.

Pupil: You can find you friends are being out of school and they are at homes, you can find them doing their work, they can be employed somewhere to graze some cows (PL- GATP-NY)

Parent: Child labour is also a factor that contributes to failure of pupils to learn orphan children are left with people that expose them to child labour like fishing, house girls the only option negative is sexual abuse like guardians, step parents abuse some of the children and this makes the life of that child very difficult. In some schools some of the male teachers take advantage of the children. (PT-MIR-HB)

Pupil: The issue of money is more emphasized more than schooling. For example in our area it is a tea zone there is a tendency of people failing to continue schooling because tea is well-paid. **(PT-KAR-MU)**
Parents observed that some economic activities like tea farming and the accompanying good payments interfere with education.

Parent: The issue of money is more emphasized more than schooling. For example in our area it is a tea zone there is a tendency of people failing to continue schooling because tea is well-paid. **(PA-FGD-KIARP –MUR)**

8.9.28. Political stability

The learners identified political stability and tribalism as emerging issues that need to be addressed.

Pupil: we need more political stability and not pointing fingers when problems arise....to eliminate terrorism... people should stop killing each other because they are from different tribes. **(PL-TEMP-**

NY)

8.9.29. Role of Education in Addressing Emerging Issues

The parents expressed the need to partner with mass media to air what imparts the right values in the learners, for instance a sleek car can be advertised with a nicely dressed lady instead of a semi nude lady. They also suggested that sex education should be given priority to help learners get the right information from schools instead of sourcing from inappropriate sources..

Parents emphasized the need to teach about emerging and contemporary issues in school.

Response Since schools replaced the roles of grandparents and council of elders then schools should teach all matters related to responsible sexual behaviour. **(PFG-St.JOSE-BUNG)**

8.10. SUMMARY

The respondents were equivocal on calling for curriculum reforms that would address overloaded curriculum, focus on the cognitive domain and passing of examinations, the duration of the primary level cycle, learners' abilities and interests as well the societal needs.

Pupil: What I think is that, the 8-4-4 should be changed to 6 years in primary.What should be done is widening the syllabus to make it better ... **(PL-SOSP-UG)**

Pupil: Changing the system, if now what we are using is 8-4-4 may be 3-6-6-.3. **(PFGD-CHEP-UG)**

Parent: ... it is overcrowded and exam oriented and that they are after passing exam (**PA-SUNEast-MIG**)

Parent: I think this system of 8.4.4, pupils stay for so long in primary school, and they

Parent: I talk about the duration these children are in school in the 8.4.4 system if there is a way the government can come up with a different system. Am so concerned because the period they take in primary school is so long.

Pupil: To me I think that we should not arrive to school very early in the morning and leave late in the evening 5pm. I think we should arrive at school at 8am and leave school at 4o'clock so that the brain may get that you have being taught in school (**P- FGD-KAHP-NYE**)

At the end primary school level the following competences and skills were identified: communication, self-reliance, social, numeracy, literacy, financial literacy, entrepreneurship, technological, industrial, life and value based skills. These skills were considered as important in producing a desired citizenry for the development of the country. The implication would therefore be that competency based curriculum should offer a solution to this demand.

In order to respond to a competency based curriculum the respondents identified the following learning areas: Practical, tachtical and vocational subjects such as Agriculture, Music, Creative Arts, Home Science, languages including Mother Tongue and foreign languages, talent based subjects as well as games and sports. Therefore the primary school level should be flexible enough to allow the learners pursue areas of interest and giftedness.

Pupil: because most nowadays there more children are more intelligent so there is this skipping a class because he or she has been found that is more intelligent in the class that he is, so if they could change the syllabus so that it may help they may not skip so if they skip time they go to secondary in their early age skipping is about intelligent but not the body the body also has if he or she go to secondary school earlier there some of the things he can't cope up with. (**P- FGD-GZEP-KIF**)

With regard to pedagogy, the findings indicate that respondents prefer learner centred pedagogical approaches that put the learner in the centre stage and shun the traditional methods of learning. As a result, there has to be a paradigm shift towards practical, self discovery and explorative methods.

KI: should be willing to do independent study, where I went in the US something called independent there is minimal interactions with the instructor, you are taken through guided learning and at some point you should be able to stand on your own, even in lower level of training we should encourage our students to grow like that (**KI-DVC-CHU**)

KI: people learn differently.....lecturer method works up to a certain way... you actually need to let those children know whether it is to explore you.... there group work, role play, discussions, experience sharing... ..methodology really needs to change and you know if that happens, then even the size of the classes need to change, the number of the teachers (**KI-KNHCR-NAI**)

The respondents decried the current evaluation that focuses on the cognitive domain and indicated that both continuous and summative assessment should be used as modes of assessment. In view of the shift to competency based curriculum, the assessment should be competency based and wholistic, thus evaluating all aspects of learning such as academic work, behaviour and talents. They also cited the need to take regular exams that will form the final assessment grade for purposes of credibility and comprehensiveness. They also need the format of the current paper to include high order skills.

Parent: That final assessment is not enough. You might find a child who has been good from the lower levels but might get a time, might be he/she is affected psychologically. This means he is not able to continue performing well. The expectations in the final exams fail. When such a person performs badly, we forget about him or her completely. There is need for learners to be assessed early, such that, in case they get to a point that they relax, we get to know the problem so that we can work together to prevent losing a child. You might have a child doing well from class one, but when he/she gets to class six or seven, they change. This stage could be adolescence. He/she will disturb in class seven, eight, form one and two. On reaching form three, they start being good. If assessed at the middle and the average done, such a person will not get lost. **(PA- FGD-MLVPA- KAK)**

Parent: In my view assessment should not be pegged on one final examination, more so, talents, attendance, behaviour can also be examined and this will encourage learners to work hard in all aspects. **(PFG-StJOSE-BUNG).**

Parent: continuous assessment is the best way in analyzing an individual qualification to the next level but corruption in the system renders the act unreliable. Checking school work on a frequent basis at home **(PA-NYAP-NY)**

Parent: continuous assessment in the beginning, middles and end term to note the weakness and strengthen of pupils in all levels of education but with the retention of KCPE and KCSE. **(PA-NDAP-NY)**

Parent...we need to take regular exams that build up...so you don't do one exam that seals your fate. **(PA-FGD-St.JPP-LK)**

Parent: ...Should anything happen such as sickness this is likely to affect performance. The tests should be national but continuous with marks counting towards the final grade. This is the only time the true performance of the learner can be determined **(PA- KIAP –MUR)**

Parents pointed out the need for school based examinations that are practical and value oriented. They also indicated that written examinations can be given alongside these.

The contemporary issues that were emphasised as need to be addressed by the curriculum include: insecurity and radicalization, corruption, negative cultural practices such as female genital mutilation and early marriages, drug abuse, Financial Literacy and entrepreneurship,

substance abuse, tribalism, sex education, gender issues, child labour and child abuse among others.

Parent: ... They end up in some criminal activities, such as terrorism and other activities. You see our children are involved in that area because they don't get employment. You educate the child, he completes secondary, you pay school fees, they go to university. After finishing the university, there is no job... we want it to develop positive attitudes so that our learners are not involved in terrorism and radicalization ... there is social unrest in our area. People will say....“Tonight will I sleep, should we be comfortable at night today, Are we going to be safe in school? (PA-FGD- KAMOP –MAN)

Pupil: We have the learning of sex in school. The children should be advised on how we can avoid contracting STDs and also HIV, early pregnancies or even how abortions or even infertility in future (**PL-TEMP-NY**)

Pupil: so people are discriminated because they come from a different place or they may be of different tribe than the ones who would share with them something (**PL-TEMP-NY**)

Parents: There are communities around ...Some communities have tribal clashes and those tribal clashes affect the children going to school and they are not able to learn they feel that there is no security in the schools. (**PA-FGD-BOKPP-KAK**)

CHAPTER NINE:

FINDINGS: QUALITATIVE DATA -

SECONDARY NEEDS

9.1 Introduction

This chapter presents the qualitative data findings of the secondary level needs. The chapter is divided into different themes which include: the general secondary needs, competencies, content/learning areas, talent identification and nurturing, pedagogical approaches, teaching and learning resources, assessment, contemporary/emerging issues and summary.

9.2 General Secondary Needs

The study sought to find out the general secondary level needs. This information was sought from different respondents who included parents, students, key informants as well as people working in the industry and informal sector. Other respondents gave their views through memoranda. These respondents pointed out that secondary education should aim at producing all-round moral, mental and spiritual learner and should build a firm foundation for further education. They should have a well-developed value system that respects life and property (their own and other people's), environment and gives them commitment to contribute to society and the nation. This would also enable them have a strong understanding of equity and justice.

Student Leader... it should help me to be a mature adult, grow spiritually and morally upright, it will help me acquire values that are going to help me in life and whenever I fall into difficulties I can apply what have learnt (**SL-MOIG-S-UG**).

A respondent pointed out that learners should be encouraged to change the mindset of securing white collar jobs and instead develop competencies suitable for employment in the industry and self-employment. For this respect, a view was expressed that secondary education should make learners self-reliant, self driven, all round graduates who can go for self employment as an alternative for employment.

INF: We need a workforce with strong resentment towards corruption and well equipped to fight it morally and otherwise. A workforce that appreciates the ethnic diversity and is able to amicably integrate in all engagements. We need Self-driven, all-rounded graduates who are able to comfortably go for self-employment as an alternative to formal employment, considering the increasingly reducing opportunities in the job market. (**BUS.MAN-INF-NAI**)

A respondent from the industry said that the secondary curriculum should provide a linkage between education and industry.

Industrialist ... We need to find the link...schools will not have factories running in them ...at the school level even in the universities...there is need to find partnerships and linkages between the business sector and educational institutions...link the curriculum development to the business world (**MAN-IND-KAK**)

Different respondents advocated for a skills oriented education. They stated that education should equip the learner with intellectual and practical skills that would help them to fit in the job market when they leave school. The respondents stated that by the time students leave school, they should be able to apply what they know to real life situations. They should interpret their learning in terms of production. To some of the respondents, life does not end at academics. Even those who do not make it to higher levels of education are capable of doing something for their livelihood if provided with the right skills.

Student Leader: I would like to request the government in as much as they care for those people who get high grades, let them remember those with low grades because we need them in society. For example, my dad is not good in books but give him any other work to do he is in a better position to do than those who are very educated. Let us concentrate on the other skills they have. Like someone who is in *Jua kali* they are also contributing to society. So let the government remembers that, the skills are the ones that will help us (**SL- MUMS - MUR**).

Parent: Our education system should cater for needs that would give the child the skills that would shape their minds or intellectual needs and not just educationally but practical needs (**PA-FGD-MOIG-S-UG**)

Student: I should be able to guide my younger brothers and sisters. I can also have knowledge on how to do something so that I can achieve what I want. For example, I can go there and apply the knowledge of agriculture and grow some *sukumawiki* and get money and provide for them (**S-FGD-KAS-S-KIL**).

Parent: ...knowledge in farming just like the old system of education when there was 4K clubs in schools; for example he/she should have knowledge on how to grow different types of crops for example maize, cassava,... be able to do things like driving, mechanical work, something that will help him/her in life ... show a difference between those who have gone to school and those who have not, because he/she will have knowledge he/she should be different in dressing, talking to others (**PA-FGD-MAKWP –KWA**).

Student: that you can invest in business after school (**S-FGD-KWANG-KIT**).

Student: They should be equipped with some of the practical skills. So, see like Form one when they come here they don't know anything. When you are taught in primary when you reach secondary you will be broad in mind and have ideas, something in mind (**S-FGD-KIS-S-NYAN**).

Student: When you come here you find that there are practical exams in Agriculture. There are some schools which have gardens and they should teach them right from primary school so that when they come here it will be easy for them (**S-FGD-KIS-S-NYAN**).

Student Leader: Personally when I leave form 4, the education system should be in such a way that after I leave school I can start something but when its theory based, I still have very little and even the teachers

they are not trained in such a way that they can encourage the practical part. That is a challenge in the education system (**SL-MBIT-S-HOM**)

Student: Like Science in primary, there is this topic on energy and lights those cell you do practical and know how to connect those things. And when you come here it will easier for you to know them (**S-FGD-KIS-S-NYAN**).

Respondent: Sasa hawa wanaweza fundishwa...nimesema carpentry, masonry, tailoring, shoe-making, na mahali wanaweza kubalika kwenda kujoin kama sasa hoteli...sasa kama hapa...wapelekwe catering, wenye watakuwa na elimu kiasi wapelekwe wasomee accounting, salesmanship, vitu kama hizo, ndio wakitoka huko, waweze kuchangia kwa wengine, kuchangia katika uchumi. Watakuwa wanajiendeleza, na pia wanachangia uchumi wa nchi

(They can teach skills like carpentry, masonry, tailoring, shoemaking and catering which will help them to join even the hotel industry. Let them be taken to do catering, and those who qualify may pursue courses like accounting, salesmanship and the like so that they can contribute to the economic development of the nation. They will have advanced themselves and also the nation) (**HOT-INF-NAR**).

Strengthening the need for practical skills, a respondent in the informal sector pointed out that skills that are needed in job market should be focused on at all levels of education as long the learners can learn them with ease.

Respondent... Education should ensure that learners who leave school at different levels all the way from Primary school to University have interest in skills at those levels that are required and now missing in various industries and which they can easily learn. This will lead to quality output at all levels in industrial work, and inject some certainty in the prospects of improved and regular incomes for all workers who attain some skills. This can be achieved if a thorough research is done on skills required in various industries at all levels (**BUS.MAN-INF-NAI**)

A respondent indicated that secondary school curriculum should prepare learners for TVET training.

KI: Curriculum content at the secondary level should be able to prepare such students even to TVET, TVET and institution (**KI-SGKN NAI**).

This was supported by other respondents who suggested that learners at secondary school level to be taught talents, vocational skills, technical skills, scientific research and mathematics.

KI: There is more to life. Failing an exam does not mean that you are failing in life. There are people who have succeeded in this life and they did not make it in school because they did not have very good grades your talented you're a good footballer you can be hair dresser, beautician you can do what God has created you to do because we all have talents (**KI-KEPSHA**).

KI: In secondary level the students should be helped to develop talents, general vocational... introduce Forms 5 and 6 (**KI-WIPER**).

KI: technical skills, scientific research and mathematical prowess (**KI-MPC NAI**).

A respondent noted there is need for attitude change toward technical subjects. Positive attitude will encourage many learners take courses in technical training. Both male and female learners should be encouraged to take up different technical trainings without biases.

KI-There are very few girls who have been trained in electrical in motor vehicle because basically of attitude. Boys too you find very few tailors mending because of that kind of attitude we have so we have to develop or we have to teach them that kind of how to accept such kind of things (**KI-NVCET-NYA**).

9.3 Competences

The respondents were asked their opinion on the competencies they expected to see among students who complete form four. They responded to this by giving the skill/abilities, values and attitudes that expected to be inculcated in the students. Generally, the suggested competencies were those that would adequately prepare the students for school and work. Without these competencies, they will not be able to successfully participate in the global economy. These are discussed in this section.

9.3.1 Skills/ Abilities

The respondents highlighted different skills that they thought are necessary in the new curriculum.

9.3.1.1 Oral and written Communication Skills

Students advocated for communication skills for example, ability to communicate in English, public speaking, debating skills and creative writing skills so as to be able to write books and magazines.

Student: For me I should be able to communicate well in English (**S-FGD-KAS-S-KIL**).

Student: ...able to write a book and produce a magazine hence I want to be a writer (**S-FGD-MOG-S-SAM**).

9.3.1.2 Problem solving and decision making skills

Respondents advocated for development of skills that enhance life in the 21st century. Students noted that they should acquire the ability of being able to make decisions and overcome every day challenges. The student leaders pointed out that by the end of their secondary level, they should be good decision makers such that they are able to solve the difficulties that they face. They suggested problem solving, decision making and leadership skills.

KI: I would imagine that they should really be supported to be able to solve problems. Problems solving skills because most of our students are just clever they are not intelligent you know being clever means being able to recall what you were taught and getting back to the teacher but when you are given a problem to solve you extend it and that is why you remember me mentioning on the table about the kind of questions evaluates this class (**KIT - BIS- HOM**).

KI: ... Why problem solving becomes critical in secondary school level is in primary school adults solve problem. If there is no water ... kid comes and tells the teacher ... In Secondary school, they will probably not report. They will probably complain because they know that this is problem that needs to be solved but can we teach them that before you complain try to solve the problem. (**KI-CEB NYAM**)

Student: By the time you leave form four you should have good decision making skills (**S-FGD-KIS-S-NYAN**)

KI: ... at secondary school that is when we train for responsibility ... and leadership (**KI-PWA-UNI**).

A respondent suggested that at the secondary level, the student should be able to come up with different ways of solving problems and choose the best solution. The respondent emphasized lateral thinking, adaptability and resilience among the students.

KI: ... And then in secondary we need to teach - it is called lateral thinking, a multiplicity of solutions to a similar problem. They should be having plan A – Z not just A and that is it. (So that if my girlfriend leaves me I kill myself- that is one solution there could be other solution).So, one of the competencies is the competence of anticipation. Let us teach them to anticipate the unexpected so that you have tools to adopt. Adoptability also. Maybe the other competence that we really want to talk about is resilience not just personal but also some concept ... So social interaction is another important aspect and that is why I don't know where the rain started beating us ... (**KI-CEB-NYAM**)

9.3.1.3 Critical thinking skills

The respondents said that critical thinking is instrumental in the curriculum.

KI: In competency based education we have to develop critical thinking. So that the learners are taught to internalize, think about issues, evaluate and be able to... those are some of the methods that the teacher trainees in this curriculum they can prepare teachers to deliver the curriculum the way it is intended to be.(**KI-TSC-NAI**)

Student Leader...By skills you should be able to be a good decision maker. When faced with difficulties you should be able to apply those decision making skills you acquired in school and critical thinking you should be able to be creative and critical to analyze situations in order to make the right choice where you're faced with difficulties (**SL-MOIG-S-UG**).

9.3.1.4 Technology Skills

Some respondents pointed out that learners need to understand issues relating to digital technologies and have skills in the same.

ME: Digital literacy should be achieved at 10 years of age. This includes understanding communication principles, how to operate computers, internet usage skills and understanding of the basic principles of digital technologies and issues surrounding use of digital use (security and privacy, digital citizenship). (**ED-AC**)

Student: ... for example those who did computer, they should leave the school when they are able to work on the computer having full skills so that they don't incur additional costs to undergo the computer studies when out of school (**S-FGD-NJU-S-MUR**).

Parent: When the school started computer lessons, I would like when the student finishes form 4 they can utilize their computer skills by teaching others as a source of income (**PA-FGD-KIRIS-S-SAMB**)

Key informants expressed the need to train learners on matters of technology since the world has changed in terms of technology use.

KI: ...The other facet that has been lacking has been computer and IT literacy in a first changing world where everything now has become e, e-education, e-health, e-tourism, e-everything. We must empower young people to have the capacity to use computers not just as gadgets or as means of either accessing content and information but that can help them become better people (**KI-CA-NAD**).

At secondary school level, the respondent emphasised the need to have students develop competencies in science, technology and innovation. They need to use skills acquired in numeracy, science and ICT to create solutions to problems in the society.

KI: In Secondary school, we should have people who are innovative, critical thinkers because the person is actually an adult. Should be able to innovate solutions to problems in society, Should use numeracy skills to innovate, use science to innovate, use ICT and that was learnt to create solutions to the problems society faces (**KI- KPSA- UG**).

Student...I anticipate to be ... very innovative... I hope to invent something that can make our Kenya proud, that will change our Kenya and turn it into the first world countries (**S-FGD-BUT-S-BUS**)

9.3.1.5 Research Skills

Learners at secondary level should have research skills. It was pointed out that learners should be able to identify the importance of research and techniques of carrying out research at the end of the secondary school level. In relation to this, the respondents said there is need for analytical skills.

9.3.1.6 Business, Entrepreneurial and Financial Literacy Skills.

Parents and learners also suggested that they should be equipped with business, entrepreneurial and financial literacy skills. Such skills would be necessary for self reliance.

Student: By the time you live secondary school you should also have well equipped skills. When you are waiting to go to university you should not be idle, you should have something practical that make you to be busy (**S-FGD-KIS-S-NYAN**)

Student leader: coming back to the economy you find that some of these countries that have developed... you find that entrepreneurs are highly encouraged... when you talk of like my society entrepreneurship is not known.. we leave school we start looking at the white collar jobs and that's exactly what teachers taught us for the education system in Kenya is such that we are taught to look for the white collar jobs and not the blue collar jobs (**SL-MBIT-S-HOM**)

Student: I think the government should hear the young entrepreneur in their business because for instance somebody will finish the high school with a business idea since that person does not have support either financially he/she will be unable to do what he/she intends do so I think after the business she will not do the business by himself (code)

Student: Business management to be in a position to open up a business when I leave high school (SFGD-MEKA-SP-KWA).

KI: ...use of technology, ability to innovate, for example, entrepreneurial competencies. Those are competencies that need to be injected into the minds of the youth at a very early age (KI-CA-NAI).

Respondent: I can only begin by saying that they should be creative. These things need a lot of creativity. Like, if you are taken to a certain field if I may say, after you get there, you will have in mind what you can do out of your creativity. Just like 8.4.4, in our time when you got to class six we had practical of making funny things such as mats and it was depending on how creative you were. That time you find that children are motivated by what is being done. The following day you would find that the child that you didn't show him how to make a certain thing can be able to do it out of experience and observation. But if a child is not taken to that field to observe what is going on there it will take him a long time for him to know those things (MECH-INF-UG)

Respondent: People should be taught technical, practical, entrepreneurial thing that they can help themselves with. Many have been learning to get employment, but are losing hope and becoming useless and desperate when they fail to secure employment. They forget the animals and the farm can earn money. So what I say is that they are “sleeping” over resources that they could use to better their lives (CARW-INF-UG).

9.3.1.7 Leadership Skills

The respondents said that the learners should be equipped with leadership skills.

Student: ability to make my own decisions and also to stand by them and also abilities to overcome challenges...both emotional and physical challenges. (SL-MAL-S-KIT)

Student...Good leadership skills, better grade, apart from education I would like to have gotten maximum skills life wise (S-FGD-PBH-S-UG).

KI: ... When you go to secondary, they should be able to solve problems, they also be able to think critically, logically, ... (KI-CBE-KIT).

9.3.1.8 Psychomotor Skills

Parents and students called for more emphasis on psychomotor skills to be taught to learners.

Parent: I think psych-motor skills should be emphasized. For-instance, we have seen so many guys making a lot of money through running, so many guys are making a lot of money through soccer (PA-FGD-MUTG-S-KIT)

Student Leader: Because there many co-curricular activities in school so when the learners go out of school, they will be well equipped with physical exercise like they can be able to play even footballs and even they can be able to do other works apart from school work (SL-KIRIS-S-SAMB)

9.3.1.9 Social and Life Skills

A respondent was of the opinion that apart from learning academic knowledge, learners should be exposed to other practical skills such as feeding animals at home and also skills on how to interact with other members of the society.

INF: They are learning too much academic, and forgetting to associate with the normal life. They should be involved, exposed to practical life integration such as feeding animals at home and farming. Within the locality they belong to, they should do what is done there... but some just learn mathematics and English which may be absent within the social environment they will live in (**SHOP- INF-NYE**).

In addition, the students said they need skills of transforming others in the society for better life.

Student:...having the ability to change the mind set of others who have not gotten the opportunity to be educated (**S-FGD-BUT-S-BUS**)

A respondent suggested that pupils should be taught values such as respect, integrity, honesty.

KI: I could say when you are when you are disciplined that is and you are integral that is it means that you are a straight forward person you know what you are supposed to do you cannot be swayed from other all other you can never be manipulated like let's say there are so many scandals in the country right now even in the ...secretaries the cabinet secretaries when a person int ... integral you will do your own work without being interfered to you can never be manipulated (**KI-STU-KAU**).

A respondent raised concerns of the greater emphasis given to class work or academics in disregard to the development of life skills. He emphasized that P.E lessons can be useful in handling other subjects.

KI: curriculum and other aspects of life skills that students ouhgt to internalize have been heavily limited because it is books all through and that is why I said , the curriculum should have been moderately to reduce the roles so that it can allow the learner to learn other aspects of life in terms of skills and tend to think the system as it compel learners to concentrate on books and knowledge and little of everything else, and from my experience and what we know even P.E lessons are useful to teach other subjects...(KI-SGKN- NAI)

The respondents advocated for social skills. Parents suggested that education should impart skills of how to relate with others. Learners identified communication skills as having a bearing on their relationship with others. They were of the opinion that the children need socialization skills therefore social skills should be taught in schools as a subject.

Student: By the time you're a leaving school, you should be able to express yourself. For example when you are getting a job, you are supposed to express yourself. It can only be achieved through public address, student teaching others. (**S-FGD-KIS-S-NYAN**)

Parent: Our government should support our children because there many children who are killing other ones. We should have those lessons on how to teach them about how they relate with others. (**PA-FGD-NJAB-S-NYA**)

Parent: ... children can learn socialization skills and how to interact with parents, peers and other members of the community (**PA – FGD – NDUR - LAIK**).

Respondent: Socially, they should be taught how to interact with others regardless of their differences, learn to appreciate individual differences. That way, they will fit in whatever society they integrate in. But some just learn mathematics and English which may be absent within the social environment they will live in (**SHOP- INF-NYE**).

MEM: Competencies related to life skills development in areas of negotiations, communication, relating to strangers are crucial for young children. For those who are training as their teachers need to be more careful to exhibit the very values desired of the children (**MEM-DBK-IS**).

KI: ... When you go to secondary ...they should also be able to respect others, they should also behave in way that will enable them to fit with others in the community. Today you see children who cannot fit in the society. They are social misfits, so they need to have these competency before they leave primary (**KI-CBE-KIT**).

KI:...need to talk to them about the life skill because some of them, they are still young because these guys finish their class eight at the age of 14 (**KI-NVCET-NYA**).

A respondent indicated that the curriculum should equip learners with good morals and the ability to produce and create things for the benefit of society.

KI: Somebody who is morally upright, somebody who is aware of the environment somebody who can be a producer somebody who can create things for the society so that of course the society moves from one place to another ... (**KI-REG-LAU**).

Other skills included security skills, self awareness, interaction skills, awareness of change and growth, interrelationship of life roles, career planning, Soft skills (empathy, emotional intelligence), Skills to harness local resources for livelihood. This may be brought out through exposure of the learner to the existing environment.

9.3.2 Values

The learners explained why it is necessary to teach values in school. There are poor role models currently and there is need for good role models. According to them, actual teaching starts when they observe and emulate significant others in society like parents and teachers.

Student Leader: When we go out there in the society we have poor role models. I think the school should teach us values so that when we go in the society and meet a person who is not a role model I will be in a position to know that person is not a good role model (**SL- MUMS- MUR**).

Student Leader:...it starts from the top- teachers, parents ...teachers should be good role models (**SL-KABRS-BAR**)

Student Leader: parents and teachers should play a great role in developing positive values. Teachers should not criticize students but encourage positive approach and avoid setting negative examples (**SL-KABRS-BAR**)

A respondent expressed the view that education should help develop values that are applicable in life like patience, hard work (to ensure youth desist from the notion that easy money is the best), taking care of our environment, respect for property, community service, moral and spiritual values. All these will help develop the learner's character further. The informant also cited the need for career guidance and education on reproduction (sexual education).

KI: ... our education should develop values in our citizens, built citizens for this country...we keep on complaining in the social public about dirty cities, dirty things, about things that we don't like yet we don't solve those social issues in education, education should help us to solve these problems ... I feel pain when I see students have burnt a school, I say I have made this school, ... taught them to Form 4, they can burn

and destroy a property then ...asking myself what values have we given these children,, values that we can use and values that we can enjoy and those should be solved by education. Education should be very key to develop character of our children...(KI-CEMASTEANAI)

KI: ... you talk and people are annoyed because they see it doesn't reflect education, because values like respect, the patience... I saw somebody talking in the newspaper on youth they don't mind how they make money, those are very bad values those are the things that education should show that you should be patient and work hard.. have been running for a project for one, you have run with project two years, those are things that hidden curriculum should show that you should wait (KI-CEMASTEANAI).

KI: ... Should focus towards a specific area, need career guidance, sexual reproductive education ...developing relationships with those around them, sharing, respect, community service at the ground, hard work, focus on career development, moral and spiritual values, guidance and counselling in all spheres of life (KI-FAWE-NAI).

Both the parents and learners pointed out the need to develop positive character traits such as hard work, obedience, tolerance, hard work, patriotism, love, humility, respectful, good citizenship, discipline, diligence, kindness, loyalty, honesty, respect, peace, social justice, respect, unity and cooperation, the virtues of honor, courage, industry, integrity, confidence, kindness and assertiveness, nationalism and patriotism, morally uprightness

Student Leader... it should help me to be a mature adult, grow spiritually and morally upright, it will help me acquire values that are going to help me in life and whenever I fall into difficulties I can apply what have learnt (SL-MOIG-S-UG).

Parent: I would like to encourage positive character traits such as hard work love humility honesty respect...they should really love one another and the country, but not social difference. (PA-FGD-MOIG-S-UG)

Parent: In terms of values, we should bring up anticorruption form of education which could still be integrating more of the subjects something against tribalism, corruption, something about nationalism, something for patriotism. . (PA-FGD-MOIG-S-UG)

Parent: respect, hardworking, obedience, honest (S-FGD-KWANG-S-KIT)

Parent: The child should also be competent in obedience. They should learn how to take orders from their parents. (PA-FGD-KIS-S-NYA)

Student...I think apart from the knowledge that we gain in school we need to be better people by knowing how to abolish corruption and also be a good leader (S-FGD-PBH-S-UG)

Student...I would like to be able to conduct myself as a good citizen with high discipline (S-FGD-PBH-S-UG)

Student: First of all, education should achieve virtue of honesty, because it does not make any sense a person having no that value to go and work somewhere like treasury(PA-FGD-MOIG-S-UG)

Student: When someone leaves this school will have ability to work and develop the nation, so in education many school should engage in teaching their students about virtues honor, courage and industry, integrity, confidence, kindness and assertiveness not only about education because if we leave school having no education but no virtues it makes no sense. .(PA-FGD-MOIG-S-UG)

Student: Critical thinking. They want to have engaged in activities that will not benefit then like sex, drug abuse. When they have those abilities they will know the disadvantages and advantages from these activities. They will all the negativity and look for positivity and will do things that will be beneficial. (S-FGD-KIS-S-NYAN)

Student: You should have humility and you wanting something you will get it easily. When your boss want to give you a job he will grant you the job because you have humility (S-FGD-KIS-S-NYAN)

Student: To be honest and truthful. When you leave secondary and you can't perform well and you don't have good grades. Some jobs nowadays they don't consider grades sometimes they look on values (S-FGD-KIS-S-NYAN)

Student: Being truthful should start in school. They are students who don't go to school and they pass exams. Teachers steal those exams for them. Teacher should help student to do what they know. (S-FGD-KIS-S-NYAN)

Student: Another thing is respect. You should first start by respecting oneself, respecting our parents, respecting other people cultures like eating and dressing. Understand and respect it to avoid conflict. (S-FGD-KIS-S-NYAN)

Student: Just to add on respect, like in high school should be strict on mode dressing. For girls to avoid wearing short dresses and wear decently when the leave high school fit into the society. (S-FGD-KIS-S-NYAN)

Student: Leader: so when I am a leader there is some challenge so it were better if integrity was introduced as a subject in schools. So that we learn that integrity is something we should live vices like corruption, tribalism (SL-MBIT-S-HOM)

Student: They will be honest and disciplined. They will be courageous to face any challenges that they will be met outside the school so they will be able to do things or even bring many new ideas within the society (SL-KIRIS-S-SAMB)

Parents pointed out that values played a key role in helping learners in future to manage ways in which they would make money. They emphasized that schools should instill in the learner the value of responsibility.

Parent: I think those values may assist student's aims in making money but how they make money is not important. I think there is a problem in values, because one may be a thief a very rich one and that's what you want to become especially there is no honesty, so social values should be there (PA-FGD-MOIG-S-UG).

Parent: The schools should allow the student to practice responsibility for example allowing them to go out once a week in an afternoon (PA-FGD-NYANDA-S-NYA)

Student Leader:...The values such as responsibilities, should love each other, should share. Should chaste because after here you're supposed to be responsible, unity at large and you should be able to relate well with everyone (SL-MOIG-S-UG).

The parents also suggested that these values be integrated in all humanities and languages.

Parent:... If they can be integrated in all humanities and languages, they should be integrated (PA-FGD-MOIG-S-UG)

Learners were of the opinion that the values taught should be relevant to the world of work.

Student: ...there are some values you are needed to have when you are supposed to set up a business in a particular place. Finally you have to have a good public relationship with others. You can't be someone who can't relate to others well and you expect your business to succeed. So for me I would also say you should have good relationship with others (**S- FGD- StMARS- NAR**)

On the same breath, parents noted that it is important that teachers teaching social ethics should be trained on the same and that the teachers should practice the same so that learners may emulate them.

Parent: but it's important that the teacher to this child who ,is already an adult, to go through a course that will reorient him how to teach otherwise, if the teacher is the one who telling the children to cheat then there is no we will teach values (**PA-FGD-MOIG-S-UG**)

Parent: I would like to add on the value system they should also go, down to the teacher because this is where student pick up the values (**PA-FGD-MOIG-S-UG**)

One parent pointed out that children should be brought up in the ways of God.

Parent: If you bring up a child in the ways of God he will follow those ways. (**PA-FGD-NJAB-S-NYA**)
Others pointed out the need for self determination and independency.

Student...I think along the academic system I should have learnt the spirit of self-determination whereby you can live independently and you can struggle with one something without using shortcut (**S-FGD-PBH-S-UG**)

Student...I anticipate that to be self-reliant and be very innovative. Not to depend on someone or things those are not made from our own country (**S-FGD-BUT-S-BUS**)

Parents were of the opinion that the value of friendship should be cultivated in the school community while students were of the opinion that education should instill in students positive attitude towards work.

Parent: The school should foster friendship with the learners. The learners should be made to take their teachers and their school in general. (**PA-FGD-KIS-S-UG**)

Student: Education sector should also help learners to gain positive attitude in life, because you will find many students wanting those white colour jobs prefers to work abroad because of mainly problems in their country (**PA-FGD-MOIG-S-UG**)

Respondents indicated the need to develop value content in different topics and subjects which learners should practice through various activities. Such values are integrity, respect, honesty, accountability, patience, socialization and environmental concerns

KI: ... is the issue of corruption and tribalism. It is the role of parents to teach their children ..what corruption is. You know corruption starts with a child at home in a way that you start stealing parent's pens, biro's ... (**KI-FGD-MASU**)

Industrialist...Mainstream values in education, in different topics and subjects, also activities (**EMP-IND-BUS**)

Industrialist...inculcate... them in our youth whatever the level of education... things like honesty... people who are accountable, people who are concerned with ... environment... I see this to be very key values (**MAN-IND-KAK**)

Industrialist...Let people learn patience, to value honesty and above all to know that they should be accountable for whatever action that they do ...later on they will pay for them dearly (**MAN-IND-BAR**)

Other respondent indicated that values like numeracy, literacy, good behaviour, relationship between gender and attitudes character, good morals, etiquette, appreciation of their environment and consciousness on how to better their lives.

KI: ... Relationship between gender and attitudes, respect, honesty and integrity should run through the system, love for the county, general social etiquette, numeracy, literacy, understand that they live in a country called Kenya, patriotism, integrity, love, self-esteem, assertive, respect for self and others, able to negotiate, confidence building, value of contentment, simplicity and concern for others (**KI-FAWE-NAI**)

KI: ... It should be able to instill basic moral values, a sense of patriotism and a cohesive society (**KI-CCO-MAN**).

A respondent was of the opinion that discipline should be inculcated in the learner, with emphasis on hard work, tolerance, good decision making, relating well with people and being self driven.

KI: hardworking, discipline, in terms of spiritual guidance be tolerant ... Human skills here determine how you relate with people.. good decision maker ...another thing also self driven. You need not to be followed to do things for you and also for other people (**KI-FGD-MASU**)

A respondent reiterated the need to inculcate morals in the learner. The respondent also was of the opinion that there is need for the learner to appreciate preventive medicine and the need for cleanliness.

KI: ...to inculcate things like morals in our children to understand even appreciate preventative medicine, appreciate that ... cleanliness, the country will be having health budget that is low, and that's are the hidden things that education will help us to do that (**KI-CEMASTE-NAI**).

A respondent stated that there were glaring gaps in the current curriculum especially as concerns the teaching of values - the values of honesty, integrity, patriotism, hard work.

KI: The gaps we found last year but one when we visited the then CS Prof. Kaimenyi and some of the gaps we found are the value system we need to come up very ... we can incorporate values as we teach whichever subject we teach - the value of honesty, integrity, patriotism, hard work. I think our curriculum

should help us in dealing in this values. Other than just cramming, children should understand they should be honest to avoid exam cheating (**KI-CEB – NYAM**)

A respondent emphasized the importance of inculcating moral and spiritual values in our learners. He emphasized that priests should create time to visit schools mainly for spiritual issues. He regretted that emphasis is laid on other disciplines at the expense of religion.

KI: So let us balance because lack of balancing it then we end with consequences that we cannot bear. Spiritual aspect is very important so that is why we are emphasizing today the priests just as it was earlier on should have that opportunity to help in information in education in schoolsWhy priests may not be wanted there its because of finance again I said economical financial reasons but it is not very expensive to give him petrol to go and once in a week because of the goodness of the child... So priest is what I want to emphasize here is the priest is very important in every society and when it is the priest it is religion. We should never rule it out. But now we are looking at doctors, lawyers and other professions we are forgetting the role of the priest and especially in education (**KI -BIS-HOM**).

A respondent observed that that emphasis of the current system is on academic work. Moral values and social integration have been given little attention.

KI: ... we are focused more on how many degrees should I acquire before I can join the job market ...so the other issues like moral values, social integration..ok there is a bit of that because of the interactions during the education journey ... (**KI-CEE KWA**).

A respondent added that the religious institutions such as the Madrassa must be actively involved in inculcating religious values to the children, and this should begin at an early age. This should not be left to the family and school.

KI: As the children are growing up, the religious values should not just be left to the family and school Churches... (for example) ..Islamic institutions like the Madrassa it's a role they should take very keenly at a young age (**KI-CEE KWA**).

A respondent was of the opinion that there is need to inculcate the value of patriotism in the learner so that so that people can refrain from looking for easy opportunities in which they benefit at the expense of others.

KI: Our patriotism does not reflect itself in aspects where one is benefiting at the expense of others. ...we are failing.... these vices that are eating up our society we still have quite a long way to go (**KI-CEE KWA**).

A respondent indicated that the current curriculum puts a lot of emphasis on content and not other aspects of life like humanity, dignity and values. The curriculum should address aspects like caring and love.

KI: The value of the education is not just the degree. There is the other aspects of our life, the humanity, the dignity, the value, you know? Basic things that are in us. And all the other things we used to see in international schools, we used to see at KCCL. The first thing we look for is a happy child. While really, this child can cheat to cover content can do manner, all manner of things. So our curriculum doesn't teach us to care, ... or to love, ... I don't know, it's strange (**KI CITAM NRB**).

Respondents pointed that there is a negative attitude towards jobs different from the so called white collar jobs and noted that this mentality should be done away with.

KI: ... Lakini because sisi we had colonial mentality that we are down and we must place the white man, so kila mtu anachukua white collar na ile ya blue collar ni ya hao. Nobody want to be associated with blue collar jobs. Unataka kuwa nini engineer, daktari, nobody will say I want to be a mechanic, plumber, mason, they say this is a dirty job which is low, but we need reeducate the system and tell people to think different (**KI-CDE-MAK**).

A respondent pointed out that use of project work in the learning process could help develop the values of patience, respect and problem solving skills to handle challenges in life.

KI: ... even assessment is continuous and students develop projects, at the end of the day we say this an A material because of the project, so we invoke them throughout rather than the students waiting for one hour or two hours to decide their fate ...those months will develop values in them because I want to see the project, cleanliness, the patience, the way you present the project how it appears, communication will develop, we see respect, because at the end of the day we judge you at the project, and even see what is your project solving, we want to see not just a project but a project that learner can help us solve some of daily problems... our education system should help (**KI-CEMASTEANAI**).

The respondents proposed that curriculum should revive the values of the society which includes honesty, diligence, caring, compassion, patriotism and morals.

Respondent: Values are eroded in our contemporary society. There is need for a curriculum that emphasizes on reviving values like honesty, kindness, love, unity, trustworthy in young children. Such values will uproot corruption which is the cancer of the nation. (**DBK-IS**)

The respondents expressed the need for the curriculum to include the national values as enshrined in the constitution, and further, that civic responsibilities should be emphasized.

Respondent: The curricula at different levels should aim to enhance Accountability, Integrity, Responsibility, Peace, Commitment to work, Negotiation, Acceptance and environmental preservation. This can be achieved by involving learners in community service at all levels during holidays hence inculcating Nationhood in learners. (**OCO-IS**).

9.3.3 *Attitude*

Learners stated that a good attitude towards subjects and the subject teachers should be cultivated by learners since attitude affects performance. A student suggested that education should give the right attitude like enabling them to appreciate various sources of livelihood including farming. A student leader pointed out that learners should have good attitude towards everyone and be able to relate with everyone. This was echoed by the students who said they need to acquire positive skills and attitudes to relate and fit into society.

Student: If you have education you can understand the attitude of life. You can have knowledge for example agriculture it will help us in our life because we can apply the knowledge to do farming (**S-FGD-KAS-S-KIL**).

Student Leader...You should have good attitude towards everyone. You should be able to relate with everyone (**SL-MOIG-S-UG**).

Student...We hope to acquire... positive attitude toward others and high self esteem, create a country where there is peace and harmony... (S-FGD-StCNAM-S-BUS)

9.4 Content/Learning Areas/Pathways

The respondents were asked to suggest content, learning areas and pathways that are necessary in the curriculum. Different suggestions were suggested as presented in this section.

9.4.1 Learning Areas

For secondary schools level, the practical component of learning was emphasized. The respondent indicated the need to encourage practical skills than theoretical knowledge in schools.

Parent: a lot of practical need to be emphasized. If a child is made to do things for himself, his mind is sharpened. We don't want theories yet children do not understand. The generation that we have can't do very simple things. They should not think they will have money always to pay people to do simple things that they can do themselves (PA-FGD-KATP-MAK)

Industrialist...Offer practical skills and not just papers (EMP-IND-BUS)

The learners said that they would like to be taught what will help them cope with life after school. To them, whatever is taught in the curriculum should be relevant and applicable in real life situations. Different learning areas were suggested by the respondents.

9.4.1.1 Creative Arts and Technical Subjects

The learners advocated for the teaching of creative Arts like Music and Art and Craft. They also suggested technical subjects such as Electrical Engineering, Drawing and Design, Carpentry, Masonry, Fashion Design, Computer Studies, Home Science (dressmaking, knitting), Business studies, Agriculture, Woodwork, Metal Work and Power Mechanics.

Student Leader: Some time back there were subjects like Art and Craft so if they can be reintroduced in schools and expanded in schools that already have them like some schools have power mechanics and others don't have them. So I think it should be in all schools so that there is inclusivity all round (SL-RAP-S-MIG).

Student: lessons like art and music should be rational support because some people may have interest in those sectors but since it may need educational support, people just concentrate on other things (S-FGD-MOIGP-S-UG).

Student: I think when we were taught in primary, we used to ... have arts but as we go on when we reached class 8 nothing was completed. I think those subjects like creative arts, music has to be at least introduced in primary so that when those kids reach secondary they will yaani... advance so that when they go they can become somebody better in future (S-FGD-MARM-S-MARS)

Student: Ok, when I was in down town school, in Nairobi we were doing music, art and craft drawing but when I came here there is no, nothing like that ... I heard that if you are best in drawing someone can take you and then you go far. (S-FGD-MARM-S-MARS)

Student: We can also have home science because if it's there we get teaching on how to wash their clothes (S-FGD-KAS-S-KIL)

Student: Home science it deal with values of food and nutrition, so if I take home science by the end of the four years I should be able to go back home and prepare a good meal. Maintaining cleanliness, making clothes, being able to set a table for visitors. (SL-MAL-S-KIT)

KI: I think part of the previous curriculum should be borrowed back like during the times of our fathers and mothers like my mum tells me she learnt home science in primary they learnt all those things in primary so I think those vocational skills should be taught also in primary high schools and also in universities in all institutions because not all who are in primary schools will make it to the high schools are not pouring high schools will make it to universities so you see if there is this vocational trainings in primaries then have not made it to go to a high school yet I know I am some skills in home science I know how to do tailoring, metal work as he has just mentioned so even if I won't make it to go to high school at least I can keep myself busy with something not necessarily the white collar jobs like since I have not have not gone up to the university ...I think those skills part of the previous curriculum should be embraced back into the...(KI STU KAU)

Student:...home science should be introduced and especially for girls because in future it will help them on how to do their house chores, cook and prepare your own things which are valuable to a girl (S-FGD-MOG-S-SAM).

Pupil: But the home science should be included in primary and secondary. Also technical subjects like woodwork, engineering.

Student:...all technical and applied sciences must be introduced in schools so that students can learn subjects of their own opinion. You find someone is not able to perform in a certain subject but he can perform well in a certain activity. So he should be given that chance to participate where he is comfortable. (S-FGD-BUT-S-BUS).

KI: Today our Agriculture has gone down why because we do not teach this subject. If you see children today in primary they are not taught agriculture yet we talk of agriculture being the backbone of our economy. It's a subject we ignored, when we talk of value of crop rotation, bee farming, irrigation etc. We need to bring back these subjects and ensure they are examinable and not made a choice. .(KI KPSA UG)

Student:...according to me I think these things that are being ignored I don't know they are being taken as minute, something like music and art and craft. I think they should be introduced because not everyone is able to read and understand Biology or Chemistry because I might be able to read and understand Biology but someone else is well equipped in music or art so something like that should be introduced so that someone can choose the subject that he/she is well capable of doing (S-FGD-BUT-S-BUS).

Student: Business studies. They should also teach us how to make business plans, so that if you go outside there you can start a business before you join a university and so that when we are outside there we can develop projects that can develop our country (PA-FGD-MOIG-S-UG).

Strengthening the idea of teaching of technical subjects, the parents said at secondary level hands-on skills should be emphasized like plumbing, welding, and construction as well as advanced skills in mechanics.

Parent: ..awe na uwezo kama wa kutengeneza vitu kama baeskelu, au kama mechanicshuleni mtoto ajichugulie kile anataka.....apate kitu cha kumsaidia (PA-NDAP-NY)

Commenting on Agriculture, a key informant pointed that such a learning area should also inculcate values like patience as they learn since they go hand in hand with what is in real life.

KI: Our country is also agricultural to me those are things we have stopped, that children don't want to see things that will take them back at home, yet we can do so much in agriculture that I will wait for my cabbage to grow, and in six months I must wait, I have planted maize and I want this maize to help me to take my children to back to school and I wait when I hear that a person is not ready to wait and have shortcut, and that's what we were saying that in our curriculum that we must develop them (**KI-CEMASTEANAI**).

A respondent noted that business studies should be taught so that the learner can learn how to count and budget.

Respondent: kitu ya kwanza ni biashara, wakati wowote umekaa chini umeanza kuhesabu na kuipangia kwa sababu hata ukipewa million moja unaweza kulala njaa kama iko hapa, kama hujui kupangia... kitu ya kwanza muachilie huru Kama mtoto wangu ameenda shule, nijue anaeza kuwa na biashara atilie maanani (The first thing is business. Any time you are seated, you start counting and budgeting. Even with a million, you can sleep hungry if you don't know how to budget. I would like to be assured that once my child goes to school, he can start a business (**BUT-INF-KAJ**).

9.4.1.2 Health Education

A student suggested that First Aid should be taught in schools in case one is involved in accident.

Student...be taught on how to use first Aid because may be you are at home and there is a small accident you are not able to do something about to. (**S-FGD-KAS-KIL**)

Students suggested that they wished to pursue careers in nursing. By implication this would mean relevant content for those areas.

Student: ...before joining the university I would like to do nursing...after finishing form 4, I would like to go to the university then after university; I would like to be an engineer if it is possible (**S-FGD-MARM-S-MARS**)

9.4.1.3 Life Skills and Social Ethics Education

Parents and learners noted that life skills should be taught, and specified skills such as decision making, leadership, how to interact with others and live an independent life. They also suggested teaching of issues related to disaster management.

Parent: I think life skills should be taught because this abilities decision making, leadership, I think they should be told in life skills (PA-FGD-MOIG-S-UG)

Student: I think in primary schools to high schools we should majorly teach students social skills how to interact with others (S-FGD-MOIGP-UG)

Parent: We should be told how handle things on our own, stand on our two feet, treated as adults, so that after high school you can depend on yourself according to our tradition.(PA-FGD-MOIG-S-UG)

Student: What I would like to say is that something like life skills should be enhanced in the school because not only that we need the academic successes you may find someone is successful in academics but considering that that person does not have integrity, he or she may end up failing in life. (S-FGD-NJU-S-MUR)

In addition, the learners would like to see moral issues addressed. They need to learn how to deal with the issues affecting them. They also need to continue learning about body changes and boy-girl relationships.

Student... students should be taught how to cope with such emotions because some may lead to feelings of committing suicide (S- FGD- OLOO- KAJ)

Parents said that children should be taught social ethics and in particular how to live in the society. They advised that learners should be sensitized on the consequences of bad governance; violence and conflict.

Parent:.. For example what happened in Rwanda and the post elections violence in Kenya. (PA- FGD-NDUR- LAIK)

Parent: It is good to add this subject on day to day life and have time to explain to them e.g. social ethics which used to be there on how to live within the society. Without that I don't know where we are heading to a good place. (PA-FGD-NYAKI-S-NYA)

Parent: Before we go to secondary as we talk about values, that will bring up social ethics which should cover all the social space, because if it is taught at this level the child will grow knowing who he or she is. (PA-FGD-MOIG-S-UG)

Parent: I think we used to strengthen ethics. The products of our education system are not upright morally (PA-FGD-NYANDA-S-NYA)

Students also said lessons on good behavior were necessary.

Student: If you look at the generation now, you could see that the youth we are facing a lot of challenges in our behaviour, so what I would like included in the curriculum is that we have some lessons which are regular for guidance and counseling. This will enable the students to have some skills which are lacking in this generation. So, if they are included I think the education would shoot higher than it is now. (S-FGD-NJU-S-MUR)

Key informants noted that age appropriate and value based sexuality should be taught at secondary level. One of them said:

KI: Again at the level of secondary school the issues of sex education should be made clear we can't leave them to experiment with the wrong information that should also be able to do all that is the curriculum. Students should be guided to be in serious and good relationships (**KI-PAS-NAI**).

KI: Again at the level of secondary school the issues of sex education should be made clear we can't leave them to experiment with the wrong information that should also be able to do all that is the curriculum. Students should be guided to be in serious and good relationships (**KI-PAS-NAI**).

9.4.1.4 Science subjects and mathematics

Other learning areas suggested by respondents included mathematics and sciences as currently offered in secondary school level. The sciences included: Biology, Chemistry and Physics

Student...I'd choose Biology, Chemistry the whole day, Life skills and CRE, creative Arts e.g. Drawing, Music, pianos, guitars music instruments, art and design, having guidance and counseling sessions on how to become an upright girl. If I can have dancing, I'd spent the whole day dancing. If there is competition in eating I spend day eating...(S-FGD-StCNAM-S-BUS)

Parent: What I would like mostly is Maths. The child should take this as number one. The child to take Business Studies, also to take Geography. These are the ones that I would like the child to take in his/her class and for examination. (**S-FGD-NYAM-S-NYAM**)

Student: Mathematics ... Biology...those ones. (**SL-MAL-S-KIT**)

9.4.1.5 Financial literacy, Entrepreneurship and innovation

Key informants suggested that focus should be put to entrepreneurship and enhancement of competency based curriculum, invention and innovation.

KI: And actually when you mention entrepreneurship, I think that should seriously be introduced in secondary schools because by the time somebody is graduating to join the university, they don't know what they want, I have seen many students finishing form 4 and they can't tell you what they want to become(**KIT- BIS - HOM**).

KI: Education reforms need to be informed by current and future local, national and international job and business opportunities...There is a need to redirect the learners focus to entrepreneurship. School syllabuses should be changed to competence-based so that learners' invention/innovation capabilities can be identified early and be given an opportunity to pursue their interests. (**KI-CCO-MAN**)

KI: on financial issues mostly we learn them in mathematics and business studies as a subject..In primary school it was removed but we meet it in secondary so it should be started in primary ..so that the kids grow with that and have ideas. (**KI-FGD-MASU**)

KI: Careers like in Agricultural sector in Homa Bay county all the food from this area comes from Kisii region so when our people pursue that practically not only academically I ..Every now and then you hear we have water shortage someone in Nairobi says we don't have water you say you people are mad. So some careers can help us develop and utilize..the entrepreneurial skills that it may also help us come up with businesses it's a very rich one when it comes to market level, the fishing industry we need some knowledge (**KI-FGD-MASU**)

9.4.1.6 Computer studies

The respondents suggested the need to advance technology from the primary school level and fully implement it at the secondary school level was highlighted as a key content area for secondary school level.

Pupil: They should advance technology in a sequential manner ...they should advance fully technologically at secondary level **(P-FGD-KIPP-UG)**

9.4.1.7 Humanities

The subjects that are currently taught under humanities were also suggested to be included in the curriculum. These include: History and Government, CRE and Geography.

However, giving an example of Geography, a key informant pointed out that much content is taught but little is applicable outside the school setting.

KI: However some subjects so much is taught at school but very little is utilized by the learner outside school. In fact a subject like Geography a lot of content is covered at school but when the student transits to university it becomes irrelevant. **(KI-TCDE-NYAM)**

The respondents also expressed the desire of teaching issues of climate change, global warming and environmental awareness in the curriculum. In addition, they noted that citizenship should be taught at this level.

Respondent: Climate change is at the fore of most international discussions nowadays, and the consequences of this change are becoming evident every day. Students should be enlightened on this, and on measures they can internalize and do on a day to day basis so as to have an overall positive impact on climate change in the long run, e.g. they can be trained on how they can make it a habit to plant a number of trees each year. If everyone did so, the impact would be very positive. **(BUS.MAN-INF-NAI)**

9.4.1.8 Languages

Learners called for the teaching of languages that is English and Kiswahili. In relation to English, a respondent noted that the Literature taught in different schools should be the same instead of having some schools study different books from other schools.

Respondent: Another thing is that in every school the literature is different. You find that in this school they are buying a different book from another school. You find you are in the same class but in different school and you have a different literature. ...In the time of exams you find the students are very different **(MECH-INF-UG)**

The respondent also suggested the teaching of the foreign languages like French, German and Arabic where they are not currently offered.

Student: If there shall be introduction of foreign languages need to be learned alongside the other subjects in school (**S-FGD-KIS-S-NYAN**).

Student: we are taught English and Kiswahili and some other schools have more languages but not all so they should also be taught. Languages like French, Germany (**SFGD-KANJU-S-NYE**).

Student Leader: There are some things I wish I learnt. There was a time I came into contact with Arabic language and I wish I studied it. I wish I learnt French or Germany but fortunately it's not there (**SL-MBIT-S-HOM**)

However, the respondents suggested that foreign languages studied in secondary schools should not be limited to German and French but also include Spanish and Chinese.

Student: Languages are limited to say French and German. We could introduce Spanish and Chinese (**S-FGD-MUS-S-KAK**)

Commenting on the foreign languages, the students said such languages will be instrumental in communicating with people from other countries.

Student...I think the foreign languages should be taught more so that those students who pass well may go to other countries and if they know the language it will be very easy to communicate (**S-FGD-PBH-S-UG**)

9.4.1.9 Talent related Learning Areas

The student leaders pointed out that teaching of talents is currently missing in the education system. Talent related areas like music and drama should be emphasized at secondary level.

Student Leader...What is missing is really helping the students realize their talents. You see in Kenyan system, it is so much about education leaving about the other part of talents so that the student doing is just about what am supposed to learn. They should balance co-curricular activities like music, football etc with the class work (**SL-MOIG-S-UG**)

Respondent: learners need to be exposed to other Talent-related life skills which are currently given minimal or no attention by many schools because they are not examinable e.g. Music , drama, etc. in case one opts to follow this trajectory of life after secondary level (**BUS.MAN-INF-NAI**)

Parent: the education of today is behaving as if there is nothing like practical work. Our polytechnics are being closed down, aa... we behave like we are all paper people. That is why we have many people with degrees who are tarmacking. Who have their degrees and diplomas and they are tarmacking. They can do nothing in this life. That is why they are stealing. So its my opinion that talents like foot balling, and others like building, those are talents, should be taught in our schools (**PA-FGD-MUTG-S-KIT**)

9.4.1.10 Psychology and guidance and counseling

In order to cope with psychosocial challenges, they also requested to be taught and psychology.

Student: Psychology – when you acquire psychological abilities you will be able to study the human behaviors you will be able to know this is a good person, this is a bad person or this intends, like for example if you have a psychological ability of suicide bomb you will be able to alert the people around or the official of the government there is a suicide bomb around and many of the lives of people will be saved (SFGD-MEKA-SP-KWA)

9.4.1.11 Compulsory and Optional Subjects

Parents suggested subjects that should be compulsory and those that should be optional. In their view the teaching of practical subjects such as music, home science and agriculture should be compulsory. Other compulsory subjects suggested included Biology, Chemistry, Physics, Maths and CRE. Geography, History and Government, Business Studies, Art and Design and others can be optional for those learners who would like to specialize in them.

Parent: Also, I would like to contribute by saying that the subjects the learners are taking at secondary level, they are just okay. A subject like Biology, Chemistry, Physics, Math and CRE, these are subjects that are supposed to be made compulsory for all learners. A subject like CRE would enable these children to acquire values. These other subjects that have remained like Geography, History, Business Studies, Art and Design and others; they can just be optional for those learners who would like to specialize. Let it not be that; the learners are going to take all the subjects. (S-FGD-NYAM-S-NYAM)

Parent: ... the technical subject such as music, Home Science and Agriculture actually should be taught at an early age for them to work out in the field with the resources available. These subjects should be compulsory in schools. (PA-FGD-NYANDA-S-NYA)

On the issue of computers studies, the parents said they should be compulsory as a subject from class 1 – university. They added that as parents they should also be encouraged to learn computers. Students also suggested that computer studies should be a compulsory subject in high school.

Student: I think computer should be enforced as a compulsory in high school so that we can have technological fitting in the world. (PA-FGD-MOIG-S-UG)

Parents suggested that learners should be taught all the compulsory subjects but emphasis should be on subjects that are geared towards specific careers.

Parent: The learners at secondary level need to learner all subjects that are compulsory but be allowed to special in areas/subjects that would contribute to their career interests. (P-FGD-St.JOSE-BUNG)

Learners expressed a desire that technical subjects should be made compulsory for all.

Student: I Think some of these technical lessons should be made compulsory in schools, I know there are some schools that teach arts, music, woodwork something like that and they are not staying in schools we find someone who is not very academically speaking has a tough time dealing with the worldwide she/he does in schools so if it is done compulsory in schools and these people don't have flat performance (SFGD-MEKA-SP-KWA)

INF...Kiswahili and Math's...Geography is hard; needs changes on map reading (**JUA-INF-GAR**)

9.4.2 Pathways

The respondents agreed that there is need for the establishment of pathways in the curriculum. The respondent advocated for the country to embrace the alternative pathways to education to stop wasting learners and resources. Suggestions were made that the pathways should be made attractive to the students. It will also involve career guidance from an early age so that the learners can know their interests and follow the pathway that will enable them to attain their goals.

KI:...I think it is the way to go...we invest a lot of resources in academics only for somebody to go up to fourth form and realize that they cannot make it to go forward.... it would save us a lot of resources. The challenge we have is to structure it in a way that it is attractive to the students. .. it will require a lot of resources in terms of career guidance .. from an early age so that they can know their interests ... For instance if a child decides at class four that they want to be a mechanic by the time they reach class eight it should be known that there is enough TIVET resources. (**KI-TCD-KWA**)

The curriculum developers were challenged to come up with a curriculum that allows for specialization. Parents and learners observed that the curriculum should offer other avenues through which those who are not academically inclined can still advance in life.

Student: curriculum developers should try and make sure that at the secondary level students focus on courses that they want to take meaning that they take subjects that will help them in the careers they want to take (**SFGD-RAP-S-MIG**)

The students said that it would be better if the students are taught subjects within their aspirations. Parents were of the same opinion. They said learners should be made to specialize in the areas they are interested in. The learners should be exposed to their areas of interest and vision so that they don't feel like the system is wasting their time.

Student: Not everyone is clever they should have institution to go for other training it will reduce the cases of immoral behaviours (**S-FGD-KIS-S-NYAN**).

Parent: The Kenya that we have is targeting students that are going to university. This person has no skills anwezajifanyia nayo. For example, a third of those going to the university and the rest do not know any work to do with their hands. For example, during the old system there was carpentry and all that and the product that we are having out there, they came out of that good work (**PA-FGD-OLOOL-S-KAJ**)

Student: I think that in secondary school level people should read according to their career aspiration. Because you tell someone to read something not that they want to pursue that career. But they read a subject because they have to read it. And also the subject should at least examine in all schools. For example if we have music in our school other schools should also have it not that some schools have certain subjects while other schools don't (**S-FGD-BUT-S-BUS**).

Parent: Specializing in his/her area so even after Form Four it was easy (**S-FGD-NYAKI-S-NYA**)

KI: everyone who is given pathways is given passion, for example, one want to be a doctor and the other wants to be a teacher, they should not be forced, and that's the right direction we are heading, as a parent or a teacher you should know what a child want to be; does he want to be an artist, dancer, teacher, engineer, actor, entrepreneur, film actor these are the courses that should be pursued in life. And then in that case we will stop the issue of school dropout failure, the society people who have nothing to do, and this will make everybody is being engaged...(KI-CDE-GAR)

KI: you build more on concept to use in practical, and as they grow to higher level, let's say secondary they have understood themselves, they become like, they have a vision, and when they have a vision, they want to learn more of their vision, you should be able to give them opportunity to understand their life as they are, and that why the pathways are important, there are children who do not want to waste time without being given certain tasks, like if they have started playing music he needs to know how to use gadgets, if they have started to model a car they need to go where they can model a car, and others who need to go to an area where they need to redefine themselves and I think this is the critical area, and when they reach basic education, the lower secondary and gaining knowledge to upper secondary then they have already taken future and that is the kind of curriculum we want...(KI-UNESCO-NAI)

KI: I think we need to back to that specialization system....you specialize in what, you are strong in the mathematics, and sciences, you have a strength in because after standard 8, a lot of them because don't qualify to go high school.... it was a good idea but I think it should be an option for those who want to do it, then there is something else for those who want because it is for very sharp people. If you are sharp, girl or boy, you will excel in that system and still be aware of the environment and the social aspect... Not just knowledge, consider now ... somebody just decides to do chemistry and physics and they discover many things you know, they have come up with new ideas in medicine and all that , you know taking 20 subjects does not make an expert anything. (KI-KHRCR-NAI)

In the same vein, some industrialists and key informants indicated that learners should be taught subjects that can enhance wide exposure for future and then they can specialize in learning areas.

KI, Actually I think I have suggested I have alluded to F.2 before F.2 by F.1 & 2 if we have all the crucial courses....may be given that some entrepreneurship may be given by that time so that as they now choose their pathways from F.3 then they can already be guided to know which areas but I think we might end up increasing a number of subjects so that there is more choice (**KIT - BIS- HOM**).

A respondent suggested that there is need to come up with schools that specialize in certain disciplines.

KI: Then come to secondary level that is where you now specialize. Is specialization a secondary level so I am going to a technical high school, so I think we need to even change the concept of this polytechnics and technical institutes to make them high schools? So this is a technical high school, so that the child who goes to let's assume now Alliance girls become a science oriented school, then we will have Mang'u being a business school then we have Kapsabet being a technical so these children are gifted differently but they will go to high schools but when you say the ones who do not go to high school we are going to take them to technical institutes, what are you telling them? You are telling them you are failures and we need to start now categorizing so that everybody feels that there is nothing like nationals. By secondary school every child should be very clear about what they want to do with their career but you find that by form four they wait for their results so that the result slip can tell them what kind of career they will do. They don't actually know even at form four what they want to do and I think it's very important (**KI -CPC- NAI**).

Parent: We should have two secondary schools, with both technical and the normal education... like Kabete. It is no longer there, it was a secondary school from form 1 and 6. Technical schools like Kabete produced good students, also Starehe has two schools, technical and secondary. Now you finish form four at 16 and get lost (**PA-FGD-OLOOL-S-KAJ**).

9.4.2.1 Technical pathway

Respondents called for establishment of polytechnics and Technical institutions which would offer vocational courses to cater for learners who do not perform well in the academics. They said that such learning areas would give the learner a repertoire of skills for self-reliance.

Student: if someone is through with education and did not pass well they should be given an opportunity to go to the polytechnics and then be employed by the county governments (**SFGD-KANJU-S-NYE**)

Pupil: Village I come from pupils who have passed their exams cannot go forward with their education the government should start Polytechnic to help pupils to further themselves in the community (**PA-- FGD-TUR**)

KI: The so called technical schools should come back as we all cannot be academicians. I have a boy who is good in Arts but am taking to a normal even when I know that the best he will get is a 'C'. But I know he is a wizard in whatever he holds but not academic. I cannot take him to a village polytechnic because of age. (**KI TCDE-BUS**)

KI: ... Former technical schools should have been introduced yesterday (**KI - FBO - BUN**)

KI: that TVET was meant to people who are failures that's why we present the whole idea wrong progress in terms of learning after finishing a craft course for those who have succeed with credit and distinction they can proceed to diploma they can proceed to a degree and we can use technical institutions like Technical University absorbing most of their clients through those kind of field... (**KI-NACECE-BUN**)

KI: And that is why I think this curriculum of ours should be made in a way that is also addressing the needs of these other children, so that if for example a child wants to go ahead and may be do like plumbing there is an institution for this child where can also go and do something else. May be like Tailoring there is these girls who are not able to go to secondary school and that is why I feel that we need to bring back this whether village polytechnics they used to be there long time ago because they are really going to take care of big number of children who are not admitted to secondary schools (**KI HET NAI**).

KI: If we can have... these people who go to village polytechnic, start with village polytechnics they go to technical universities, I think the idea of coming up with technical university is like took the university of Mombasa that is noble one so that people who start from village polytechnics can go all the way and they graduate in technical subjects and we need these technical people to address the issues and challenges that we are facing today and also to help us to achieve our vision 2030. We will not achieve vision 2030 without training (**KI DVC KAU**).

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KI: I think we need to also develop another path especially the technical aspects so that there are these pupils at class 8 who are not academic based, they can take a technical where they can do building and construction, like we had earlier the technical institutes and after they are through they can be absorbed in the job market or we also have technical university, so that we can have two of them, the academic and technical I think that will be able to catch and develop the talents from our children so that we may think all round.. (**KI-CDE-KIT**)

KI... it is useless wasting a child for many years without gaining anything when he would have gone to direction that could have helped him, you empower a child on area that he fills comfortable in the society earlier enough such that if he finishes let's take for example the TVET pathways which can go to technical and vocational within the TVET (**KI-UNESCO-NAI**)

Respondents observed that vocational courses would benefit learners in the sense that they could get certification after going through trade tests and in turn would enable them to be self employed or to seek employment in the job market.

Respondent: Kama umepeleka mtoto carpentry... Sasa akifika mwisho atahitimu, atakuwa na trade test. Akiwa na trade test, anaweza kuanza biashara yake, ama aende kuajiriwa mahali. (If you take your child for a carpentry course, at the end they will get a trade test and be able to start their own business or be employed) (**HOT-INF-NAR**)

The respondent expressed concern that Prof. Odhiambo's recommendations on pathways were very good, however the public has not been convinced.

KI: Prof. Odhiambo's pathways were good but we have not convinced parents about it especially TVET. Let this pathway choice be included in choices at their school level so that learners do not perceive TVET as areas of failures... (**KI – CDE – BUN**)

9.4.2.2 Talent pathway

The respondents noted that students should be encouraged to take courses or training programmes which are in line with their talents, interests and abilities. This could be reinforced by creating pathways that develop student's talents or abilities from an early stage. The system therefore should provide adequate opportunities for learners to follow career paths which promote development of their talents, abilities and interests.

KI: when we know our talents, we are able to concentrate on areas that we can do our best (**FGD-UNIV STUD- PWANI**).

KI: Why can't we go to colleges produce me as an athlete, why can't we go to colleges that provide me as a musician.... So irrespective of whether I dropped out at form 4, year.... My daughter was good in fashion and design, she is deaf and when she did the grade test, from grade III, grade 2, and grade 1 in fashion and design but at form 3, she dropped at form 3, still when I exposed her to the job market, they said, but now she is good at these things but doesn't have form 4 certificate-the form 4 certificate has nothing to do with what she does, so it is like we screen people out rudely based on academic, so out way of nurturing and promoting talents is to start, we should start redefining out screening, we screen people, that is how we should motivate people (**KI-PWA-UNI**)

KI: ... Students should be able to go to schools offering subjects/areas they are good at. This is possible through identification and nurturing of talents so that there is no pressure on academics. Former technical schools should have been introduced yesterday (**KI-FBO-BUN**).

Student: schools should not only be academic oriented they should also help those who have talents to improve them (**S-FGD-KANJU-S-NYE**).

The respondent suggested that pathways need to be created in order to identify talents through P.E, art and craft, music and home science. They said subjects also need to be examined.

KI: Pathways to identify talents at early stage like footballers through P.E. lessons art and craft to be examined. Home Science through practical lessons musicians should be nurtured and identified early. (**KI-TCD-GAR**)

The respondent said the Odhiambo Report on education had the idea of talent. It outlines how students were to be given opportunities to identify their talents.

KI: I was reading Douglas Odhiambo Report on Education; it had this idea of talent. You know we have two categories of people with talent. We have people who are multitalented, there are people who are very bright, and they are soccer players, could even be runners, and they should also be given this opportunities.... those that people who may be not being very good in academic issues should have institutions that can take care of them. They are weak academically but they are talented (**KI-TCD-KWA**)

9.4.2.3 General education pathway (academic)

Students noted that while there is need to balance, those who are good in academics should be allowed to pursue academics and the rest their talents. Those who are not endowed in academics can still excel by exploiting their talents.

Student: I think those who are perfect in education let them to continue with their education and those who are talented continue with their talent (S-FGD-KAS-S-KIL)

KI: those ones who are gifted in class they go through the normal curriculum but for those who are not gifted in academics then they go and carry out what is best for them because at the end of the day instead of being idle.....(KI CDE LAI)

9.5 Talents Identification and Nurturing

The respondents were asked to give their views on talent identification and nurturing. In their responses, they mentioned different types of talent, gave their views on how to identify the talents, who to identify and when to identify them. They also gave their opinion on the strategies of nurturing the talents.

9.5.1 Types of Talents

The respondents pointed out that there are different talents that can be identified among students. These include talent areas in visual and performing arts, culinary arts, drama, and sports

Parent: physical, cooking, drama, music, athletics, race, dance, sports, art, poetry, public speaking hairdressing, football. (PA-FGD-MOIG-S-UG)

Respondent: Talents like... music also should be taught at an early stage in schools...I think there many talents but for me are talent for me I just want ports...drawing...(CARW-INF-UG).

Respondents: Example is singing. Those with singing talents should be helped to develop them. (SHOP-INF-NYE)

Respondent... aina tofauti tofauti ya mchezo, basketball, football, marathon na hizi zingine hizi za kurusha rusha, mpila...(Different types of sports i.e. basketball, football, marathon and netball) (MEC-INF-UG)

Respondent:--talents... Sports, music, craft, pottery, debates, comedy, Agriculture (META-INF-BUS)

Respondent; anaanza kuunda nyungu yako na anaeka hapo, kuna mtu ako na kipawa ya kuchonga mbao anaanza kuunda nyungu yako na anaeka hapo, kuna mtu ako na kipawa ya kuchonga mbao (Someone can make pots, someone else can be gifted in carpentry) (MEC-INF-UG)

The students said they were convinced that they should be motivated and encouraged even in non-academic areas.

Student: ...demoralization, you see even for example principal used to... if they find them...a girl doing mistake, they just demoralize them. They don't give them that hope....Some of us are not talented in this side of academics, some are best in when it comes to field, but if they see you are not doing well in that side of academics they will just tell you, you are nothing, you have to do this instead of going there.... (S-FGD-MARM-S-MARS).

Student: ...recognition, you see that one when you are recognized and then you are...may be given a kind of gift you end up even influencing others (*to play football*) or get even more completion, so we don't have such **FGD-MARM-S-MARS**).

Student: For me our learning should entail the talent. In Kenya system our learning is cramming only. After four years you will not remember all what you have crammed and gain nothing. When we go towards talent like football the school encourages you to improve on your talents and it will act as a security after you leave school. **(S-FGD-KIS-S-NYAN)**

9.5.2 Identification of Talents

A respondent proposed broadening or creating more opportunities for talents to be showcased and developed. The respondents suggested several methods that can be used by several stakeholders to identify talents.

9.5.2.1 Identification through the curriculum

The curriculum should be anchored on using education as a tool to identify and nurture talents. The respondents said there is need for a provision of a balanced curriculum, market driven and one that encourage creation and participation in co-curricular activities. Co curricular activities should be mainstreamed and made a part of the daily learning experience. In the same way schools offer swimming as part of the daily timetable scheduling, other activities which could be relegated to clubs should be incorporated into the main school timetable.

It was suggested that the curriculum should be wide in the formative years of education in order to provide a variety of opportunities for the children to explore and know what they are best in.

A respondent advised that during the extra curricula activities competitions, an officer should be assigned the duty to identify learners with specific talents which can start being nurtured from there.

KI: now that we have devolution and services have come closer to people then and sport is involved although still some part of it is to the national government so the sports department in the county will be able to identify such talents by ensuring that they go to competitions when the primary schools and secondary schools have competition then an officer can be sent to see who are talented and then nurture that talent from there **(KI-WV-SAMB)**.

9.5.2.2 Identification by the parents

Parents were of the opinion that they should be at the forefront in identifying talents in their children. This is done by children sharing with them and observing the children. The parents should monitor their children and be able to identify what they are good in from the time they are very young in early childhood.

INF...For me I think the ... the major backbone lies with the parents in the first place...because they are supposed to monitor their children, which talents they have... in early childhood... then pass the information to the right teacher who is in that line **(WEL-INF-NAR)**

INF: As a mother, when do you know that your child has a talent? As a mother I will know there is a talent when the child starts playing the ball, starts singing, modeling.... **(MEC –INF-NAR)**

INF: Ukiwa nyumbani kwako, watoto wako...ata kama uko na wawili, watatu...ukiwaangalia unaona huyu anafanya mambo kama mechanic, engineer ama ni daktari, huyu ni driver, ni pilot...yaani vile unaona mtoto wako akikua. Lakini, vile unamuona, hakuna wazo lingine zaidi ya hapo unatakiwa kumuelekeza kwa hiyo njia umeona. Ni rahisi sana ku-identify talent ya mtoto.

(When you are at home, it is possible to identify the kind of talent any of your children may be having. some could have potential in mechanics, engineering, medical field, driving, or even piloting. so it is your duty to help the child pursue the area they seem gifted in. it is very easy to identify the talent of a child.) **(HOT-INF-NAR)**

Parent: When they are small, they open up and say what they would like to be so as a parent you should watch them and guide them until they are mature to follow their talents **(PA-FGD-NJAB-S-UG)**.

Parent: When you see a small child starts to make small vehicles a parent see a talent in him. **(PA-FGD-NJAB-S-UG)**

Parent: Like a girl child, you see she is very smart and loves to do some works in the house and sometimes they learn a lot from that. Like my son loves football so as a parent you see a talent in him.. **(PA-FGD-NJAB-S-UG)**

9.5.2.3 Identification by the teachers

Teachers were said to be very instrumental as far as the identification of learners' talents is concerned. They can reach out to parents informing them of this potential in the student

INF:Na waalimu pia ni watu wamefundishwa. Hao pia ni wazazi. Wanaweza-identify huyu mtoto, talent yake ni fulani. Sasa wapangwe kulingana na talents, wanafundishwa masomo ya kawaida, na pia wanapelekwa kufundishwa kulingana na talent ile imeonekana na hao watoto.

(Teachers are well trained and they are also parents.they can be able to identify the talent in individual children. so the learners can be grouped according to talent areas and nurtured in this area even as they pursue the core curriculum alongside this) **(HOT-INF-NAR)**.

Student: The teacher involved could see this student is talented in this or that and help out. **(PA-FGD-MOIG-S-UG)**

Student: I think this teachers should really help the students in informing their parents of the talents they have because sometimes you can go to your parents... when they have this strict parents, you can go to your parents and tell them, “dad, i love singing” singing is the talent .So they wouldn't get that **(SFGD-MEKA-SP-KWA)**

They can identify through their personal interest in learners' lives, encouragement, tolerance and support for petty interests in children.

KI: A teacher is in a position to identify talents in learners and nurture through encouragements. Teachers should be trained to notice talent and encourage a child to grow in whatever area they are good **(KI-MCDE-KAK)**

A respondent suggested that talents can be identified through child exploration.

KI: Let us encourage these students to know themselves and you can stand up and speak so that by the time they are expressing themselves I will be able as a teacher to see the gifts of this particular student...children at that early age are playing with toys the one that likes making vehicles from soil, just constructing a vehicle from a soil in the western part you know you are mechanic or engineer, the one that likes constructing something even like a guitar then wherever they are just trying to see that is a musician. The ones that like entertaining others that is a comedian we need to give them an opportunity to express themselves so that we can pick some of these skills and talents and develop them so that we don't say that if we don't pass Form four your case is gone. If you are good at music why don't we explore that and enhance that. If you look like a comedian like the Churchill live let us promote that... If there are comedians take them to the institute of comedians (**KI-DVC-KAU**)

A respondent suggested that teachers should engage learners more in activities such Physical Education and discussion in order to observe the different skills each learner portrays.

KI:,,, To identify talents in learners to very great level, when you take students for P.E, we can observe. When you engage learners in discussion you can observe the difference, the different skills intellectual thinking and several other skills (**KI-SGKN NAI**)

The respondents pointed out that for effective identification of the talents, teacher training and development is crucial. Teachers will need to be equipped with competence to identify and nurture talents.

In this regard, one respondent stated that skill for talent identification should be embedded in the teaching standard norms so that the role of the teacher is not just to impart knowledge but also to nurture and foster talent. It was observed that currently, there is no organized way of identifying talent and in view of that teachers should be given skills on how to identify and nurture talents.

KI-The teachers should be able to help identify the talents even as they deliver other lessons their own lessons they will be able to know that this child has a special talent and that child should be encouraged on that that particular area an area that they have found a child is strong in and that is their talent then the talent should be nurtured and not killed (**KI-TSC-NAI**)

Though the teachers were placed high in the identification of learners' talents, a respondent observed that the teachers have no capacity to identify talents in learners and how to nurture them. He further said that even if talents were identified, the question would still be whether we have time to nurture them since all the time is study time.

KI: Does the teacher have the time to observe these children? Do even the students have the time to do these things because even break time "kuna assignment yenye mwalimu amewapatia." Lunch time has been reduced to 15mins and games time is revision. So we need to consciously know that part of the curriculum is talent, part of the curriculum is co-curricular activities and mainstream them. Actually this is one thing that I passionately would ask KICD to do to mainstream these things .You know we call them co-curricular but we still treat them there are schools which believe that they are not important. (**KI-CEB -NYAM**)

Other ways of identifying the talents were teacher- learner interaction, teacher- parent collaboration, teacher-teacher professional exchanges.

9.5.2.4 Identification through the school system

At school level, respondents proposed creating of healthy competition and reward systems, fair evaluation and appraisal systems. Others included institutionalize career guidance and counseling, build linkages between industries and school, promote and facilitate clubs such as writing, film, astronomy, drama, and music clubs.

KI: If I have music lesson and tell the children to sing I will be able to know I have musician in guitar and this one cannot sing. So by the time we are identifying the talent and this is what we should do we identify the talent of this child you don't stop there. Like here let me use our school: if I identify the talent of a child I am supposed to work hand in hand with the parent because if I identified as the teacher there is nothing I can do because I also want the parent to work with me so that we can now tap this talent and we help the child now to move to another level (**KI- HET- NAI**)

Student Leader: I think that teachers should be more strict on the school clubs... I think that if the teachers are present during this clubs, someone will feel they want to work hard on the talent (**SL- MAKGS- MAK**)

KI:... different clubs and students go to clubs of their interest so from their you can be able to identify students who are good at one thing or the other then we continue nurturing those particular talents .There are those who are good in drawing. How do you get those who are good at drawing? If you organize like a day for Art (**KI-SCDE-SAM**)

Student: ...Yes we have but even teachers are not committed...I think it is better when we have a ... active clubs in school just like debating club, journalism club...yes because it can may be open our minds (**S-FGD-MARM-S-MARS**)

Student: We need to have games competitions like running, sports, playing football, and volley ball. By doing this, it is easy for us or it is easy for one to identify his or her talent (**SL--MARMD-S-MARS**).

Student: You find in school there are talent night. We have games you will see somebody is playing well and also in music some sing well. The teacher should know there student who have talent. And they will employ a teacher for those talents (**S-FGD-KIS-S-NYAN**).

Student: They should also come up with various clubs, such that if one is talented in music or football. They will be taught on how to improve their talent and perfect them(**S-FGD-KIS-S-NYAN**).

Student: Like most debate clubs they are carried in some school. So they should these debates in all school and it build their talking skills (**S-FGD-KIS-S-NYAN**).

KI: let talents and skills be embraced like if someone has a talent in music or drama or anything let all these talents be let them be grown like in most cases those people who are talented in football may be when they are out of school like if someone is in high school he or she is only participating in games that are that the school will participate in but after that let us say he or she is not able to go to university so it means they the talent is cut from there. And these people may be if it happens that they are not doing anything else cannot continue with education you see they will have nothing to do but if their talent could have been cultivated so that after the education they also there well equipped they can also get to grow their talents further so that they can engage themselves other than just sitting idle and doing some bad things that they may engage in (**KI STU KAU**).

Another respondent said that learners should have opportunity to participate in activities so that their talents can be identified.

KI: ... you can identify a talent in a child is by making children to participate because without involving them.... may be involving them in games you cannot identify the talent and do you know that children can like...even in a classroom you congratulate a student maybe mtoto aki answer a question very nicely when you congratulate that student kila siku atakuwa akijibu maswali so you motivate. That's another way that you can nurture (**KI-WV-SAMB**).

Parents observed that one way of identifying learners' talents is through play yet in most cases, schools do not give them a chance to play. They pointed out that lack of emphasis on practical work has denied learners an opportunity to develop their talents.

Parent: When it comes to play, there are schools where they don't allow the children to play and this is when you see that talents. Through the play is what they see the talents (**PA-FGD-OLOOL--S-KAJ**)

Respondents suggested that talents can be identified through assignments especially in the technical areas and through projects.

Build a *repository of ideas* and innovations that result from students expressing their creativity in areas such as science and arts. This repository should serve as a pool for interested actors (such as private sector, foundations etc) to pick from and help students develop/nurture innovations.

Talents can also be identified through schools exhibitions in areas like science (Annual science congress), handcrafts, IT, sports, games, music and drama. Others ways include conferences, excursions, field trips and exhibitions, career talks and open days, student service and attachments, student mentoring, student councils, Non examinable courses in performing and fine arts, physical examinations and technology, student magazines and debates.

Establish specialized training centers in schools to train the identified learners. Equip all schools with facilities to provide opportunities for learners to discover their potential and talents.

9.5.2.5 Identification through talent focused institutions

The respondents proposed talent focused institutions and academies in every county.

KI: okay the talent academies I think the government should establish more talent academies and then these schools will be used to identify the people with the talents so that they can do more of the talents and less of the reading Yah. That is what I think (**KI STU KAU**).

KI: In our school we have a center for gifted and talented on the school and that is where we sent these children for who have different talents and when we sent them there we have teachers there who deal with different group. If its swimming we have swimming academy, if it's creative Art we have a creative Art group to work and walk with these children up to where we can have children with parents in their own. If it's swimming, we have academy for swimming. If it's music we have extra music lessons that are offered- (**KI HET NAI**)

The respondents suggested the establishment of advanced talents advocacy centers in all counties and vocational centers in all counties, development of talents identification centers.

It was suggested that Ministry of Education should create a department to search for talented children and other individuals.

9.5.2.6 Identification using questionnaires

Learners suggested an innovative method of identifying talent whereby a questionnaire filled during admission to school would enable one to state the talent areas they feel inclined to.

Student:..Before admission, they should like fill a questionnaire that... has a section for the talents for the students. Because we would have already been identified in the admission forms, the schools will start preparing (SFGD-MEKA-SP-KWA)

9.5.2.7 Identification by the experts

The respondent proposed that practitioners/ mentors be involved in the identification of talents.

Practitioners must be actively involved in the identification of talents at all levels and in all relevant fields. Physical activities, Community service, spiritual activities, arts and crafts, and creative arts are all areas that include search for talents (KCCB-RI).

9.5.2.8 Identification by the community

The respondents said that the community members as well as the churches can identify the talents of the children.

Parent: the first one is the parent. (Eeh).there is the government, local community e.g. the churches, the mosque. All these can identify these talents. For example, One day I needed a plan of a house. I was directed to a certain boy that has not gone beyond standard eight because of school fees. But the boy had a skill in art. When I met the boy, he drew me the plan of the house. Very nice one na nikajenga (*very nice one and I built using it*). People in the community can identify these skills. (PA-FGD-MAKG-S-MAK)

9.5.2.9 Other platforms for identifying talents

The respondents pointed out the need for development of talents identification tools and a national talents identification and development framework. Initiatives such, talent scholarships and media focus on talent achievements should motivate learners to explore and develop their talents and motivate education institutions and its leaders to create opportunities to nurture these talents.

Counties should create education strategies that take advantage of their regional strengths to attract talent to their areas and create opportunities to develop them.

9.5.3. When Should Talents be Identified

According to the students, identification of talents should start early, right from class one.

They emphasized that schools should expose the learners to as many talents as possible.

Student Leader: when an examination is done like KCSE they always look for the tops who have gotten A and A-, B-,B+, those ones are considered more. They forget to consider those with Cs and D, they need the nation to help them. Let us look at other talents they have if they are not good in books and through that we need to know what this person can do because not all educated people will bring improvement to the nation. (SL- MUMS- MUR)

Student: In some foreign countries football is taught from class one. Such a person can join a club later on in life (S-FGD-MUS-S-KAK)

Student Leader...I think this one should come even directly from far, like from Kenyan view many have got fortune via the talent use and the same case should apply to the intellectuals where they should be fitting in any environment (SL-MOIG-S-UG).

Parents would like talents to be identified early for early orientation to specific pathways.

Parent: ...children's areas of talent should be identified and nurtured early so that even as they move To secondary school they continue learning in their areas of talents and interests. Those talented in science should take the science paths and those who have technical talents proceed to technical institutions. (PA- FGD- NDUR- LAIK)

9.5.4 Nurturing of Talents

The respondents noted that there is need to nurture talents from early levels of education.

Respondent: This has been in place by use of the various activity areas for the young children. More effort should be put in, in terms of nurturing the talents right from the earliest stages. This will address children's individual differences and help them along the lines "in which area are they best at" as opposed to the current academic orientation tradition by teachers (DBK-IS).

Student: It is a God given ability but it also needs nurturing. So if some of this lessons like the art lessons maybe somebody was born he/she knows how to draw if they have art lessons in school this person can nurture her talents and of course they need the teacher who teaches art work for the teacher to identify the talent in school (SFGD-MEKA-SP-KWA)

Respondents indicated that talents can be nurtured by giving learners opportunities and enough practice in schools. However, respondents emphasize that it is important for the learners to go through the education system even as they develop the talents.

Industrialist...wanafundishwa masomo ya kawaida, na pia wanapelekwa kufundishwa kulingana na talent ile imeonekana na hao watoto (MAN-IND-NAR)

The students said that the government is key in nurturing talents. According to them, others who can help in nurturing talents are county governments, Non Government Organizations (NGOs) for example Red Cross. They are convinced NGO'S can go a long way in nurturing talents.

Student...For those students who are talented in athletics and they go to national level, the government may consider and pick them and coach them so that they can run for the country in future (S-FGD-KAW-S-MAK).

Student:...and even an NGO like Olive ... which used to nurture talents, we only got support from those; but in the side of teachers...no (S-FGD-MARM-S-MARS).

Students explained why they think the government should come in. They said teachers may not be skilled enough to nurture certain talents. Coaches should also be availed to coach those who are talented.

Student: For me, it's only the government... I would like the government to help because ... many people have ... different talents but they don't have that... that ability to do it because we have teachers but now teachers are not improving that. (S-FGD-MARM-S-MARS)

Student: Like me am talented with netball but there is not coach for net ball... but teachers are busy, they say they are busy. (S-FGD-KAS-S-KIL)

Different strategies of nurturing talents were suggested by the respondents. These include the use of use talent academy schools in Kenya including football academy, music academy. Parents suggested that the government should put up talent academies at the secondary and county levels so as to help nurture learners' talents in areas such as athletics, music, and ball games among others.

KI: as a country is good that once a child is identified to have a talent in sports or in drama or anything we can now go ahead and put up a regional talent centres. I am saying regional because eeh....like if you go to rift valley side they are good in sports if you go to the western side of this country they are good in football. So you can put academies talent centres- (KI CDE LAI)

Parent: The government should think of coming up with talents academics probably in secondary school level where various talents are developed. (PA-FGD-MOIG-S-UG)

Parent: Also, let these academies start from the local level; and now that we have counties, let every county have an academy for athletics, songs, ball games so that these children can be developed. You would find that in class, a child will not even do maths and score 50%, but in ball games, songs or athletics, or Art and Design, he or she excels. Let the government assist them in the area of talents and that would be the only way through which that child can support him/herself in life. (S-FGD-NYAM-S-NYAM)

Student:...I think the government should also open talent academics where the youth's talents are nurtured (S-FGD-BUT-S-BUS).

Respondents: Maybe we need to set up institutions because not every child is bright with books. So maybe if we set up like football institutions, the main thing in that institution is football though the child will still learn like languages and how to communicate but above all the institution should be there to nurture talent (MECH-INF-MUR)

They also said that the schools can help in nurturing talents especially in co curriculum activities like clubs, games and sports drama, music, and debate

Students:...I think for those who are talented the school can help them financially. You realize that we've games competition, music competition so the school can support the co-curricular part of studies financially

and also look for links for those who are talented to nurture their talent... The school should identify that special player so that they can find the appropriate sponsor to sponsor that child (**S-FGD-PBH-S-UG**).

Student: I think the school can provide the necessary resources concerning the performance of certain activities or talents so that they do not run shortage of such resource (**S-FGD-PBH-S-UG**).

Student... I think they should encourage co-curricular activities because they serve in building talent. They should also encourage games by funding some of these activities that involve games it's easy for schools to participate (**S-FGD-BUT-S-BUS**).

Student... Through clubs of journalism, if they practice in schools... and also an experts be brought to be able to explain the benefits of being a journalist and also tell them how to do it (**S-FGD-KAW-S-MAK**).

Student... Create a career room and bring equipments, like for singing, drums and play what they like. Competition will help develop better. Teachers do not like some activities like scouts and music...they think it's a misbehaving club. Some students are not good in studies they should be helped in their talents (**S-FGD-StCNAM-S-BUS**).

Parent: and then at this level these competitions, as in music festivals, you know we have these things in music festivals drama festivals; we should broaden those festivals in early stage, even in ECD level (**PA-FGD-MOIG-S-UG**).

Respondents said the talents can be nurtured through use of resource persons and experts in that field.

Student: Also the school can provide functions, whereby now these students should be exposed to people who are talented in such or the government can just bring like some conferences, people specialized in different talents should be brought together in certain hall and the students from different schools who have such talents will be coming there for getting advice (**SFGD-MEKA-SP-KWA**)

Student: we need an expert someone who has knowledge in that field, yea he will come and nurture them and talk to them (**S- FGD- St MARS- NAR**)

Students cited the need to participate in public speaking, science congress, and talent shows to nurture talents.

Student: ...they should hold an open talent show so that the young men could show their talents (**S-FGD-MARM-S-MARS**).

Student: For instance, you find that those that are interested in public speaking and leadership programs, they are called for the trainees they come and train you part of public speaking then you are given different forums to present yourselves in front of a public or in front of a certain crowd, which makes you nurture your skills better. Even here at the parade, you find that different students are given the opportunity to on the activities of the day for example, the school captain, the captain of the day. Still the students are given the ability and the forum to lead in the church, you find that the students are the ones who take control of things (**S-FGD-NJU-S-MU**).

Student Leader: And again when you talk about the science congress the government is not doing so well in motivating students. Some of these ideas might be crude as we look at them but if we give them time and then other people might help them develop them so the idea of the science congress could be expanded (**SL-MBIT-S-HOM**)

According to students, talents can also be nurtured if schools can raise the necessary finances for them to be able to participate in competitions with other schools (S-FGD-KAS-S-KIL)

Student: The school be ready to provide financially example this year we have only two activities we are going to compete with others and other games the school is saying it doesn't have finances so the school should be ready to raise the finances So that we can be able to compete with other schools. (S-FGD-KAS-S-KIL)

Student: practice, then the school should support those ones who are talented like if you want to go and see the school should provide the fare (S-FGD-KAS-S-KIL)

Still on the issue of finances, parents suggested that scholarships should be availed for talented primary school learners to allow them to transit to secondary school level where they can nurture their talents.

Parent: If student is good and not good academically for example, if we say a student has good 300 marks which may not allow him to join high school but is talented, then we may have scholarships, for those others they can transit to secondary schools as continue to nurture their talents, we could also encourage them (PA-FGD-MOIG-S-UG).

Another suggestion was that tertiary institutions like colleges and universities could offer short courses on talent areas. However parents were unanimous that the learner can only undertake the short courses after going through a basic curriculum.

Parent: we need special schools for such talents. And short courses in let's say university or colleges. Wawe na short courses for those people with different talents (PA-FGD-MAKG-S-MAK)

Parent: I it is better for the child to finish class 8 first. They need education for communication. Lazima awe anajua Kiswahili and Kingereza. This is because without language hawezi kutunga wimbo...Hata anaweza kwenda secondary akipata marks nzuri. He needs this education also. Up to the level ataweza then (PA-FGD-MAKG-S-MAK)

Parents also suggested that the government and the private sector should create employment opportunities for talent areas in order to motivate learners.

Parent: under employment opportunity the government should create employment for this talents and also private sector, there should a way of all of us (PA-FGD-MOIG-S-UG)

Other ways of nurturing talents were through teaching some of the subjects like home science art and craft, practicing ones talent in real situations.

Student...For example let me use journalism, we go to the station like citizen, we go and do what they do and put it into practice and be devoted (S-FGD-KAW-S-MAK).

Student...I think there is this subject home science and the arts it was abolished but sometimes someone may have talents and the subject is not there, and they may survive in future through it, it can be brought back to develop students who have those talents, (S-FGD-KAW-S-MAK).

Student... You know all of us may not have the same talents, so someone may be talented in things like biology , science and other one may be talented in arts subject that is learnt in school so I think this subject it can be introduced again in school, for the beneficial who are talented in that field (**S-FGD-KAW-S-MAK**).

Instead of pegging ones potential through exams, the students suggested the need for special studies for weak students that can help them realize their potential.

Student... I don't know whether it is possible for the government to make sure the student who finish four form and didn't pass to be just given a chances to have a special studies for their own just to grow their minds, and also to get, because there are students who do not understand much in class but when we come to agriculture they can develop in terms of farming, rearing animals, so it is better for government for chances to be opened for them even if they get any grade, and be allowed to do work that they can be productive. The government should be advised to give form four leavers, a chance on these special issues (**S-FGD-KAW-S-MAK**).

Student... I think government should introduce a different course whereby if your kid fails, they will be introducing those talents from now. If you fail in class, then you are placed in learning of the talents. And also by introducing education about the business or to conduct business because maybe you have money but you don't know how to use this money, you will be in a position to use this money and how to put up some other business. And then you become a businessman after finishing form 4... Sometimes parents may be having a lot of money and they share it with their young ones (**S-FGD-MUL-S-BOM**)

The students however noted that sufficient time in school is needed for nurturing talents. Learners observed that lack of time and facilities greatly impacts on talent development. They therefore suggested that allocating time on the time table would help in nurturing talents in learners.

Student Leader: So it would be like the time allocated is not enough like the sports are there you do not have facilities for those who can dance and sing. That one should be nurtured so that when they get out of school they just exploit this. You see people like Lupita Nyong'o got a job out of the talent .I have never seen in the education system people are acting or maybe a player playing and its being marked something like that (**SL-MBIT-S-HOM**)

Student Leader : I would think of a scenario where they give time for like talent night it would be like in the syllabus that the time is there even in the timetable so that this people are given time to show what they have. The schools could introduce inter classes so that we can identify what they everybody can do (**SL-MBIT-S-HOM**).

Student... According to me the school should provide enough time and resources for those talents (**S-FGD-PBH-S-UG**).

Student... There should be balance in the part of talents and academics. if someone is good in academics support her if in talent support him/her (**S-FGD-StCNAM-S-BUS**).

Learners and parents also noted that equipment and facilities should be availed to enable practice of talents.

Parent: Nafikiri hapo kitu cha kwanza ni mazoezi kwa wakati ambao unafaa. Alafu pia katika mazoezi kuwe na vitu kama viwanja, kama ni mambo na mipira...kuwe na mipira ya kutosha...ili huyu mwanafunzi

asikae lalamika eti hakuna mpira...hakuna nini...kuwe na hizo equipment (**PA-FGD-OLOLUG-S-NARK**).

Translation into English

(I think the first thing is to get practice at the right time. so there should be playing fields, balls..the balls should be enough....so that this student does not complain that there are no balls or this and that...these equipment should be provided).

Student: I would like to be a journalist, we have a club but we don't have equipment, we lack support from role model (**SFGD-IFT-S-GAR**).

Learners pointed out that the government should choose some schools in every county and set up training camps for the talented. Those with talents should be sponsored.

Student: The education should put more effort in science congress because it makes the student to open his mind and more progress can be made in the country (**S- FGD- OLOO- KAJ**).

Parental support should be encouraged through awareness creation and mobilization of the communities. This will help them realize the importance of talents.

Parent... hata pia waalimu wanaweza kutusaidia katika shule. Unakuta labda mtoto kwa darasa sio mwerevu sana, lakini pale wakikimbia uwanjani, ana ile mbio...ana ule ujuzi wa kukimbia. So katika shule waweze kupewa nafasi waweze kuifanya ikuwe, na waweze kum-support, kumpeleka ile levels ambae anaendaga katika shule, mashindano...ata kama kuna ile ya likizo. Nae wazazi pia waweze kumpa nafasi huyo mtoto aweze kuendeleza iyo talent ambayo ako nayo (**PA-FGD-OLOLUG-S-NARK**).

Translation into English

(Teachers can also help us. you will find a child who is not very bright but can run very well. So the school can offer them opportunities to grow this talent and can also expose the learner to competitions. Parents should also offer moral support at come)

Parent: We see a learner with talent and as a parent you can get someone who is also good in the same talent to help mentor the learner (**PA-FGD-KIRIS-S-SAMB**)

Student: I think we should be provided for platforms to showcase our talents in school events or national events and get something in return if he/she is the best (**SFGD-KANJU-S-NYE**).

Student-Even for those students who have not excelled in certain level like the high school level there should be things for them to do, they can be encouraged by the government to start their own businesses, or they can set up with other areas like going to polytechnics to learn some trade like sewing, or mechanics, technical skills instead of focusing on education and academics in general (**S-FGD-MEKA-SP-KWA**)

A respondent suggested that mentorship and coaching should be used to identify and nurture talent.

KI: Get people to interact with the children and in the process identify talents in them and help develop them- (**KI- LIS -NAI**)

KI: Coaching and mentorship programmes should be based in schools... Coaching is where you are given tasks and then you are assessed and told what you should have done in such a situation. A mentor does not give you answers. You get answers as you grow... (**KI-MCDE-BUS**)

KI: ...the child sees a teacher as a friend as a consultant; so that kind of aspects it will make children to be nurtured well and have a focus and have a life. (**KI-NACECE-BUN**)

The respondent suggested that talents can be developed through talent exhibits.

KI: We have that aaaaah..... an activity where like something like talent show. So that we the school are able to capture all other talents and like only thee..... music and aaaah.... and eeeeh..... drama.. American school talent so that is are an open whereby everybody is allowed to show his/her own talent. So if school could adopt that where there is that curricular activity where it is open for all so that those talents are captured into it would be best- (**KI STU KAU**).

Respondents suggested that talents can be developed through competition.

KI: Even the leadership school of South Africa, there is time we had sent 10 of our class eight to that school, so we really want to make the children know it's not about the books and getting maths 100%, there are things you can do rather than in class (**KI HET NAI**).

KI: For example, we have the drama festival, music festival, what we do with those students after they perform so well apart from them going to State House and performing and getting trophy. We should be able to identify those students at the music festival, at the drama festival and put them into their academies which are talent academy. So you have helped, you have identified and then you put talent academy and these people can now grow on that line. We have our games they happen, we have our athletics, football games and sports but apart from few of them who will get at the national level and maybe get picked by some of the corporate and again if some are too young and then they may give up on the way and I think that is where public and private partnership comes in (**KI CPC NAI**).

The respondent also indicated that talent should not be emphasized at the expense of academics.

KI:...As you struggle to nurture talent but make sure this person has papers on the table because that talent after some time they will be redundant... (**KI-CAT-BUN**)

One respondent expressed the view that for talent to be identified and nurtured people must have change of attitude and appreciate talents such as music, football, athletics and drama.

KI-Remember when this young girl hit the whole world, Nyongo, she certainly made the world know that you don't need to be a doctor to be recognized and she has made a big impact in the thinking of many children that you can be a musician ,play football, run and still have bread on the table.(**KI-CEE-KAK**)

Concerning talents, one respondent proposed that the envisaged curriculum should allow for fast learners to be fast tracked. Yet another respondent indicated that schools should have multi-disciplinary facilities and infrastructures for all learners to enable them identify areas of their gifting. In addition, the curriculum should have talent identification tools that teachers and institutions can administer to enable learners progressively identify their talents and gifts and build on the same. Another key informant indicated that learners should be encouraged and given the right environment in order to provoke them and help in identifying their talents.

KI...though we have tried to promote skills, from individuals because I believe everybody has a talent. But given the right environment ndio inatokea, we have seen even workers you give them this environment, anakuwa lazy they don't work, but change them and take them to another environment they become the best worker, unashindwa all these skills where were they, and this applies even to our students **(KI-CDE-MAK)**

KI... I think students should be encouraged to come with what they have, such opportunity should be encouraged, because you won't know what talents they have until you provoke them, the environment, give them opportunity to see that they can see **(KI-AIC-KIT)**

They also pointed the need to have a system which supports learners from the lower level to the national level and the need for parental education so that learners are not just subjected to academics only.

KI.. .. there was an initiative at national level, but how can we have one on the top and we don't have one in the lower level and it is only focusing on certain skills, so we need somewhere where innovation, creativity centre at lower level where anybody who have idea, can try it out any time, and then na kuwe na system from down here all the way, so that our national creativity ikuwe expanded, we have narrowed ourselves to academics, na mtu akianguka si unasikia wengine wanajinyonga, wanasema napelekea baba hii, siwezi nikafika nyumbani, you know there is a case I know from county, a child a girl was canned naked by the father because in class 7 amepata 277, anachapwa, na anapelekwa shule na anasema this is a very big girl na ni baba yake anaambia mwalimu, kwasababu baba ako na focus of academic only, he does not think the girl can amount in anything, if she doesn't scores highly in academics, this national site we have to work and change it altogether **(KI-CDE-MAK)**

KI... Learners should be facilitated to identify their talents and potential early enough, pursue them so that they can offer their contribution in developing their country **(KI-CCO-MAN)**

Respondents suggested that government should be funding learners and also helping them improve their talents and skills. Music, sports, creativity, public speaking, drama and innovation are some of the talents the respondents felt should be emphasized in the curriculum. A respondent also indicated that having co-curricular activities, providing DVDs and allocating more time for co-curricular activities can help in talent identification and nurturing. The key informants also expressed the need to train teachers so that they can help learners in identifying talents especially at primary level.

KI... We need to train teachers, and refresh them to provoke the students to come up with the talents they have, sometimes we find a student who can be full of talents in himself and they have not been developed until they go to secondary level, and you find they will develop them at very late level, I think teachers should be trained as such early level and help the students to show the talents they have. **(KI-AIC-KIT)**

KI:... teachers ..could identify your weakness and strength and where the teacher could say here you are good in this line you are also good in computer but your talent in good work is so critical and it will add you value to you.. should be part and parcel of the structure of the school system to identify talents within the children so that they can say this child is too bright you give him a work in class, in five minutes he has finished and waiting for others to finish that's already a talent for the child to understand faster, you need to go further and know what the child can do, because they are gifted children and are wasted on lower classes **(KI-UNESCO-NAI)**

KI:...I would propose that our curriculum at a certain level, may be after primary, and that's what I talked about projects and so on, our teachers should be trained to include talents, being able to see talents in

children so that after form 4 may be after form 2 at a certain point students should be allowed to go to their areas **(KI-CEMASTEANAI)**.

KI:... you not allowed them as early as possible, may be they would be the best musicians in the country or in the world, may be that will be even film making now, even now country like Nigeria is making a lot of money in film making, I think we should allow learners to pursue their area of interest as early as possible, but the teachers here comes, as we say a teacher is a guide to help them because you can also know this one like music, this one like this, I think the teachers can help with those talents identification **(KI-CEMASTEANAI)**

The key informants indicated the need for talent development to improve livelihoods of individuals.

KI:...To come to talents, I was looking at it as this talent when you develop it is going to improve the livelihood of the individual in sense they will earn income, look at Yego, the police officer who is a javelin thrower, this young man gotten an award to say that he broke the Olympic record, .. how were you able to do this, he says it is a talent.**(KI-CDE-GAR)**

Key informants indicated that talents should be nurtured through exposure and provision of variety of resources. A respondent indicated that students can be nurtured in these centres or talent clubs at every county where learners can exit from incase one does not make it to the university. This would keep learners from getting into anti-social behaviour such as drug and substance abuse.

KI.. .. Let us look on to practicals, because this issue of school and exams orientated, we should also have talents departments, and develop them fully, the skills should be embraced. Some take children to games academy, and they get very good money through this, so we must emphasize on the issue of talents, we should create schools for talents and this will help **(KI-CDE-GAR)**

KI:...these is nothing wrong in creating schools in terms of talents: everything should be part of the main, main curriculum and investment in terms of resources, financial and equipment should also be pumped seriously to schools so that this is done **(KI-SGKN NAI)**

KI... Regular school teachers to identify and nurture talent, guidance and counseling and career guidance teachers to assist in identifying talent. Schools to nurture talents if facilities are available even at National level through competition. Through talent academics, also home and community can help identify talent **(KI-FAWE-NAI)**

KI... For example, one with talent in academic to move on, a hands on person to be channeled to appropriate pathways. Every child's potential should be taken care of talent centres should also be created...nurturing of talents which should be channeled to the right pathways **(KI-FAWE-NAI)**

KI...Observation, we need to do it practically and identify the talents, we also need to expose them to various activities so that they can have a wide variety of exposure, also we need to avail a range of materials to our learners freely, so that when the learners turn to this corner or that they have the materials, to engage and through that free choice of materials, you will see even talents come out because children when the materials are many they are not grouped or are not conditioned to use either material when the materials are available they make free choices, that is when you see students go to take hammers, timber, that is when you see engineer, doctor, the engineer building bridges **(KI-CBE-KIT)**

KI...Strategy of identifying and developing talents will involve Policy formulation by the two levels of governments ...The best strategy is to help create talent academies in every county. Once these institutions

are set up and running, experienced personnel will help in identifying inherent potentials in learners. **(KI-CCO-MAN)**

KI:... so that we don't require to keep this person to do history up to a level that is not needed, to continue forcing this boy to do this until a certain level, to me at a certain point there should be deviation now, so you go to music, I found that in Israel, they have a room with musical instruments, there are others in a room with innovation mind, there is another one of Arts, there is another one for dancing and that, I think at a certain level those students should be left, and then schools which is also found in Britain that also school tends to specialize at a certain level, like you say Lenana is for music, like Moi forces is for dancing, to Kamukunji for soccer.. , otherwise it is very key to identify and we place them where they want... those musician who have done architectural design though they were in university for several years and they never did anything on that, they went back to music.. **(KI-CEMASTEANAI)**

KI:... They can join that club, and we shall start having professionals, other than just saying you walk in the village "unapata wazee wanasema" Eish that son of nani used to be a footballer when they used to see you in the village yaani scoring, you are just there, you joined drugs and now taking chang'aa and you were a very good footballer, we should have ways of tapping these people don't waste them. **(KI-CDE-BUN)**

Key informants also indicated that talents can be nurtured at the counties through cultural festivals and support from teachers

KI:....example you may find that a child is very poor or not performing well in learning but very good in athletics, football and creativity and in drama, now the teacher is the first person to identify the ability this child has particularly in talents, as a county it is through competition, bring the issues of inter-school competition now the county..... like the cultural village or the cultural in counties taking place with where community try to being their traditions and customs, it will develop the talents of particular children. That is why you hear that a certain school is good in folk song or that, it is because of the certain talents identified by teachers and developed.**(KI-CDE-GAR)**

The respondents pointed out that, in order to nurture talents self-learning should be emphasized and learners availed time to acquire self-learning skills.

KI:..... so we should really appreciate it because talent are coming from the domain of self-learning but how do we motivate these people, so, to motivate them we have to allow for time and space, for this self-learning skills to come out..... **(KI-PWA-UNI)**

Key informants indicated that talents need to be identified at an early age at primary level and have mentors/coaches to help nurture them

KI... the primary place to identify talents is within the home environment... it also depends in the ability or capacity of a parent to decipher and identify certain tendencies in a child which could perhaps could tell a parent this child is more tuned towards the , music.. child has a number of interests in observation in conducting experiments or this child is very good in speech and perhaps can become a very good lawyer or lecturer. **(KI-CA-NAI)**

The responses of different respondents show an agreement on the different talents that learners may have. They pointed out that after identifying the talents there is need to nurture them lest they are lost.

Respondent ... I would like to add that when we were young in school we had defined talents in that we were known what we individually likes and we were helped to develop the talents that we had rather than stressing on books where you aren't good. You start nurturing what you're good at from the school level (CAP-INF-LAM)

Apprenticeship was said to be one of the ways of nurturing talents among the learners.

Respondent: eeee...giving my own example somebody can think I have learnt a lot but I only dropped out of school when I did my class eight and after that I just ventured into the Jua-Kali sector whereby my cousin played a major role in giving me some instructions that is, giving me knowledge then along the way I came and met these architectural people engineers who built me much on my work so...so that is how I prospered in this job (WEL-INF-NAR).

However, it was pointed out that having some initial skills would make apprenticeship work better. If somebody got these skills it would become easier to understand the job even if he or she has to initially work under somebody. Art and craft was said to be an important subject that can lay basis of nurturing talents.

Respondent: yea..... we have we have those things like in my school me I learnt in Art and Craft most in fact I was the best student by that time. so...by the moment I came into the welding sector it wasn't hard for me and because I got somebody who had learnt a lot they still injected some ideas in me easily (WEL-INF-NAR).

The respondents suggested that learners should engage in practicing what they are good at.

Respondent; unawaambia wafanye mazoezi zaidi kama wanajua wako na talent Fulani, kama ni kukiambia enda kwa uwanja kimbiba kama ni ya kucheza mpira chukua mpira ndio hii, alafu wafanye more practise...(They should do more practice if it is athletics or playing football) (MEC-INF-UG)

Respondent:...giving children opportunities to practice different things in school,-----teachers have clubs in sports, athletics and run them well. (META -INF-BUS)

Respondent:...Expose them to many things by practical exposure or thru wide reading habits (QUAR-INF-MAC)

A respondent noted that parents and teachers can nurture talents by supporting the children and making a follow-up even in school to ensure that there are practical activities that will help promote that talent. Also, parents can support their children by providing the necessary resources that can help in nurturing their talents.

Respondent:... Kitu moja nikumuunga mkono ndio nimsaidie. Kitu ya pili ni mkalishe chini nimuulize kama hii kitu umeona kama iko ndani yako? Akikubali iko ndani yake, mimi mwenyewe nimuuge mkono kama ni shule na hiyo kitu iko shule tilia mkazo kwa hiyo kitu unataka kufanya. The first thing is to support him or her so that I can help him. The next thing is to ask him or her if that in deed is their talent. If it is, then I should support him even in school if the talent is offered there (BUT-INF-KAJ)

Respondent:... ningeenda niangalie kama agriculture iko kwa ile shule, wanafanya practical. Ningesihi mwalimu asome ile talent iko kwa huyo mtoto, nitajaribu ata tusaaidiane na chenye mwalimu anataka, nijaribu nipatie huyo mtoto. Atleast akifika shule kama ni jembe anaitishwa sio lazima ningoje shule

inunue hiyo jembe. Ningesema achukue yangu kabla ya shule ikuje, ndio akitoka jioni aniambie jembe yangu ilifanya kazi gani.

(I would go and find out if there is Agriculture in that school and whether they are doing practicals. I will ask the teacher to find out if the child has that talent. I will also provide resources needed so that the child can pursue that talent) (**BUT-INF-KAJ**).

A respondent suggested that learners should have some free time so that those with special talents can be identified.

Respondent: in terms of sports an early age... the school should offer them morale to develop, offering part-time free time so that they can select those students who have the special talent in sports (**CARW- INF-UG**).

Some respondents said that these talents can be nurtured by for example farming; small portions of land could be given to the learners, to grow different crops, and also by sending them agricultural shows for exposure.

Respondents...given very small portion of land to grow even two potatoes, the farming competition,...competitions in schools. (**MITU-INF-NYA**)

9.5.6 Assessment of Talents

Parents emphasized on the need to encourage learners' involvement in the talent areas by ensuring that talent areas are assessed.

Parent: The talent areas should be assessed and marks given to encourage the students since now they either take or not nobody bothers. . (**S-FGD-KIS-S-NYA**)

It was suggested that schools could consider issuing leaving certificates that articulate one's talent areas. This would serve to motivate learners.

Student: The school should also consider leaving certificates. So they can know on what they are good in. From the classification they will know where your talent is. (**S-FGD-KIS-S-NYAN**).

9.6 Pedagogical Approaches

The study sought to find out the appropriate and relevant pedagogical approaches to deliver the secondary level curriculum. The respondents gave their views on the preferred learning approaches. They proposed learner-centred approaches which are constructive in nature and a reversal of the traditional classroom practices. The findings are discussed below.

The respondents advocated for approaches that cater for diverse learners needs. Their suggestions point to an evident break from the traditional classroom teaching methods, which are commonly considered to be less engaging and inspiring among the youth in schools. The parents

said that the current teaching approaches used in schools emphasize on rote learning and turn the learners into robots. They are regarded as half-baked products. The respondents suggested teaching approaches that emphasize on understanding and application.

Parent: I would say such a child should be all round. We spoon feed children too much. They are taught academics but other thing mtoto hana chochote. Anakuwa kama robot (*they become like robots*). Anaweza kufanya mtihamu na apite kasha ukileta same exam later, hatapata kitu. They cram and if you can change something small they will fail. They need to understand things not cramming. (PA-FGD-MAKG-S-MAK)

Parent: The 8:4:4 turned to be even more theoretical, its products are half baked, for life they cannot even repair a fence or even cut grass for the cow (PA-FGD-NYANDA-S-NYA)

9.6.1 *Learner Centred Approaches*

Some of the learner-centered approaches cited by the respondents were: discursive and interactive approaches which promote participatory learning, practical teaching approaches using problem solving techniques, discovery and exploratory methods, especially those that are hands – on. A respondent recommended anything that liberates the learner. He explained that good approaches are those that are discussive, dialogic and interactive.

KI: I would give a very broad answer and say anything that liberates the learner ... Approaches that are discussive, dialogic, anything that is interactive, where there is actual interaction not you know for most of our teachers interaction is something like ask a question and the student answers. There is no interaction there... It calls for creativity on the part of the teacher and it calls for inventiveness ... Then they also need capacity to some kind of reflexivity (CEB-NYAMIRA)

9.6.1.1 *Interactive and participatory approaches*

The respondents proposed team teaching, peer Cooperative learning, Activity based teaching and learning, Collaboration.

Learners suggested that lessons should be more participatory rather than focusing on completion of the syllabus. They would like to be able to express their views in class. They emphasized the need for group discussions to enhance learning.

Student: ... I think group discussions should do it after the end of the topic or may be syllabus you have groups and you discuss what you have learnt without using books, just applying. (S-FGD-MOG-SAM)

Student Leader: I feel I should just be taught and the teacher should confirm whether I have understood for when you are teaching you give the students time to express their minds (SL-MBIT-S-HOM)

Parent: Let school meet and intermingle. During our time these schools were free from 3.30p.m. let schools meet and debate or intermingle. (PA-FGD-NYANDA-S-NYA)

KI.. ...We want education that allow students to participate, more students participatory and one of our approach...is lesson plan that student centered, you prepare a lesson plan oriented and they participate more, rather than rushing, let's not just rush to do that but I think how much skills have they developed that

every time, every topic we want to develop, and we will be keen in what they have achieved..(**KI-CEMASTEANAI**)

KI : .. Student centred approach for ownership and gender responsive approaches are important. Ways such as drama to be used, talking walls, notice boards and trees. Practices in using local environment materials and resources should be considered. Use of songs and plays. Use of approaches equivalent to Nyumba KUMI initiative. The textbooks should encourage both gender (pedagogy should be gender sensitive) (**KI-FAWE-NAI**)

KI: Groups work better when students are at school. But individually, homework or takeaway homework will work better. . (**KI-CEB-MIG**).

Students also noted that peer teaching could enhance learning – students learning from other students.

Student: May be you know I don't know maths then my friend here know maths then they will teach me, like that we will share ideas in the class room. (**S-FGD-KAS-KIL**)

The learners cited collaboration especially in mathematics and science project work and reporting. A student suggested that contests should be held in all subjects to promote learning.

Student: I think so far the government is everything only they are holding the mathematics contest, we want also the contest for other subjects to be (**S-FGD-MARM-S-MARS**).

9.6.1.2 Practical Teaching

A respondent observed that in a Competency Based Curriculum, pedagogical skills should be practical and not those which facilitate rote learning. Examples are the exploratory, inquiry-based, Problem-based teaching methods, Experimentation and discovery methods which include field work, field visits, exchange programs and project work.

KI : Letting children do things their own, I mean like research one I talked about and letting children go and research in their own like get a manila paper go and draw a plant involving children not just from the teacher involving the children (**KI- HET- NAI**).

The respondent further observed that field studies and exchange programs enable children to see what is happening in different parts of the country. A parent advocated for project work (for example in the farms) to enhance acquisition of skills adding that some of the projects could generate money for schools.

KI: even within the country for our students and pupils to see for example what is happening at Webuye paper mill, people from Mandera coming to Sony sugar so that they see that the sugar we take can also be made locally from our place and that in itself would even make them embrace Agriculture as a subject. They'd see the value that Agriculture adds to education (**KI-CEB-MIG**).

KI: making the children do something and taking them out for field studies and all that, going to this place called arboretum during science lesson I take my kids to arboretum I can tell them look at insects so that when I come to class instead of talking about an insect and a child is getting what insect is they can say this

is a grasshopper, it has wings, it has six legs. Children look seeing, when they see they remember (**KI-HET-NAI**).

Parent: Yes, trips to take children for trips it helps a lot and they learn a lot because they are together as a school. (**PA-FGD-NJAB-S-NYA**)

Parent: The 8:4:4 turned to be even more theoretical, its products are half baked, for life they cannot even repair a fence or even cut grass for the cow (**PA-FGD-NYANDA-S-NYA**)

Parent: There should be small projects in schools where the student can learn from. There were also duties where children were assigned to work in the farms where they work and you come out of it something. (**PA-FGD-KIS-S-NYA**)

Parent: The parents should allow the learners to have projects. When you were young and you went to aunts or 'guka' (grandfather) we were given chicken. This chicken should belong to the child to create the spirit of owning. The children learn how to be responsible since they want to take care of their livestock. (**PA-FGD-KIS-S-NYA**)

Parent: the schools can also support learners' projects which can generate money which can be used to buy resources. (**PA-FGD-KIS-S-NYA**)

The students indicated that it would be advisable to use practical in teaching some of the subjects like Agriculture in order to enhance retention of the content. They said:

Student...In terms of practical what I can add is in agriculture it can serve better when all the student are doing it practical. our country will grow economically, as when you do practical you are able to understand better the concept so according to me, it is better to have practical of agriculture for example keeping poultry in school and having some of the machines, we heard in those topics we may be coming across them, if you come across something it's very hard to forget (**S-FGD-KAW-S-MAK**).

In addition to the practical, the students pointed out that there is need to use field work where the student are taken to see some of the physical feature that are found in subjects like Geography.

Student ...My point is about field study, you can find that schools in Nairobi where there no forests, student will may experience hard time to go and learn than students in interior outside like stones, sands, different soils, which are learnt in geography and part of agriculture. So it is better for schools to be exposing students to go and conduct field study in school and far from the area (**S-FGD-KAW-S-MAK**).

The respondents said the practical approach to teaching helps to develop skills such as collaboration, problem solving, ICT integration skills in teaching and learning. They proposed that practical skills take up 70% and theory 30% of the total teaching and learning time.

Parents further suggested the use of television programmes to educate students on the importance of even menial jobs. They noted that debates among schools could enhance learning.

Parent: There should be activities in the television to be airing short broadcasting on how somebody have become successful in through things done manually than those who have gone through formal education. (**PA-FGD-NYAKI-S-NYA**)

9.6.1.3 Differentiated instruction

The respondents challenged teachers to do more research on what they teach and to cater for both fast and slow learners. They are expected to reach out to individual learners by catering for their individual learning needs.

Student: I think it is student teacher kind of learning. You contribute in a lesson. Teacher should have a plan on how to teach. And inform them earlier so that they can research for it. But not all schools do that. they want to finish the syllabus early. In learning there are different abilities. Others are fast and others are slow learners. Slow learner will spend more time to go and study on what they have learnt while other are ahead of them. But if the teacher will interact there a room for expressing oneself (**S-FGD-KIS-S-NYAN**)

KI: The method of grouping the most bright together and the moderate together would not be the best in class. The best method to teach would be mixing the students in class. Of course. You as a teacher you know Okelo is brighter or is the most slow learner. The best is to go and put her/him next to the most bright one so that that one can also assist in their discussion maybe in their home work. . (**KI-CEB-MIG**).

Other methods cited are in use but may not be widely used in all institutions of learning namely: integrating ICT in teaching and learning of mathematics and science, storytelling of real life experiences, games to teach concepts in mathematics and science, lesson study which brings about research lessons, open ended approach to teaching that require varied ways of solving a problem, mentorship of learners through field visits and experience for example in banks, hospitals, law firms among others Mentorship of learners through field visits and experience for example in banks, hospitals, law firms among others, Use of guests on academic and non-academic topics, Use of outdoor and indoor physical activities, Video games , and research activities.

The respondents consider these learner-centered approaches appropriate for teaching transferable skills such as time management, communication, planning, work-appropriate behaviour and attitudes, team and independent work, financial literacy and entrepreneurship, workplace health and safety, work place rights and responsibilities and customer orientation and satisfaction. In the respondents' view, the proposed approaches give rise to all round students as they impart practical skills. They promote understanding and critical thinking as opposed to rote learning.

9.6.2 Reversal of Traditional Classroom Practices

The key informants expressed the need for teachers to be more professional and up to date with current information and make learning fun and learner centered. This will ensure curriculum connects with realities of life and allow learners to relate content with their immediate environment.

KI... Lets talk about classroom environment, the teacher is supposed to enter in classroom, I think the structure is very clear, using that scheme of work, lesson plans, but the problem is how to deliver, on

structured lessons, and here it comes about because most of the time if the teacher doesn't have the objective to deliver he may not know what is not getting out on the lesson, so the approach should be they normally call it, it can be participatory within the content, where the teachers know what the students have not learnt from the previous lesson, it has to be more of the children enquiring from the teacher, than the teacher enquiring but how does the child enquire if you don't give them the task, and you just talk (**KI-UNESCO-NAI**)

KI: So there is there need for strong interaction between the teacher and the students opposed to increased kind o of lecture format of training and there must be a lot of practical work so that if for example, you are a journalist and you have been trained on feature writing the next thing that should happen is that you should be let out to go and write a feature several of them (**KI-CEO-MCK-NAI**).

Learners suggested that content should be current and that practical approaches should be used. What they learn should not be outdated.

Student Leader: We should learn something that is practical and current. For example we learnt about writing telegrams yet they are outdated. You should learn trendy things (**SL-MBIT-S-HOM**).

The respondents further suggested that pedagogical practices should encourage teachers to conduct classroom research and provide forum for feedback from curriculum implementers, encourage reflective teaching for purposes of teachers self-quality assuring curriculum implementation, ensure evaluation of the curriculum is in line with the objectives of the intended curriculum to avoid mismatch and train teachers on practicing interactive learning. This calls for reforming the teacher-learning process in the teacher colleges too.

ME: Reports in the media allege that while reforming the curriculum and or education structure, reforming teacher-learning process in Kenya is urgent...Our education system lacks about 100,000 teachers to effectively and efficiently manage the learning process. This goes up if we factor in those who should be removed from the system because they do not teach (**Okwach Abagi in DN, 2016**).

A respondent proposed an elaborate approach to teaching and learning ethical and integrity issues in the learning institutions. They proposed using creative learning should be employed to encourage young people's awareness about the importance of integrity through activities like role-plays, debates, workshops and discussions. According to them adoption of the World Bank supported integrity club initiative in the learning institutions serves to trap the youth initiatives to fight against Corruption. The initiative has been adopted in some other African countries such as Zambia. It has also been adopted in the USA. In the implementation of the programme, facilitators provide governance and anti-corruption classroom lectures to pupils and students in high schools and colleges. The lectures deal with basic understanding of corruption, its causes, manifestations and consequences with emphasis on its relations to good or bad governance.

Practical lessons should include Ethics and Anti-Corruption Commission (EACC) mock hearings in schools. The Model's Ethics Course is designed and implemented by the through mock hearings which encourage students to analyze ethical dilemmas through examining real-life examples of ethical misconduct and acting out role plays.

The programme should include both national and school level essay contest, where students are encouraged to develop and express their attitudes towards corruption and lawfulness.

Respondent: The topic will aim at educating and encouraging the youth to be self-directed, focused and responsible citizens while still at school with the view that the same will be upheld in adulthood. Lessons under this topic will include their entitlements, responsibilities and elements of good citizenship including principles of democracy (TIK-AC).

9.6.3 Integration of Technology

The respondent stated that it is necessary to explore effective and innovative ways of teaching such as using computer which allows for individualized learning where people learn more at their own pace and in case of teacher shortage in a particular subject; one can actually use recorded information for teaching. Key informants indicated that the teachers should be equipped with the 21st century technology which is where the learners are and as such the teachers need to be ahead

KI :... but the teachers in 21st century are teachers who will be able to appreciate technology because you can't move against technology, we are also to move with the development of the children, go and buy a new phone and give your kid you will make it for you, and us who went to school we want to take them back to teach them in different (KI-CEMASTEANAI).

The respondent advocated the use of IT as a tool in teaching. They particularly mentioned Technology assisted learning for example E-Learning.

KI: ...all teachers should be competent and able to use IT. It should be incorporated in teacher colleges so that they are versed in that area. Those who are not in teacher training should be in - serviced. (KI-TCD-KWA)

A respondent suggested that practical and technology based learning should be encouraged to enhance learning and nurture talents.

Respondent: ... giving them more practical lessons, apart from theory ...and also if they improve technology so that those children...technology I think will also help them develop their talent in more efficient (CARW-INF-UG).

Respondent: Vile vile hata wa leo huwa najaribu kitu lakini ingekuwa wakati ule tunaifanya practical ingekuwa mzuri zaidi. Kwa vile ingesaidia yule mtoto kwa vile hiyo kitu ingekuwa kwa

kichwa yangu.

(If those days we had done practical, it would have been good since it would have helped a learner as the skills would have been learnt very well.) (**BUT-INF-KAL**)

9.6.4 Parental Participation

A respondent proposed full involvement of parents in their children's education

Respondent: a curriculum that includes parental participation on regular basis in and out of school with specific stipulated roles for its success and relevance to the market... curriculum to avail longer sessions for reflection in learning and application of the learnt concepts, cease from more theory to more practice (**KCP-RI**).

9.7 Teaching and Learning Resources

The survey sought to establish the teaching and learning resources which are necessary for the successful implementation of secondary curriculum. The respondents identified the key resources, their sources and distribution. The findings are outlined in this section.

9.7.1 Key Teaching and Learning Resources

Different resources were identified as key for the implementation of secondary curriculum.

9.7.1.1 Human Resource

The respondents indicated that teachers are very crucial in the implementation of the curriculum.

KI:I propose here that the most important resource is first of all of course the teacher and that's why we are still insisting that number one teachers should be motivated from the word go (**KI-TCDE-NYA**)

Student: I think the greatest resources are teachers (**S- FGD- OLOO- KAJ**)

They said it is critical to provide well trained teachers and ensure that they receive continuous and regular in-service. The case of inexperience among teachers was highlighted.

Student: Some teacher teaches without skills. Some come to class and they have no experience. The government should have a way of assisting teacher before they teach (**SL-KABRS-BAR**)

Industrialist...tuwe na watu ambao wao wanaweza kuwafundisha...ambao wana ujuzi wa kufundisha... We need people who can teach, people who have knowledge in teaching (**CEO-IND-GAR**)

Industrialist...In-service. Hiyo in-service iangaliwe... Kila term kila mwaka hiyo training iwe inaendelea... In-service. We need to focus on it. The in-service training should go on throughout the term or the year (**CEO-IND-GAR**).

Key informants expressed the need to revive teachers' advisory centres to help equip teachers with skills.

KI: ... We require library in sub county level where children can access the materials, we also need to revise teaching advisory centre, where we had teaching learning aids were being developed, and teachers in zone can go there and get and share them as a zone... offices to support teachers in curriculum issues (**KI-CDE-KIT**)

According to the respondents, those choosing to be teachers should be vetted. The profession should be for willing people but not those who choose it as an afterthought or for lack of any other career

KI: We are not so much talking about money but we are saying we should try to identify the right person who should be a teacher from the word go with or without what we may call a package teachers who would actually take teaching as there career as their profession (**KI-TCDE-NYA**)

The students expressed the need for adequate teachers for all the subjects and specialist in certain cases. They pointed out that some subjects of interest to students are not offered in some schools due to lack of teachers.

Student: You see one may have a career in form three you find some do not do Geography because there are no teachers for that subjects. Teachers should be there for students who for example want to be surveyors (**S- FGD- OLOO- KAJ**)

Student: One is that even though it is not affecting this school, you find that so many schools are lacking teachers. You find that a school has eight classes and five teachers meaning there are classes which lack teachers. So we can say it could be better if every school could have more than enough teachers (**S-FGD-NJU-S-MUR**)

Student Leader: :...the government should supply adequate teachers to the schools which are needing teachers,....(**SL-FGD-REH-S-UG**)

Respondent: Let the government employ more teachers. With enough teachers, performance would improve (**MAIZ-INF- NYAM**)

Reports in the media allege that while reforming the curriculum and or education structure, reforming teacher-learning process in Kenya is urgent and should be core of any development reform in the education sector. Our education system lacks about 100,000 teachers to effectively and efficiently manage the learning process. This goes up if we factor in those who should be removed from the system because they do not teach (Okwach Abagi in DN, 2016).

For good performance in schools, the respondents suggested that teachers should not teach long in one school. They should be rotated in different categories of secondary schools, that is, from national to county schools.

Student...The teachers should be rotated, from national schools to provincial and provincial to district; this will improve schools and make them better (**S-FGD-KAW-S-MAK**)

The students highlighted the need for teachers to teach the subjects that they specialized in, in teacher training colleges. In addition, they pointed out that the teachers must have passed well at the college level.

Student...The government must employ specialist teachers, let us say if a teacher in university level studied English let them teach English in school to improve that, because you might have a teacher who studied geography in university and in class teaches English...Also the government should employ qualified teachers, mostly teachers who have first class, second class, but those who fail they should not be employed unless they go back to school (**S-FGD-KAW-S-MAK**).

The students raised the issue of having qualified teachers to handle specific talent areas as a means of helping the learners develop the particular talent. Additionally, they pointed out that teachers should take their work seriously. Some of the co curricular teachers don't take their work seriously. They said:

Student...I think only few schools take field works seriously. You find when you have a game master is not serious of what is happening, I think we should be serious and come up with someone who is for that purpose... When you come to the field, the teachers also participate in the field which is tiresome because they had a class work. It is better for government to employ people of the field which will assist the learner to have an exercise, education also being simple because a person is healthy, the government should increase teacher for field (**S-FGD-KAW-S-MAK**).

A respondent commented that in addition to teaching, teachers should have the capacity to discipline learners, even if it means caning. Teachers should also avoid absenteeism.

Respondent: The very important thing is the teachers. They should have capacity to teach, discipline learners, even if it means caning...what I know is that teachers are very important in teaching and discipline (**SHOP-INF-NYE**)

Ensuring ESQAC is effective becomes imperative. Respondents requested the government to ensure quality assurance officers visit schools in order to ensure that teachers implement curriculum is as required.

Respondent: The relevant officers should be visiting schools (**MAIZ-INF-NYAM**)

Industrialist...Kwa sababu school inspector...Anakaa ndani ya darasa, anaangalia mwalimu vile anafundisha, anaangalia mtoto vile anasoma...anaangalia kitabu cha mwalimu amejitayarisha, mambo nyingi yalikuwa yanatengenezwa hapo. Lakini siku hizi hakuna.

Translation

Because school inspectors used to enter into classes, observe the teacher as he/she teaches, observe how the students are learning, and inspect teachers' books and his preparation, so much used to go on well. But today this is not done (**CEO-IND-GAR**)

Apart from teachers, the respondents identified other stakeholders that are also instrumental in the curriculum implementation. Learners suggested that resource persons could be brought into the schools to sensitize them on pertinent social issues that they are undergoing. Other human resource includes counselors and chaplains. Such people are made to be role models to the students.

Student: invite professional, journalist and politician to come to school to motivate us as our role models (**SFGD-IFT-S-GAR**)

Student: I think this resource people. They should be brought to school especially who have experienced the problems we face (**S-FGD-KIS-S-NYAN**)

Student: Experts and people who have gone through similar emerging issues should be support learners (**S-FGD-MUS-S-KAK**)

Parent: There something which is not there in primary, that is not too much emphasized and is guidance and counseling, I think there is a problem and they should send counselors to those schools I think there is a year that we proposed they should be sending counselors to primary schools and secondary. (**PA-FGD-MOIG-S-UG**)

Student: Providing ...Guidance and Counseling for those traumatized with home challenges for them to concentrate in class...domestic conflicts back at home, divorce, physical abuse (**SL-MAL-S-KIT**)

To meet the mentoring demands of modern school, it is recommended that the services of a qualified counselor and a chaplain be availed in each schools to help the children early enough as issues emerge. This should be provided at GoK expense. In addition, higher centers should be established to serve as referral centers for cases that cannot be handled at the school level. Schools are encouraged to allocate more time for spiritual and moral matters (**KCCB-RI**).

The respondents said there is need for qualified librarians and laboratory technicians.

Student...The government first should employ permanent technicians, because I have talked that when you go around the schools you will not find any government technician, they pick from village who do not know how to handle even a test tube (**S-FGD-KAW-S-MAK**).

A key informant suggested use of community as a resource

KI: ...I was thinking if we use the community as a resource for learning for instance we have a ... so many... Features in the community or we want to learn about the life skills practically so instead of telling them in learning giving theoretically to learners you can take them and let them seek for themselves in the community because the community is available (**KI- STU- KAU**)

9.7.1.2 Physical facilities

Different physical facilities were identified as key in the implementation of the Competency Based curriculum.

Well-Equipped Laboratories

The respondent indicated the need for well equipped laboratories. These include sciences, languages and computer lab.

KI-if students are doing sciences they may require labs so that they are able to undertake practical in carrying out experiment...(KI-IED-NAI).

KI.. like in physics to talk about force, or graphic how do you demonstrate to a child without having a laboratory (KI-UNESCO-NAI)

Students...Sometimes we struggle a lot because some facilities are not there like fish and other things... The chemicals that are in the laboratories are not enough. The government should add that. There must be additional practical facilities like test tubes, burettes, beakers, because they are not enough and other things. (S-FGD-KAW-S-MAK).

Student...Our laboratories are those of the old ages... our apparatus are outdated (S-FGD-BUT-S-BUS)

Student... Some schools do not have laboratories except private schools (S-FGD-StCNAM-S-BUS)

Student: I think we require more laboratory equipment like apparatus because you can see it is very difficult even during the national exams people are divided into classes because students in public schools are many, a class can reach up to 300 students so I think it is better for us to have enough laboratory equipments (S-FGD-MARM-S-MARS)

Student: laboratory equipment should be advanced (S-FGD-MARM-S-MARS)

KI: ... Currently, you realize there are schools which do exams without laboratories,...if you want to develop the talents and capacities of every individual then we should have standard facilities in our school system .. If I am teaching a class of 40 the equipment should account for all the 40 pupils [KI – KUP-NAI]

Well-Equipped Libraries

As far as libraries are concerned, the learners said the libraries should be spacious and well equipped so that students can study on their own. Parents advocated for schools to have fully equipped libraries in order to encourage a culture of reading among learners.

Student Leader: I believe each and every school should have a library and not a small one, a more advanced one where I know information the teacher has given me to research I cannot find it in my books but if I go to the library I'm very sure I'll get that book. Also it provides a conducive environment because class is not always a conducive environment due to noise making... (SL- MUMS- MUR).

Parent: Ndiyo. Nafikiri kuna mambo na vitabu. Kuwa na vitabu shule... ...kuwe na...tunaiita maktaba ama? ...yes...kuwe na hizo maktaba nyingi...na pia kuwe na darasa za wakati wanafunzi kama wametoka darasani kuna wale wanapenda kwenda kwa maktaba kusoma, kuwe na viti vya kutosha, ...

Translation into English

(yes, there is the issue of books. there should be books in school..there should be..We call it a library or?.yes...there should be many libraries....and desks. Some students love to go to the library after school and read..So there should be enough chairs and books... **(PA-FGD-OLOLUG-S-NARK)**).

KI.... having books should go hand in hand with stores and libraries. **(KI-AIC-KIT)**

Key informants expressed the need to establish sub-county libraries.

KI: ... We require library in sub county level where children can access the materials... **(KI-CDE-KIT)**

Classroom and workshops

The respondent observed that emergence of new secondary schools has impeded quality education since most of them do not have physical facilities like classrooms and playing fields..

Other respondents suggested that schools need classrooms, toilets and other facilities before the country can think of computers

KI... Facilities for example, room, ...there is a child doesn't even has classroom, the environment is not conducive, there needs to be that classroom, it needs to have enough space then all other.....girls do not go to school when they have their menstrual periods because of the kind of toiletsso that environment may not just mean on classroom..... yes the classroom is important enough desk ...**(KI-KNHCR-NAI)**

It was observed that in some schools the classrooms are small and therefore they should be expanded.

Parent:...resources we will talk in terms of classes....the government should expand these classes so that we can have at least pupils which we can handle, at least 35... library which at teaching practice you go and ask for certain book and they tell you we don't have that book...we talk about laptops...are very necessary,...sports facilities;... science facilities **(PA-FGD-ATH-S-BAR)**

Student: even the size of the classrooms as you can see, even here we don't have a lot of class rooms so when changing of class some come here, some go to the ICT to learn and some come to this lab and you see this place is not very good **(S-FGD-MARM-S-MARS)**

The respondents also mentioned the need for demonstration workshops

9.7.1.3 Teaching and Learning Materials/ Curriculum Support Materials

Different respondents were in agreement that provision of teaching and learning materials is of paramount importance. They pointed out the need for various categories of books, chief among them enough textbooks. They said sharing of books has challenges. They indicated that currently textbooks are shared by as many as seven pupils (for one book). Learners also expressed the desire to be provided with topical books on a variety of subject areas of interest to broaden their knowledge.

Student: they should also provide more books that do not necessarily have to be educational books like books used in science technology (SFGD-KANJU-S-NYE).

Student: They lack those books ... you are going to see ... you will see seven students sharing one book and that is even is not recommendable (S-FGD-MARM-S-MARS).

Student... if the school doesn't have text books, the education cannot go well. And we ask the government to provide the needy schools to have a library and a librarian to handle books to be used ... So as to increase our knowledge through different authors, to sharpen our minds to be better people... (S-FGD-KAW-S-MAK).

Students... textbooks ratio to students should be considered and also by encouraging teachers maybe by early payments ...(S-FGD-PBH-S-UG)

The students went on to say that they would like to be provided with free set books as all learners cannot afford to buy their own.

Student... Set books should be given to schools...some students do have money to buy (S-FGD-StCNAM-S-BUS)

Key informants pointed the need to expose learners to both local curriculum materials as well as international materials that relate to areas of interest in our country like culture, patriotism and even legends. Such materials include course books and supplementary materials.

KI: ...learning resources will be guided by the content of the curriculum...have main course books which are helping the teacher to teach in class ...need to have supplementary materials that are beyond the national level...materials which give a global perspective, which goes beyond your own country it is good to expose the children to resource materials that are not within the country context.. Other materials that looks at culture and patriotism, even the material that engage on legends. Children are really exposed to variety of materials, (KI-UNESCO-NAI)

A respondent commented that the books in use should not be changed too often and they should not be too many. He added that having so many recommended books ends up confusing the learners.

Respondent: When I was in school, by the time we had a book by the name new This was an English book and it was so good that it helped us a lot. In fact it was very simple book and we started it while we were in class three and it boosted us up to class five and those who were behind us they used the same book because those days the syllabus was not changing that much like nowadays. Nowadays, the book which is read this year, by next it will change the parents are told to buy new text books. For example English text book you find that they are like three of them and the teacher wants you to buy them. And funny enough, these books have different information, the student are getting confused because they are being taught different things. By the time a student will be in class eight, they will be totally confused. ...To me I can say even if the syllabus has to change, they give people some duration. The person in form one by the time will be in form two at least will find the things which form threes read are still there. These days even students are not able to assist each other who are below them due to the changes of syllabus (MECH-INF-UG).

Still on the set books and textbooks, the parents said a book should be used for a span of 10yrs. This will make siblings to use same books instead of tasking the parents to buy new books every year.

Parent...Textbook aspect should be addressed i.e. one textbook should be used by other children behind them in a family other than having different textbooks every year.(**PA-FGD-MAT-S-KAK**)

Commenting on the revision books, the students said there is need for teachers to find out the books that have been approved.

Students: Teachers should consult on the allowed revision books (**S-FGD-PBH-S-UG**)

KI:... we need to see how we can even review the books that are sometimes recommended for the students and the pupils to read right now as the industry even people are concerned that even the language is a problem so that means something should be done how is languages being taught in schools (**KE- CKUJ-NAI**)

9.7.2.4 Tools and Equipments

The respondents said that tools and equipment should be availed for the implementation of the curriculum. These include:

Computers or computing devices

The students cited the importance of adequate computers and computing devices in schools. These will make it easy when it comes to doing practical. They isolated computer tables, media suites and filming studios with related quality equipment.

KI: ...You may need modern facility computers, for example if you are in media you need proper editing suites, you needstudios, you know you need cameras yousteel cameras, you need video cameras, and then you need ...Proper skills in terms of use of computers and designing desktop kind of skills you know so that people can be able to do desktop publishing and all that and ... more importantly also you need some better environment for learning with ample space well aerated, clean space, isolated from the pubs, the markets (**KI- MCK-NAI**).

Student...They should provide for computers because students who take computers are many, and when we are doing practicals the computers are not adequate (**S-FGD-KAW-S-MAK**).

Student...I think the government should buy for schools some computers schools which are 'huku mashinani' (in rural areas) not only concentrating in Nairobi so that child who has never had a chance of touching a computer should have that chance so that in future he does not hustle when he/she is employed in an office he doesn't have to go through another training of how to operate it. The government should avail computers to schools (**S-FGD-BUT-S-BUS**).

They also pointed out the need for laptops which in their view should substitute writing notes. They would also like to have conventional audio-visual teaching and learning materials to enhance their lessons.

INF: computers is a good idea,... they learn foreign things by using modems,-- connect to the internet (**JUA-INF-KWA**)

Student:...have smart boards and projectors because these are programmes that education is easier to classify and understand ...audio visual (**SFGD-MEKA-SP-KWA**)

Interviewee: we need to be well conversant with IT skills and we should use computers in more than one subject. Technology should be introduced even in high school where e should also use videos in the labs and even in geography for better remembrance (SFGD-KANJU-S-NYE)

Emphasizing on the ICT, a respondent expressed the need to provide learners computers and laptops which have multi-media capability, the ability to take pictures, the ability to take a video and the ability to record sound in order for them to create and share own content.

The respondent noted that the use of visual aids in learning enables learners to grasp more than merely listening.

KI:...The learner acquires 11% from listening and 70% from visuals. Where the learner is involved the learner uses all the six senses. Some of the materials needed can be bought or made locally... In ECDE teachers are trained to make materials. They use sacks to make materials and children enjoy learning using the materials. Where aviation is taken a skeleton of a plane will be required, where engineering is taken they require a skeleton of a vehicle which can be used for a very long time (KI-MCDE-KAK)

Other respondents were of the view that computers are not a first priority, other resources should be provided first. These respondents suggested the need to have enough books, chalk and teachers before the provision of computers.

KI... have enough desks, teachersto take care of every child... even when these computers are provided, this is not the time, it is a very good idea but it is not the time. (KI-KNHCR-NAI)

Internet and E-Platforms

Learners expressed the need for schools to have connectivity in order for them to access internet learning resources.

Student: Internet connection, to the wifi like in school if you want to research... like Science club the teacher doesn't have data bundles (S-FGD-KIS-S-NYAN)..

Student: lately the president has been taking laptops to some schools in the rural areas and if you look those places that are being given those laptops, what are those laptops there for? So like sometimes in places there is power shortages everywhere such cases the government should look for ways to make incase a place doesn't have power from a certain source there is another source that can provide electricity from apart from that (SFGD-MEKA-SP-KWA).

Student: Internet, it should be provided in schools so that if someone has ideas they can expand them using that resource (SFGD-KANJU-S-NYE)

E-platforms or online platforms and text books were identified as key resources that should be provided to improve learning in schools. The respondent recommended provision of relevant materials that promote a child's talents and adequate Space to allow the mind to explore. Teaching learning materials should be appropriate, interesting and responsive to the local environment.

It was further indicated that the move to introduce ICT in schools is a very noble idea especially in this era of globalization. However it should not be done on a crisis mode but adequate preparations should be done.

KI: ...You see some schools without desks, some schools even without classrooms, And then you are talking about IT. We are going to increase the gap between those who have and those who haven't (**KI-KNEC-NAI**).

In addition to these, the students pointed out other resources like fields of football which could be facilitated by the government.

Students... some schools lacks football field so the government should intervene to help them buy field (**S-FGD-PBH-S-UG**)

Games and Sports tools and equipment

One of the key informants pointed the need for facilities to support sports in schools

KI.. the important thing like a sport centre and here we have children doing variety of sports that is important and the only limitation in our country is that we may not build it across the whole country we may only have a few schools with those equipments.,(**KI-UNESCO-NAI**)

Student Leader: we want like football here, the teachers don't improve on it. When we want to play foot ball, there are no balls which can play it (**SL-StPH-S-KIT**).

Farm tools and equipment

Parents also noted there should be tractors and greenhouses in schools, to allow for actual practice.

Parent: There should be actual practice in school for example promising tractors which they can see and use, even green house should be in school. (**PA-FGD-NYANDA-S-NYA**)

9.7.1.5 Financing

It was apparent that the utilization of finances in the institutions was paramount to the availability of resources. The key informants reiterated the need for financial resources. They said the government should allocate more money to education.

KI .. One of the main resources...you know resources both financial and human these are two resources we require most, because for you even to develop human capacity you need money to train the teacher, you need money to put up infrastructure, so we need both human and financial resources, and in that sense what we are saying the government should put more money to education in the counties because I have noted that the Serem commission has allocated more money, to the education sector whereby now the county government will not only be basically involved in the early childhood training but will also be involved to improve the infrastructure both secondary and primary .(**KI-CDE-GAR**)

Respondents noted the resource problem is further associated with the mismanagement of the limited finances that institutions get. They indicated sound financial management practices needed to be applied where money was available but people did not buy the resources.

9.7.1.6 Infrastructure

The respondent proposed the need to equip all learning institutions with appropriate infrastructure for academic and non-academic activities such as sports in order to develop potentials of learners in various areas. These include among others, water, electricity as well as roads.

Respondent: Water near, road near, good environment will learn better. We need desks be there, clean class. Good environment. (MAS-INF-BUNG)

Student: ... so to me I think the government should install electricity in schools. I think that will support us (S-FGD-MARM-S-MARS)

Student: Yes, and also class rooms lack electricity we are here up to six then we go home, some people want to extend but because there is no electricity they can't extend (S-FGD-KAS-S-KIL)

The students pointed out that the challenge of power at home affected students especially the day scholars. For this reason they suggested support from the government through rural electrification

Student...This goes to day school student, at times some homes lack lights so the government should encourage rural electrification (S-FGD-PBH-S-UG)

Student: In Samburu County we don't have many secondary schools especially in the interior. If they build schools in the interior they will be able to go to schools since currently they are practicing nomadic pastoralism. The children will be able to go to school and this will improve our county (S-FGD-MOG-S-SAM)

The need for a school bus was indicated by some parents. This could be bought through the help of the government and parents.

Parent: This is like in buying school buses. The project should start without the parents benefiting directly. These projects can also be assisted by the government. (PA-FGD-KIS-S-NYA)

Students agreed that a dining hall was a necessity but it was lacking in a number of schools.

Student: Another resource is about in this school, we don't have, we lack a dining hall..... just we take food and then we sit outside (S-FGD-MARM-S-MARS)

Student: In addition to that... is when we are eating outside, like we may contract diseases, and a good health is good for learning and there that also have to be improved (S-FGD-MARM-S-MARS)

A student noted that in their school, they did not have water and that the government should provide them with storage tanks.

Student: So we wanted our government to provide us with some tanks our school we don't have water (S-FGD-MARM-S-MARS).

Student: ... like to mention someday schools, some you find them they are being forced to carry water in jerricans to go to school for washing purposes. So, such a thing all schools just to mention, a resource of water should not be missing forcing the children to come with jerricans. (S-FGD-NJU-S-MUR)

9.7.1.7 Time as a Resource

Parents were of the opinion that time management should be inculcated in the learning by being exposed to the importance of a time table.

Parent: The importance of the time table should be inculcated to learners for them to be able to keep time. (PA-FGD-KIS-S-NYA)

9.7.2 Distribution of Resources

The respondents pointed out that resources should be fairly and equitably distributed for better development of the country. They emphasized the need to rectify the disparities in resource allocation and distribution

Student: Proper distribution of funds without really checking on which somebody come from. (S- FGD-INOS- LAIK)

Student:...I think on allocation of resources the government should be fair not only favoring some parts of Kenya but also some minority some small places which have been ignored. Like let's say north eastern. It should distribute resources equally for that student there to be able to compete with a student from Nairobi or any other part of the country that seems to be much developed than the others (S-FGD-BUT-S-BUS)

Parent: I think we have problems in equality, some schools have others don't have and at the end of the year they give some results so the one which don't have really go under (PA-FGD-MOIG-S-UG)

The respondent said that equitable resource allocation to schools will accord every learner the same learning opportunity and that the graduates are able to compete competitively on the same level in the job market.

KI:...social aspect, I'll talk of equity in politics first in Kenya for example we have schools that are marginalized, we have schools that are private and they are rich in facility and we still expect that these students will compete in the same opportunities and the same things that the society offers and so if we look at these developed schools they have enough resources and support and these schools that are in marginalized areas you find that they go for an exam when they've never seen a lab or any facility. For the education sector to grow we have to empower marginalized schools (KI-FGD-PWN)

While noting the disparity in provision of resources between schools in the rural and urban settings, parents in Samburu County requested the Government to provide schools with computers, electricity and enhance security.

Parent: they can help even if its facilities. The government can provide equally since in places like Nairobi, the schools are well equipped and you find learners are advantaged and yet they are doing the same exams with the rest. Here (*Samburu County*) they lack those computers and some schools lack

electricity power, enough teachers and other schools lack security. The government should also consider the rural areas too. Learners from these areas are disadvantaged and when its exam time they sit for the same national exams **(PA-FGD-KIRIS-S-SAMB)**

They indicated that such laboratories lack in the marginalized areas and urged the government to consider providing such facilities in the affected areas.

KI: ... the government should consider the marginalized areas receiving we have great schools in Nairobi and other urban areas but when we go in the low marginalized areas we find that they don't have labs there are students who have gone from form one to form four they are learning about Bunsen burners in schools they have KCSE and they have never seen a Bunsen burner and chemicals so that that's what I think **(KI-STU-KAU)**.

KI: ...It's more cumbersome in secondary school than in primary school where subjects like biology, physics are compulsory so already I know the government is chipping in but sometimes need to be done particularly for the new schools because otherwise our students are not getting equal attention when it comes to other subjects like sciences, even computers. It is theory sometimes when we talk of all secondary schools having electricity they don't have some don't have **(KI-CEB-MIG)**.

9.7.3 Sources of Resources

It was strongly indicated by a respondent that government together with the community should provide textbooks to learners. Some students were of the opinion that it's only the government that can support the institutions to get resources.

Student: for me, I think it's only the government **(S-FGD-MARM-S-MARS)**

Student: It is only the government who can assist us **(S-FGD-MARM-S-MARS)**

Respondent: Books should be availed in schools by the government **(MAIZ-INF- NYAM)**

Some students however felt that though it was the duty of the government, parents and donors could also come in to support the schools in providing resources

Student: I think it is the duty of the government, but also our parents as this is a public school it belongs to our parents as well as the government; so shall not leave it to government only because it is all ours but not only for government **(S-FGD-MARM-S-MARS)**

Student: Even the donors, international donors **(S-FGD-MARM-S-MARS)**

Student: I think the county government even **(S-FGD-MARM-S-MARS)**

However, a respondent expressed concern that parents were overburdened since they had to purchase books for their children. Also, fees charged by some schools are too high for some parent to afford.

Respondent: There before the government, provided pupils with textbooks but now we parents are the one to buy the books for our children. Second, nowadays, curriculum needs government to intervene because

you find some schools have high charges of school fees that you find the child from very poor background cannot be able to pay and the parent can not be able to educate that child (**MECH-INF-UG**).

9.8 Assessment Modes

The respondents' gave their views on appropriate modes for assessing what the learners have been taught. All the respondents pointed out that assessment of learners was important in order to know how much the learners understood what was taught. Assessments were also viewed as one of the ways of identifying different potentials of learners.

Respondents: ... the performance of children at different levels of competition is very important because along the same line you may realize this child can stand to represent Kenya in different levels ... (**CAP-INF-LAM**)

Respondent: There's nothing bad with the exams. However, for public schools, they do not compete favorably like their counterparts in private schools. The way I look at it, head teachers are to blame for non-effective monitoring of teachers' class attendance. Other officials should check on performance of schools generally (**MAIZ-INF- NYAM**)

A key informant however indicated that assessment should be meaningful and should be able to address the regional and cultural diversity.

KI : ... should do the same but not similar i.e. a child migrating in rural and is a mobile school and tell him about traffic jam and you have not provided resources so that when you speak of it he can see the video not imagining, how resources are distributed and utilized, a flexible curriculum to address diversity. Also flexibility of children from one class to the other i.e. not basing on performance and age. Accelerated learning should also be there. Assessment tool should be meaningful.. (**CEB – SIAYA**)

The respondents proposed that education should adopt an assessment method which will assess problem solving and critical thinking skills. The methods should help recognize the talented and gifted learners and variations in abilities.

The respondents suggested a variety of modes.

9.8.1 Formative Assessment

Respondents were of the opinion that CATs are an ideal way of finding out how well the learners have understood what was taught. They are of the opinion there should be more formative assessment as it motivates learners. Students suggested that there should be continuous assessment and these should contribute to the final grade. They were of the opinion that continuous assessment can be used from as early as form one through to form four for a longitudinal presentation of their individual performance.

Student: They should start assessing from Form one how a student is performing and use it for Form four because some steal exam. Like in primary school they should start from class 6 (**S-FGD-KIS-S-NYAN**)

Student Leader: Here in this school we have the exams CATS and like in form 4 we have the lunch quizzes evening quizzes ...but at some point you find that these exams are not regular like you find at times you have to do two CATS it would be better that after this period you assess this student after short periods (**SL-MBIT-S-HOM**)

Student: ... after the topics that we have learnt, after one week, I would like to do an exam. I want to test whether I have understood that topic....and every weekend; no... every Friday we want assignment. By Monday for example, like composition, and then by Monday we bring here then it is marked by our teachers (**S-FGD-MARM-S-MARS**).

Student: ... for example when we are waiting for the KCSE there are those who fear even if you are very bright you find that when the KCSE comes he fails. If it was possible, we could have for example after the first year in Form One, we have for example an exam which is conducted for example the same exam in the County it may be conducted by the same teachers because students you find that when they see new faces, the way the KCSE is conducted they fear that ... So it could be well if we have an examination at the end of Form One and Form Two and Form Three and Form Four then the report... (**S-FGD-NJU-S-MUR**)

Student:...I prefer we use the CATs since when we use the K.C.S.E we get so many cases that leakages are out of papers. The results for the students to get to the next level, we get KNEC to come and collect results for the assessment of the CATs they have been doing since form one so that they can get the real results (**S-FGD-BUT-S-BUS**)

Student:...I equally support the use of continuous assessment tests because as we are talking in different parts of Kenya like let's say North Eastern .The type of education that students from N.E use is different from education that a student from Nairobi use. Like for example a student from North Eastern will sit under a tree in the morning, he will not be sure of lunch and will not be sure a teacher. Maybe the head teacher and the deputy and one teacher are in that school so CATs will help in going to the next level in that it is easy to realize the ability of such students compared to KCSE whereby some parts of the syllabus that are set have never been covered by a student from North Eastern because of lack of resources like teachers (**S-FGD-BUT-S-BUS**)

Parent: We can have different assessments, we can have assessment for attitudes, achievement, generally may be after every one year we can assess (**PA-FGD-MOIG-S-UG**).

Respondent: Tests on continuous basis are good for gauging the performance of learners. Also, tests would be sourced from other counties and vice versa (**MAIZ-INF- NYAM**)

KI ...deliver examination from overall achieving so that we have CATs in every stage and remove overall exam...Assessment must be continuous within particular subject at different levels and the teacher ought to see whether they are moving on well or not. (**KI-CEB-KAK**)

A key informant is of the opinion that continuous assessment should encompass activities being done at home.

KI: The assessment can be oral, written, done home as homework (**KI HET NAI**)

KI:...Should be assessed from home when on holiday they need to give a report on what they did etc practically if it is sing in choir, in church testament to that effect (**KI-MCDE-BUS**)

The respondents indicated that CATS are a better option to summative evaluation as they take place in a relaxed and enabling atmosphere. They also help determine a child's previous performance.

KI: I advocate for CATs in a relaxed and enabling atmosphere not with a policeman with a gun. CATs records covering every topic should be part of the final assessment and not for teachers to use them to light their jikos. As parents look for vacancies in schools they are at pain to explain that the child was performing well but does not know what happened but has not records to show. (KI-TCDE-KAK)

KI: The best way for me to assess I think in my opinion would be to have continuous assessment and not base it on just one final exam has been the focus that exam is a do or die." (KI-KEPSHA).

KI : I think it should be continuous assessment throughout so that we are able to make it to be able to even grow through those competencies because the summative is not enough rarely 8 years in class and then you need two hours for an exam then when you don't pass you don't get the marks you are said to have failed so the eight years are seen to waste and there might have been some conditions that could even have affected you so if you are able to access that child all the way from class one in English all through so you can be able to even identify the gaps along the way and be able to see how the gaps can be so I would suggest continuous assessment (KI-MCDE-NYA).

A respondent was of the idea that such tests should be given on a regular basis so that learners can be given a chance to remember what they have learnt. Some suggested that CATS should be done after every topic and weekly.

Student: After each and every topic, I think it is good to have a continuous assessment tests because there are topics that are complicated like in chemistry, physics and biology (SL--MARMD-S-MARS)

Parent: Exams will help us know what they have learnt. I would like the CATS after every topic so that the teacher can know what the learner has learnt. You can't wait until the end of term to examine the learner and you find the learner hasn't understood anything (PA-FGD-KIRIS-S-SAMB).

KI: Professor Odhiambo three years ago and he suggested that we come with a structured way whereby we can continuously assess the learners and put this marks as we move on instead of doing one of the exams so that the continuous assessment tests that are, might be done maybe after even year or two years are the one that you put accumulative mark the final analysis just like the universities do and also putting into account the special talent and ability the learners have (KI-TCDE- NYA).

Respondent...they are supposed to assess them continuously...every step of the week they are supposed to know what was taught so that you rectify earlier than later (WEL-INF-NAR).

Respondent: On weekly basis so that they can remember what they have learnt that week (CARW-INF-UG).

KI: Now this is what we have taught for these 6 weeks and then we are going to assess, and from there after you have assessed and you have seen that John has got 30% in math's and then what are you going to do as a teacher? And that now we have analysis, we sit down as teachers we do analysis and we know multiplication and division was not well understood, so when we come back the next leg of the term before we even start teaching now look at what the children were not comfortable with and then we revise before

we continue. So now that one is for school and these assessments are different. The assessment can be oral, written, done home as homework (**KI- HET- NAI**)

Respondent: On weekly basis so that they can remember what they have learnt that week (**CARW-INF-UG**).

Respondent...they are supposed to assess them continuously...every step of the week they are supposed to know what was taught so that you rectify earlier than later (**WEL-INF-NAR**).

Another respondent noted that the teacher should be actively involved in checking students work during teaching and giving enough examples to ensure that no child is left behind. Also, too much dictation and work should not be given as the learner will not be able to revise if it is too much.

Respondent: ... take time while teaching and make sure every student is keen to what you are teaching. For example, if it is mathematics, first give the students more examples and then you assign them to do one...then you have to go round checking whether the student is doing the right thing or not. If you find the student is wrong you are supposed to correct him/her and show how it should be done. Another thing is in secondary school, you find that the teachers are giving the students a lot of dictation such that by the end of the lesson the students are getting tired even they will not be able to go through them all. When the exams come, the students are totally blank because they didn't go through all the notes (**MECH-INF-UG**).

The respondents also noted that there should be standard continuous assessment measures which will focus even on soft skills/life skills/social skills. Also, there is need to develop instruments such as aptitude tests, psychometric tests which can be administered through inter-teacher and inter-school exchange programmes.

KI: we can develop tools like aptitude tests like if I can look at the social interaction of the student (**KI-CEE- KWA**).

Portfolio assessment tool can be used to assess learners' abilities from the time they join school upto the time they leave.

KI-You can assess different talents, you can assess how students are participating in the community you can assess leadership skills of students you can assess even the way students respect each other. We can have a tool of assessment. We can refer to anything and we can refer to that assessment test. Then we can say because of course these places will always be small so that if we say assessment test let them take maybe 50% of the total marks. If a student scores less than 40 marks in the assessment test even if you are sick and do not do very well in the final exam which is out of 50 even if you get 20, 30 you have not gone to waste ok. So maybe in US there is something they call portfolio, the portfolio carries your things from the moment you enter that school to the moment you are leaving ok (**KI-REG-LAU**)

A respondent proposed development of an assessment tool for different areas. A respondent indicated that assessment in competencies based curriculum requires development of tool to measure the acquisition of the desired competencies and that this should be done continuously but not at the end of the programme.

Respondent: With the shift from purely academic to other domains of education, there will be a change in the role assigned to national examinations. It will now be necessary to design a tool that can be used to measure and assess or evaluate the degree of learning that takes place in such areas as attitudes, values, and character. Do away with the national examinations especially at the lower primary level and replace them with well-coordinated and managed continuous assessments. Research on and design evaluation methods that can be used to measure learning in the fields of affective domain of education (attitudes, emotions, morals and values) (**KCCB-RI**).

KI: I think we must develop a reasonable assessment tool that sometime should even be continuous because sometime you may not be able to evaluate skills that have been learned over long period of time in one instant, the competencies should be constantly evaluated and practiced given room to be summatively evaluated as well (**KI-SGKN NAI**)

A section of respondents suggested that continuous assessment marks should constitute 30% of the total marks and summative exam form the remaining 70% in KCPE.

KI: we assess them continuously so that at least final battle of it is only 50%, because you find sometimes you can train students and you are very sure this one are doing quite well but when all of them are failing so you wonder what happened and were best students. As a teacher you are really demoralized because the set of examination is beyond the students. So I suggest that assessment is based on lectures or teachers and let the final assessment be done nationally so that we have national uniformity (**KI- DDE- MUR**).

KI:but if you ask the school today they have all the information may be you should have a way of may be giving that feed back that we are asking. So that KNEC may have 70% the exam, 30% what the school says about how the child has been performing. by the exam itself you have that inclusion. (**KI-SCDE-SAM**)

KI : It's continuous and should not be just about exams being 100%. if you have to do one National Exam you should take 50%. Continuous assessment tests can take may be 30%. Talents can take 10% then other issues smartness, keeping time, discipline students need to add marks or you can lose marks; patriotism should take at least 10% (**KI-CPC-NAI**).

Parents and students noted that to enhance integrity in examinations, independent officers other than teachers teaching in those schools to conduct continuous assessment tests conducted internally in the school. These assessments could replace national examinations which were marred by cheating.

Parent: I am suggesting if we can go for continuous assessment test, officer should be send in each school and assess in class one class four and then class eight, the government should also come in and assess again if they are still ok, an then on issues that some students may favor their own students, teachers can be send from other counties. (**PA-FGD-MOIG-S-UG**)

Student:... like the national exams, you see now during those times there is a lot of stealing and even those people who are not able to pass well, they can as well pass. I think in order to do away with cheating in exams, we... I request to have internal exams and then that exam is recorded for you (**S-FGD-MARM-S-MARS**)

They added that continuous assessment can enhance integrity of examination process. Key informants suggested that assessment should be competency based and meaningful. This will help reduce cheating in examinations. The assessment format should be oral, practical work, projects and theory which should determine with reasonable degree of accuracy the capability of the learner. The items should bring out more of critical thinking. External examiners should do the final assessment to avoid teachers misusing the opportunity to settle differences negatively. The respondents proposed regular checks of the level of attainment of competencies in Class 4, 6, and at Form 2

KI :It's continuous and should not be just about exams being 100%. if you have to do one National Exam you should take 50%. Continuous assessment tests can take may be 30%. Talents can take 10% then other issues smartness, keeping time, discipline students need to add marks or you can lose marks; patriotism should take at least 10% (**KI CPC NAI**).

The respondents suggested practical exams because the current system of cramming makes them forget things as soon as they are through with the exam

KI: ... we can use simple mechanisms like using some old vehicle, where the learner is asked to assemble it after it has been disassembled. And rather than theoretical assessment....And as a matter of fact, we do pass exams not because we know but because we have cramming ability, for five minutes, put the concept in my mind then 10 minutes after examinations I am very blank. (**KI-TCD-KWA**)

KI: ...as a matter of fact, we do pass exams not because we know but because we have cramming ability, for five minutes, put the concept in my mind then 10 minutes after, forget.." (**FGD-UNIV STUD-PWANI**)

Key informant added that assessment should incorporate project work which would assess more than the learned skills but also values

KI...most traditional way through periodic examination of learners but, it should be the number of pupil that we generate as self reliant who are able to identify ways and means of resolving social economic challenges those who can find solutions in business, in financial inclusion... through monitoring and evaluation to measure the impact of the curriculum based on initially set objectives..If the curriculum has been able to inject and inbuilt values to people and then levels of corruption and ethnicity goes down. (**KI-CA-NAI**)

Respondent 2: Assessment should be based on not only written but practicals and whether the child can display these. To develop creativity, there should be assessment on projects for example how to recycle things; drawings, collage etc. Award honesty so as to discourage cheating and shortcuts Special awards/ scholarships or marks for those who excel in sports or arts. (TKS-IS).

Some parents lamented the frequency of formative exams noting that this tended to eat away into the teaching time. They suggested that they should be fewer and a longer interval.

Parent: I think exam business is more tailored than doing anything else. Its exam, exam, exam.... especially in primary schools, there is a lot of exams. Now, is like pupils are wasting a lot of time doing exams, and marking. Your term is of 14 weeks, and you do four exams. And if each exam will take about

one and half weeks, it means, six weeks will be spend on exams. That is why we turn to these remedials to recover the time wasted (PA-FGD-MUTG-S-KIT)

Parent: if it were possible, the exams could be limited, they should be controlled...at least two per term...or even one a year (PA-FGD-MUTG-S-KIT).

Parent: I think we can stagger the exams. Maybe 844 has been there for 30 years, and if it won't undergo reforms overall, reforms maybe we can have class 1-4 take a common exam, then that grade is carried to upper primary, then at the last stage let's say class 8 they do another exam, then the grade is aggregated we get the grade. Then come to form 1, and form 2, you have an exam, then that grade is carried over to form four, then(PA-FGD-MUTG-S-KIT).

Learners further observed that written exams are not necessarily the best way of assessing learners since it does not take care of other aspects that the learner may be good in.

Student: the way of testing students through exams is not the best way because people are good in different forums (SFGD-KANJU-S-NYE)

Student: if someone wants to be an engineer and has the ability to make something they should be allowed and then it can be marked and maybe more marks can be gotten in the area that they are good in(SFGD-KANJU-S-NYE)

The student leaders advocated for individualized assessment citing that such a method will enable the teacher identify the weaknesses of the learner unlike if assessed as a group.

Student Leader:...personal assessment. If the teacher assess me personally he will be able to explain to me where I goes wrong rather than in group assessment where am not able to tell you where I goes wrong because of the group mentality (SL-MOIG-S-UG).

The respondents advocated for assessment based on learners abilities. They said it will help a lot if the child's interest is considered and nurtured from early years. The respondent also indicated that assessment can be on one on one based on the learners' abilities not necessarily academic

KI: In this county (Kilifi) we had cases of schools being burnt, we lost a lot of resources and in many cases it is because of fear of doing exams. I think Teachers, parent and community at large we have a responsibility to talk to the children.... Not all children can do the same exam and expect all of them to pass. if we identify their interests and abilities from the beginning, ... we cannot give them the same exam. The exam should not be the only tool of assessing a learner and taking him to another level. There are some areas if we assessed we'd realize the child has other good attributes not necessarily in academics (KI-CEE - KIL)

Some learners, however, are of the opinion assessment should not be in the form of written examination. Students excel on paper but they do not have the necessary skills.

Student: I think we don't need to assess the person using a CAT because there are cases of people cheating in exams You get to see on paper but on your hand or on a play you don't have the skills set you simply have the knowledge to pass that exam. I think the staff the of having everyone can show

what they can do best then it can work better, to ensure that people who go into various sectors are capable of doing the job not people who have excelled in papers not only knowing on what to excel on paper, should ensure that the real skill. For example if you are a doctor who is well qualified and have the best results on paper but they don't have the skills at hand then we will have a problem. (S – FGD – StMARS - NAR)

Although some learners were in favour of CATS, others felt that it was not a fair way of assessment. They said this type of assessment is influenced by the teachers who set the questions.

Student: ...Use KCSE because someone is serious, but cats you joke. KCSE is standard because CATS they set one topic. CATS' teachers will be setting simple questions so that all students pass but KCSE we don't know the questions. KCSE generalized the students in the whole country but here you can get an A but if you compare with others are better than you, so we compete with them (S-FGD-StCNAM-S-BUS)

KI ...people will just award people marks most of these teachers teach in their local schools. And nobody will like to see a brother appearing to have failed... (KI-NACECE-BUN)

9.8.2 Summative Assessment

There were mixed reactions as far as summative evaluation is concerned. Some respondents were for the opinion that national exams continue being administered. The national exam was advocated in this case because of its promotion of equality among learners. Students were of the opinion that we should still continue having KCPE and KCSE as they help in placement of students and one is better prepared for the final examination. They said summative examinations like KCSE is necessary in that it plays an eliminative role to determine those who would transit to university

Student: I think it (KCSE) is necessary, you will be able to identify the ones who are capable of going to the universities (SFGD-MEKA-SP-KWA)

Student: we keep it because that's where we have completion, so we can know who were working, and show importance of education (SFGD-IFT-S-GAR).

Students: We support national examination because it promotes equality (S-FGD- PBH-S-UG)

Student...for me I support K.C.S.E because they seem to be more intensified because you can find there is math's paper 1&2, English paper 1,2 and 3 and just one paper testing what you have learned from form 1 up to form four. I thing collecting all these CATS from form 1 up to form 4 can be tiresome so I prefer just using that single examination paper to go to the next level (S-FGD-BUT-S-BUS)

Student: It is through the certificate that determines the future to the university you are going to join to employment. (SL-MAL-S-KIT)

Students: For me KCPE and KCSE is the best because students they happen to fail in Form One, Form Two and once they get to Form Three they realize they have to adapt to the system and they start performing. But suppose the results were taken from Form One and Form Two, you see it will affect. And also

considering that we are doing a common exam it will be easy to standardize rather than this County is doing a different exam from the other County (**S-FGD-NJU-MUR**).

However, they suggested that strict measures be put in place to avoid exam leakages.

Respondent...The exams in schools are good because they enable students to study hard. Maybe for the main exams that is, KCSE where some schools happens to perform poorly and you're at times surprised. Maybe we improvise the Tanzanian mode of exams where you just use the index numbers only (**CAP-INF-LAM**).

KI: We can't avoid exams but how those exams are taken and how the results are handled I think is important and probably if the exams would be made in such a way that the problem is when the society is not honest if we say that lets ..Counties sets,...here could be credible so that at one county we can have the national exams. There could be regulations to lower the examination that are also administered by the teachers ...and who knows what they want to test, who knows what they want to evaluate except the excitement that they have reached. (**KIT - BIS- HOM**).

He regretted that a wrong precedence had been set in the country where people are placing a lot of significance on passing national examinations some even using un procedural and dubious methods.

KI:And I think that issue of exam is also moulding our school children the wrong way because if the parents emphasize on a grade and the child maybe is not talented for those kind of grades, they might be talented in other things. I think an education system should be there that can also be able to help those other talents that children might have so that they don't feel rejected because they don't perform in school. (**KIT - BIS- HOM**).

In order to curb a number of challenges facing exams in this country, a respondent has proposed three parts in the entire examination

KI: ...broken into three parts. That one of school, National practical; for all National level and then the theory way... (**KI-NACECE-BUN**)

They further suggested that KNEC should come up with mechanisms of assessing this.

Parent: KNEC should be given a proper mandate to conduct various forms of assessments, not just academic but they can do other different forms under that cycle and they make it official that this time we do particular assessment (**PA-FGD-MOIG-S-UG**)

Respondents suggested other formats of administering KCSE. The students suggested other national exams to be administered in the course of secondary level. This will give several options for consideration for those going to higher levels. In this respect, the past records of students should guide the final grade.

Students:...I think more exams should be introduced maybe form one and two you do a national examination so that it may not be only one examination that they consider in you joining the university. .. (**S-FGD-PBH-S-UG**)

Student:...in terms of education, we should at least at Kenya do national exams maybe every year in the whole country but not only waiting for K.C.S.E and K.C.P.E (**S-FGD-BUT-S-BUS**).

Student...They should consider what you were getting from all other exams, then what you have gotten in the KCSE they should look if it is in the same range, you can find in these exams for example you go D's, and in the final exam you get a B+, what is that? That's what I am talking about, **(S-FGD-KAW-S-MAK)**

Student...In my view the exam should be done nationally so that we avoid panicking, when we will be doing KCSE or KCPE. .. By the end of form four students fails not because they are stupid, this is because of panicking cause of not doing thorough practice, that is why am requesting the government to be providing for us national exams during end terms, so that will help us better and better. **(S-FGD-KAW-S-MAK)**

Student: examinations have always been a part of us but I think it has been done in a poor way by testing at the end of four years, so maybe they should be doing it at the end of every year until the four years are over and maybe irregularities can be controlled **(SFGD-KANJU-S-NYE)**

Student Leader:... the examination should be moderate,... for example after KCSE , the students should be given interviews, for example if they are going to colleges they should be given interviews,...by observing characters, by just going to the field,...after form 4 the schools should write a report about the students in the school,...continuous assessment tests and mocks are just a way of preparing bus towards that final examination,...final exam should be the best way.....**(SL-FGD-REH-S-UG)**

The suggestion is that we should do away with final exams as we know them. One examination or two cannot determine a person's capabilities. The curricula should not be examination oriented. Assessment should be done throughout the year or years. These should include tests, assignments, practical tasks and oral tests. At the end of term/year, the means for these marks from all subjects taken are recorded and kept. This should be done at primary and secondary school levels .At the end of the 7, 4 for 2.The marks are tabulated to make the score or grade for the student. Another suggestion is that the tests, assignments, practical tasks and others can take 70% of the marks and a not so formal exam takes 30% of the marks.

We can also introduce open book examinations at higher levels **(JWM-IS)**

Further, the respondents suggested that continuous assessment could be used as part of the final score in the secondary school level.

Respondent: Let KCSE contribute only 50% of the final secondary school grade. The rest should be accumulated over the four years of the course through research, writing and presentation of papers, projects, CATs, general conduct, special talents and oral exams. This will reduce the tendency to cheat in national examinations. **(ASM-IS)**

Other respondents called for abolishing ranking in the learning process.

Respondent: Stop child to child competition and ranking. We don't want to teach rivalry and individualism in Kenya, we want cooperation and friendship.

Further, the respondent expressed the need to discontinue KCPE **(ASM-IS)**.

Respondent: Stop KCPE and let the teachers give a comprehensive primary school leaving certificate that will help the child and her parent to decide on future career and subjects to pursue in secondary school. Children will then join secondary schools that are near them or those that will offer their choice of subjects. **(ASM-IS)**.

One of the respondent proposed that CRE should be tested on its own, unlike the current status in which it is tested together with Social Studies. Religious education is a guardian of values and morality and should be given priority in both primary and secondary school curriculum.

Respondent also proposed introduction of talent based examinations, that national examinations should be based on the talent identified in a particular student in primary, secondary and tertiary institutions.

However, some respondents had the opinion that national examination for primary examination be discontinued to provide open opportunity for all to proceed for secondary education.

Respondent: My suggestion would be that the Class 8 examination be discontinued so that students proceed, as far as possible, to local day secondary schools which are large enough to accommodate those of varying abilities and interests. (SMO-IS).

The respondent proposed that a framework be developed to assess both cognitive and non cognitive abilities.

Respondent: There needs to be flexibility in regards to SNE learners. The KICD/MoEST ought to provide assistive equipment and technology and adopt best practices in regards to how SNE learners are assessed. ...Assessment should be done to promote learning rather than to quantify learning. ...We propose an assessment framework that embraces Continuous assessment tests, project based assessments, community service, oral/written assignments, non-cognitive attributes, attitudes and behaviours (KP-EO).

A respondent suggested that the overall grading and exam should include other areas such as moral, industrial and co-curriculum activities. Learners went on to suggest an alternative assessment mode whereby a first year student would do an exam in first term and results submitted to the University of their Choice. Subsequent examination results up to the fourth form would be sent to the university. According to the students this would prove a students' output.

Student Leader: According to me I would like they introduce assessment exams where you do exams in term one and submit to the university you want to join so that this university assesses your performance up to form 4. After form 4 they would see that this student is actually a performer. (SL-MBIT-S-HOM)

Types of Examinations

Parents suggested that learners can be subjected to oral examinations. This would help the teacher to find out whether they had learnt what was expected.

Parent: I was also thinking that the current examination system should be strengthened; some exams should be done orally. ...if it's like language the only sure way of assessing ability of use of that language is oral. (PA-FGD-MOIG-S-UG)

Student: another way is just to tell the teacher orally (SFGD-MEKA-SP-KWA)

Parents suggested both summative and formative examinations for the secondary level.

Parent: in secondary I can suggest both summative and formative, formative for the better of students, summative to get to know what they have achieved because secondary school level remember we are talking about placement. (PA-FGD-MOIG-S-UG)

Parents suggested that there should be more than one examination then these can be harmonized at the end of the course.

Parent: There some children who are more clever than others. It there can be another assessment apart from this exam. We can be having other so that at the end we can harmonize. (PA-FGD-NYAKI-S-NYA)

Parents were of the opinion that multiple choice type of questions should be done away with.

Parent:... those multiple choices, picking A, B, C, D, it is good that we do away with it. When the child is tested, let him/her write an answer, not indicating A, B, C, D. Multiple choices should be removed. This one will make the child to learn and master the content because A, B, C, D he/she will guess any answer and write it, but if it is a word, he/she must learn, struggle and get the correct answer and this one will make him or her to think critically and this will help him/her when joining secondary ... it will be easy for him/her to learn and study. (S-FGD-NYAM-S-NYAM).

Parents noted that there should be assessment in practicals such as knitting, moulding etc.

Parent: Like there before the work of the hand like knitting, moulding pots and the like it will help him/her. (PA-FGD-NYAKI-S-NYA)

Parents said that exams should be continuous so that students can get used to them.

Parent : Let the exams be done all the time and students should get used to exams since they are continuous. (PA-FGD-KIS-S-NYA)

Key informants indicated that the country should do away with national exams

KI.the government it is high time that it can do away with the national exam and then they find a way of testing and analyzing students how they are performing because it is the national exams which brings a lot of theft and corruption issues. (KI-FGD-RONU)

KI....The first thing that should be done away with is the national exams.... it is really unfair because it is more based on cramming other than the knowledge you have. So you find that a person is good in cramming and the other one just has content but unfortunately what he has, has not been set. (KI-FGD-RONU)

Though national exams were preferred by some respondents, others had contrary opinion. They felt that national exam may not measure all what the learners has learnt. For this reason, a respondent was of the opinion that examinations should be given by the school because teachers are the best assessors.

Respondent: Exams given by the school are the best because teachers are the best assessors. The national ones may not tell exact how the learner is... (SHOP-INF-NYE)

Respondents further observed that the exam oriented attitude of Kenyans have disadvantaged learners who do not make good marks in summative examinations in that they are not equipped with requisite skills for survival.

Respondent: Lakini saa hizi, ile masomo tuko nayo ni ya kufanya mtihani, examination-oriented. Mtoto asome tu, aende kupita mtihani, na asipo pita mtihani, hakuna jambo ingine iko kwa kichwa chake

INF: Currently, we are focusing on examinations .Children only focus on passing their examinations and in the in an event that they don't make it, they have nothing else in their heads. **(HOT-INF-NAR)**

The key informants expressed concern that learners are subjected to examinations which when they do not perform they are rendered useless by the system. Such learners should therefore be exposed to talents.

KI:...The challenge with the examination is that it disenfranchises so many people take for example in every one year, you hear for example, eight hundred thousand kids have done KCPE two hundred and fifty thousand go to secondary school, nobody ever takes stock of what really happens to the five hundred and fifty thousand who don't go beyond a primary school. **(KI-CA-NAI)**

As observed by the respondents, exams should not be used to intimidate learners. Certain schools should not be viewed as for the failures because of their performance.

Respondents ... and the exams as he has said nowadays is not the same as our days. You may here once the child fails he/she is told to join the private school an act that demoralizes a lot in that this private schools deters education progress a lot due to the performance pressure **(CAP-INF-LAM)**.

Commenting on the assessment, learners said that all energies should not be on passing of exams but practicing what has been taught.

Students: ...Students should avoid reading just to pass the exam. They should focus on acquiring the professional knowledge of the area of their specialization **(S-FGD-PBH-S-UG)**

Student:...Education should be not only for personal exams but should produce individuals who can fit in tomorrow's society **(S-FGD-BUT-S-BUS)**.

Also, primary and secondary exam leakages have been rampant, because of the demand and pressure to pass national examinations.

KI:.. We have that...(Wrong)...mindset that once I get a grade A I'll be absorbed into the job market and improve my skills greatly..**(FGD-UNIV STUD- PWANI)**

The parents said that buying of examinations should be abolished because they don't test what the teacher has taught but the whole syllabus which is wrong. The parents were also on the opinion that KNEC should come up with another methods of assessing the student that will make him/her move from one level to the other

The issue of commercialization of assessment was criticized by the respondent especially due to the recent development where teachers are not preparing their own tests. The role of the principal as the first supervisor was highlighted and the need to build their capacity in assessment emphasized.

KI: These days they want to commercial exams in schools which I think is not the right thing...we used to be in schools and we were being tested by our own classroom teachers weekly or randomly and it worked quite well and at the end of the year when the final exam came, it didn't show a lot of deviation at all at all.(**KI-CEB-MIG**)

Some of the students felt that other exams should be considered when determining the final grade of the students

Student... You should first before KCSE, first we can just say we start with a sub-county exams, then the county exam which should be done with other strict measures then the KCSE which is done by all the students in Kenya then you take the average. (**S-FGD-KAW-S-MAK**)

Parents also expressed the need to have holistic assessment of the learner in terms of talents, attendance, and behaviour.

Parent: In my view assessment should not be begged on one final examination, more so, talents, attendance, behaviour can also be examined and this will encourage learners to work hard in all aspects (**PA-FGD-KITUN-S-BUN**)

Some learners felt that the summative exam is not fair. In their opinion it does not reflect a students' final output due to environmental factors.

Student Leader: Personally I would say that the KCSE exams is not the best .Imagine of this scenario I become sick when KCSE is around and then I do the exam when sick and fail. That means I am now a fool. Another scenario is where people say you do KCSE once unless you repeat. So people are scared and fail out of that .That does not mean you are now a fool. And you now look at the setting. The syllabus from form 1 to 4 cannot be tested in one paper and you say now the student is qualified. Sometimes you find that a whole topic was not set so how do you know the student knows this (**SL-MBIT-S-HOM**).

The entry behavior of learners should be assessed for proper placement of learners. Projects should form part of the final examination. In secondary, they said learners can sit for external mock exams. Mock is important to put learners on their toes.

KI: ...the entry behavior of learners even at pre-school level. We must have some assessment to find out whether the child can communicate, voice has developed and can remember where they have come from. Entry behavior helps in providing assistance where it is needed especially for slow learners... (**KI-MCDE-KAK**)

KI:...Part of their examination should be to come up with projects... second term there should be a project which children have come up with before they sit for their final exam to show they have understood(**KI-MCDE-BUS**)

Respondents posited that though exams may be the one way to find out how well learners have learnt in school, the issue of integrity makes them not always viable.

Respondent: The first thing is maybe to test them like an exam although that's not a very good way to know because an exam can be leaked but i think it's the best way to do exams, that's the only way to prove (**MECH-INF-MUR**)

On integrity in exams, the students pointed out that the exam body needs to be more vigilant in order to ensure that there is no production of unqualified professionals due to exam leakages. The learners pointed to the unfairness and lack of integrity of the current exams citing cases of leakages.

Student Leader: Like last year I am told the exam was everywhere and if an exam is like that is that an exam? With such an assessment everything is tested and results given. With the leakages student just cram what is in exam and you mark and say this is a good student (**SL-MBIT-S-HOM**).

Students ...evade leaking of exams which leads to quacks professionals. The department dealing with the exams must be very serious (**S-FGD-PBH-S-UG**)

Student: ... this issue of leakages in exams. Some of them who are becoming doctors are not qualified because they stole exams. (**S – FGD – ATHS - BAR**)

Student:...I think here exams should not be considered much, because you find a person does not excel in other exams in school but when we do national exam they perform well, the sequence should be taken, the mock, so that you can get the rate of the students to avoid this cheating. (**S-FGD-KAW-S-MAK**)

9.9 Contemporary and Emerging Issues

9.9.1 Climate Change

Climate change was said to be the talk of the day and for this reason it is among the contemporary issues affecting the society.

Respondent: Climate change is at the fore of most international discussions nowadays, and the consequences of this change are becoming evident every day. Students should be enlightened on this, and on measures they can internalize and do on a day to day basis so as to have an overall positive impact on climate change in the long run, e.g. they can be trained on how they can make it a habit to plant a number of trees each year. If everyone did so, the impact would be very positive. (**BUS.MAN-INF-NAI**)

9.9.2 Pollution

Learners attribute having little or no concentration in class partly to environmental pollution. They said there is need to teach about the consequences of pollution and how to curb it.

Parents....I think we should educate people on the ravages of pollution so that they can stop it. (**SFGD-MEKA-SP-KWA**)

9.9.2.1 Noise pollution

Student:...The schools near the markets, bars those things should be closed have a policy that controls those music like our school coz it's near the beach they make a lot of noise. (**S-FGD-StCNAM-S-BUS**)

Student:...The schools near the markets, bars those things should be closed have a policy that controls those music like our school coz it's near the beach they make a lot of noise. (**S-FGD-StCNAM-S-BUS**)

Students: Global warming...The student can be taught more on how to reduce global warming, creating awareness also around on the ways of producing also global warming (**SFGD-MEKA-SP-KWA**)

Student: I think for many things we should be told what is important to all of us for example some topics at the end some have like some lessons on pollution that is something that is general human kind on earth, we should be taught that but there are some things you are taught and you are like where is it important where is it applied (**S- FGD- StMARS- NAR**)

9.9.2.2 Air pollution

Student Leader: high population has brought about people leaving in congested places. Due to this congestion, and having industries at one place, this brings about air pollution that affect plants, animals and human being (**SL- MAKGS- MAK**).

9.9.3 Environmental conservation

Parents noted the importance of teaching learners about environmental conservation while learners expressed the need to put this knowledge into practice by actively engaging in clean ups.

Parent: conserve the environment, which should be a subject. Environment and its conservation should be a subject like mathematics (**PA-FGD-MUTG-S-KIT**)

Student Leader: If you walk around these towns they are really dirty Students should be given a day where they walk to a street, they clean it up, and then they do things like planting trees. I think in that way they will have developed that sense of environmental management (**SL-RAP-S-MIG**)

Student:... Our school has a lot of snakes...create awareness about animals in the compound. (**S-FGD-StCNAM-S-BUS**)

9.9.3.1 Environmental Cleanliness

Parents said that students should educate on garbage disposal and environmental conservation.

Parent: we can first educate the parents on how to do it. so the parent will also teach the child. Corruption is also contributing on environment on planting trees they end up cutting those trees. Like in our town there is a lot of garbage. Educate them on how to dispose that garbage and conserving our environment. (**PA-FGD-NYAKI-S-NYA**)

Student: ...environmental pollution, industries fitted with devices to filter poisonous gases to prevent global warming. (**SL-MAL-S-KIT**)

Parent: Entertain learning with environmental sustainability issues. They should do or practice while in school (**PA-FGD-NYANDA-S-NYA**)

9.9.4 Radicalization and Terrorism

Parents observed that there is need to emphasis on patriotism in the curriculum to curb learners from getting enticed into radicalization.

Parent: the curriculum is not emphasizing on patriotism, and that is why there is radicalization, the youth and most of us do not love our country. We don't feel we belong here. (**PA-FGD-MUTG-S-KIT**)

The learners further indicated that out of school children are prone to radicalization.

Student: The Students who stay at home are those who join Al Shaabab (S FGD AthS BAR)

Parents highlighted the issues of terrorism, drug and substance abuse, tribalism and nepotism as issues that ought to be included in the curriculum.

Parent: You see nowadays there is ... terrorism, drug and substance abuse all this how can we be able to bring them to the curriculum so that we can address those problem especially from lower classes? Like tribalism, nepotism how can we help them? (PA-FGD-NYAKI-S-NYA)

Student: we need security in our place. There is no enough security here in terms of like we say teachers.. they are fearing to come to this place because the soldiers themselves... sometimes they become hard to the people. They are not treating the people in the same way because somehow they think Somalis are Somalis so they don't treat people justly. Even though soldiers are sent, people fear them.(SFGD-KHADJ-S-MAND)

Student: it's a matter of terrorism we would like our people as Kenyan not as a community, as a tribe, as a religion... we would like to join in one hand to avoid this terrorism. It's affecting us. It's affecting all of us as Kenyans. If you are a Kenyan who is born in this country I think that we are Kenyan. We are Kenyan for sure because we never went to school in Somalia. By talking this language of Somalia, these people... they are making us to look like we are the terrorist. As Islam, we don't want to be made as a terrorist so joining hands together is what we will going to do to avoid the terrorism. .(SFGD-KHADJ-S-MAND)

9.9.5 Alcohol and Drug abuse

Learners pointed out to the need to help both the boy and girl child who are neglected leading them to engage in drugs and substance abuse among other vices in the streets. The students noted that issues of drug and substance abuse ought to be taught and should be compulsory. Peer discussions could also be used to address this issue.

Student: boy child has been left behind, he never asked in a high school level and he is loitering in the street that is most of the young engage in theft and drugs because no one is out there taking care of them so they have to struggle to find other means. The government should come with an initiative on how to try and balance the ways of helping the girl child and the boy child (SFGD-MEKA-SP-KWA)

Student: We taught of the effects of the drug abuse because they use the drugs but they don't know the effect of the drugs ... Forming groups for educating the youth... Yes in school form clubs that will act like advisors (S-FGD-KAS-S-KIL)

Parent: there is this issue of drugs. I think it would be good if we teach about them so that they may be taught the side effects of the drugs. Because some children when they go outside, let say to university, they are introduced to drugs. This is because at primary and secondary this is not given the weight it deserves. This should be taught as a compulsory subject and examinable because if we say it is optional, children will not take it.(PA-FGD-MAKG-S-MAK)

9.9.6 Technology

Challenges associated with technology should be addressed. Guidance on the use of computers and internet was emphasized by the respondents. Not all content should be allowed to be accessed by the learners.

INF: The onset of the Internet has created a great rift between the “analogue” and “digital” generations in Kenya and Africa at large, with the awed older parent generation unable to guide their computer savvy children into a digital world they know nothing about. The internet-exposed youth therefore lead themselves into all kinds of extreme mischief as they “learn” from the net; traditional social structures have broken down, resulting in amoral society on all fronts. Control of children’s interaction with the internet should thus be paramount, with the government leading the way in providing guidance and necessary controls and regulations towards this end, and the education system weighing in with structured lessons. Conservative China has demonstrated that this can be done by blocking unsavory content from the internet, unlike the liberal West that believes in “absolute freedom”. It is to be noted that the West has strong remedial support systems and traditions in case of adverse exposure of youth as well as adults to negative traits, unlike in Kenya where there are very few professional guidance and counseling experts or remedial centers, and it is stigma in Africa to be seen to have been “treated” for waywardness of any kind. **(BUS.MAN-INF-NAI)**

A respondent suggested that there is need to address the issue of persons and students spending too much time on social media.

INF: I think it is affecting our country because ... most people spend most of the time on technology. They don’t have time for their family, so if people are taught on how to control their time with technology, I think it will help For example, students they don’t have much time to study. Parents don’t communicate with their children well so it really affects them. I think technology if people put it correctly it will help... people spend most of the time with for example phone **(CARW-INF-UG)**.

It was suggested by the student leaders that there is need for E-learning exchange programs locally and internationally.

Student Leader...I think, we should have E-learning, exchange programs with international and other schools **(SL-MOIGS -UG)**.

In the same vein, the students suggested improvement in ICT for information sharing.

Student...I think ICT in schools should be improved this will greatly boost education system because we will have enough information, providing free education **(S-FGD-KAW-S-MAK)**

Student... I think the education introduction of technology in the education sector shall be of great importance to schools because students and teachers can be able to do research and they can be able to do research and they can be able to different things which they were unable to do before the introduction of technology **(S-FGD-BUT-S-BUS)**.

Student... We have the issue of I.T. The jubilee government promised Kenyans that will install an IT project so let that project runs because the world is running digital. Let it start by electrifying schools that have no electricity and see the way forward **(S-FGD-BUT-S-BUS)**.

Parents suggested that instruction on ICT in schools should include appropriate use of technology to counteract social media influence.

The students also pointed out that a lot of care should be taken when handling technology. According to them, the parents should have an upper hand in this.

Student...parents should be keen on their children's phones. For example advising them on the wrong sites that they may visit which may lead to distortion of their minds... when a parent buys the child a phone, let the parent take care of it. Let the parent tell the child the importance of this phone. Let the parent tell the child more of positive things about the gadget. (S-FGD-BUT-S-BUS)

In relation to the safety of using technology, the students suggested they should be allowed to use phones in school. They alluded to the fact that though not allowed; they still carry them and endanger their lives by connecting them dangerously.

Student...I think that mobile phones should be allowed in schools in that...we get that instead of losing lives here in school. We get that some students sneak in with them and connect wires which can lead to power shorts and most cases of fire arise from people tampering with the wires. The solution is to support the phones in school (S-FGD-BUT-S-BUS)

Parents identified issues of technology including their negative influence as pertinent area to be taught to learners

Parent: Our education system should be set in such a way that as technology changes we move in target to it (PA-FGD-MOIG-S-UG)

Parent: If you tell somebody not to do anything after that he will tend to try what you have told him not to do (*inappropriate use of technology*). Nowadays these children are very clever not like our days. There was no other source of getting these things. Even nursery school they know everything (PA-FGD-NYAKI-S-NYA)

Parent: Watching TV when the parents are not there and sometime they download some bad things from the internet. (PA-FGD-NJAB-S-NYA)

Parent: Punitive measures should be meted to control posting of pornographic material in media. Sites broadcasting pornography and violence should be blocked. (S-FGD-MUS-S-KAK)

9.9.7 Remedial Teaching

Students suggested that the issue of holiday classes and other forms of remedial classes should be negotiated between the school administration, the students and the parents

Student: After there was put a ban on the tuition in the schools, let me say that it could have been optional where the three parties agree - the school administration ... the students and the parents. Yes, the four parties as I have mentioned when they come to an agreement that the students at their will wanted to undertake the tuition as if it is even one week after the school term has come to an end. And still that is for those who are feeling they would like to take it. Then the other one is per the concerned students who would like to undertake the night lessons... I think that would still try to uplift the performance of the country. (S-FGD-NJU-S-MUR)

9.9.8 Guidance and counseling

For the secondary level, learners and parents suggested that student should be taught respect for other communities, religious morals, drug and substance abuse, tolerance, discipline. Integrity,

gratitude and ability to interact with other students .They went on to suggest that inculcation of these values would be enhanced if the guidance and counseling component in schools is strengthened.

Parent: At this level learners have moved away from their localities therefore they need respect for other tribes and embrace religious ideals, tolerance, gratitude and interacting with learners from other schools freely. (PA-FGD-MALIK-S-BUN)

Parent: However, if peer counseling and guidance and counseling is strengthened values such as obedience, honesty, cooperation and dedication to responsibilities should be emphasized to a great extent (PA-FGD-KITUN-S-BUN)

Parent: When a child is in school, he is supposed to be taught that corruption is bad and should be taught about drug abuse, so that as he leaves school he should be aware and follow closely what he has been taught. The school should also have discipline too. When they leave school they should know drugs are not good, corruption is not good and when they get employed. And when he goes to any office not corrupt in order to get assistance. (PA-FGD-IRIS-S-SAMB)

Learners: Aspects like morals. Immorality mainly gets ground in secondary school. So the government should put up structures maybe the counselors to counsel students and so on (SFGD-RAPS-S-MIG)

9.9.9 Cultic Religious Groups

Students noted that the issue of cultic religious groups should also be addressed.

Student: Another thing that may affect education is cultic religious groups. Some of the religious groups in Kenya they say that education is not necessary although you have god in your heart. So such religious beliefs should be not condoned in the country, they should be put off so that education in Kenya can grow and not only grow but also help students to remember what they did with their school lives or education. (S-FGD-KWANG-S-KIT)

9.9.10 HIV and AIDS

With regard to HIV and AIDs, a student noted that they should be taught how to live with the infected and the affected.

Student: They should be taught how to live with the infected and affected, we should be taught the ways which some can. -S-KIL)

Parents: Another thing ... there is the challenge of HIV and AIDS ... also it has contributed a lot. You can find a child has the potential but his/her parent has been affected by HIV and AIDS ... now the child cannot study well. (PA-FGD-NYAM-S-NYAM)

Student: We should try to educate the student about danger of the diseases and immoral behaviours. Tell them about life after they leave school. There some things you cannot be told by your parents. You need someone else (S-FGD-KIS-S-NYAN).

Student...Educating the youth on the effects of HIV/AIDS and making them shy away. From acts that may lead to contraction of the disease (S-FGD-BUT-S-BUS)

9.9.11 Poverty and Unemployment

Students noted that education on poverty and unemployment eradication should be given.

Student: We should educate us on important things to help in our life on to reduce poverty (S-FGD-KAS-S-KIL)

Student: unemployment, many people living below the poverty line thus most children are not able to go to school. (SL-MAL-S-KIT)

9.9.12 early marriages and Pregnancies among the Girls

Learners in the northern region of the country lamented that early marriage was adversely affecting their chances of getting an education and called on the government to eradicate it.

Parent: ...early marriages, it's a matter of the parents. ... the girls are the people who are in early marriages. You will find a student dropping out of school because of her parents pressuring her to marry a man and the man who she is marrying is not her choice but it has been forced by her parent. The parents are only thinking of the money to take ... they are making the child to get out of school and make her to marry that man. The man is again older than her. ... I would like the government to educate, create the girl child education in our community and to make and we would like to remind my parents, our parents as Somalis to avoid early marriages. We are the people who are doing early marriage in our country. (SFGD-KHADJ-S-MAND)

Parents lamented that early marriage was adversely affecting the girl child's chances of getting an education.

Parent. Kuna mambo kama hii ya early marriages. Watoto wanamaliza class eight na wanapeanwa. Inaffect mambo na masomo pia maana imeishia hapo. So akisomeshwa hata wale watoto wakiwa primary, na waweze kujulishwa ya kwamba inastahili wasome hadi kiwango ya university, Yule mtoto akiwa class eight, atajua tubado hajamaliza masomo yake. So mambo kama hiyo early marriages ina-affect community (PA-FGD-OLOLUG-S-NARK)

Translation into English

(there is this issue on early marriages. children who finish standard eight are married off. this affects their education which ends there. so children should be sensitized on this issue in primary school and made aware that they can further their education up to the university level. the child in class eight will be made aware that their education has not come to an end. so this issue of early marriage does affect the community.)

Learners called for guidance and counseling services in schools to combat rampant early pregnancies and rape cases.

Student: And there is also about the young girls at school. A lot of pregnancy cases and rape cases are showing up so may be a girl can get some services about protecting the girls , guiding and counseling in schools (SFGD-MEKA-SP-KWA)

Student:... Some engage with sex to increase manhood, the girls become pregnant and both then they drop out of school (SFGD-GATU-S-NYE)

9.9.13 Sexuality/Sex/Health Education

Though some learners decried the hard stance taken by schools on issue of condoms, others were of the opinion that the government should not introduce condoms in schools.

Student: But in school not everybody is concerned with the student because they say they are not my children. In school they bring certain rules like if you are found with a condom in school you will be expelled (S-FGD-KIS-S-NYAN).

Student: Homosexual and lesbianism ...the government is saying they will introduce condoms in school I don't think it right (S-FGD-KIS-S-NYAN).

A student leader observed that girls in secondary school have problems understanding and managing their menstruation yet it is expected that the knowledge they presumably got in class and from their mothers should help them.

Student leader: Sometimes I have a problem with mothers they don't teach girls issues like menstrual cycles yet we learn them in class. I love what my primary teacher taught me there was an organization that came to teach children the menstrual cycle and insisted that everybody need to be there to learn.(SL-MBIT-S-HOM)

Parents pointed the need to prioritize sex education to the youth in order to empower them to live positive lives.

Parent: Sex education should be given priority to help learners get the right information from schools and help those infected live positively (PA-FGD-MALIK-S-BUN)

Student: High pregnancy rate is the main thing that makes Samburu girls go down in terms of education. If they can invest and go down in the interior and teach them the importance of education and they stop the culture because it will help the girl drop out due to pregnancy. If they teach them the effect of this culture it will improve their education. (SFGD-MOG-S-SAM)

9.9.14 Equality/Gender/Rights

Female learners requested to be taught gender equality issues to bolster their self esteem and help them contribute to the political development of the nation.

Student: should encourage them and teach girls that they are equal to men, like Taiwan having a female president, we shall have female for president (SFGD-IFT-S-GAR)

Parents highlighted the fact that neglect of both the boy child and the girl child has affected access to education

Parent: Huko nje unakuta the boy child. You know we have been concerned with the girl child for long, but now the endangered is the boy child. You find the boy has finished form four, but instead of looking for a job you find him in the market chewing miraa day time (PA-FGD-MAKG-S-MAK)

Student: some communities discourage girls from going to school, communities should stop that and influential leaders should help in that (SFGD-IFTEN-S-GAR)

Commenting on gender, the students pointed out that the boy child is now endangered.

Student...I think that in as much as the society is trying to empower the girl child, they should also not forget the boy child is somehow being left behind (**S-FGD-BUT-S-BUS**)

9.9.15 Family related issues

The student leaders emphasized good relationships between parents and their children. To them, such relationship would enable sharing among the two parties. In addition, the parents are supposed to be role models to their children

Student Leader...parents should be able to relate well with their children so as to make them to be free with each other to facilitate sharing (**SL-MOIG-S-UG**).

Learners cited the need to sensitize parents to help their children relate with their peers

Student: especially we have issues that affect us at home mostly which affect us which ...*unclear*.... Maybe those things are coming in when we are in school in cases where you find they are hurting you are caused by the parents and are, if I would say I could say that there to address the parents and the child have meeting to choose the parents like the parents have different hey might have such a parent might be too harsh to my daughter or my son a parent, parent who cannot give her daughter or her son a chance even to relate with others only humiliating or that student or his or her age is to*unclear*...his or her friend but at home some parents they don't give such a chance so I could ask that the school may have such meetings when all parents are there at least to address them educate them and show them, show them the importance of ,of exposing their children to other children (**S FGD St MarS NAR**)

9.9.16 School Related Issues

The student leaders said they can be supported through provision of good guidance and favorable learning environment both in school and at home.

Student Leader...In the curriculum, we should have... good guidance and favorable learning environment (**SL-MOIG-S-UG**).

9.9.16.1Teacher Deployment

Student...I think one of the emerging issue is teachers, a teacher from this area is teaching the same home area, the teacher can have a neighbor and they have a grudge from home to school so the government should transfer teachers far from their home areas. (**S-FGD-KAW-S-MAK**)

9.9.16.2 Career Talks

Career talks were cited as one of the contemporary issues that need to be included in the curriculum. Such talks would create awareness on different types of careers.

Student Leader...I think we should have those career talks to create awareness amongst the students (**SL-MOIG-S-UG**).

9.9.16.3 Strikes

The students pointed out student and teachers strikes as some of the emerging issues that affect teaching and learning. School strikes interfere with the learning process.

Student:... Concerning teachers strike, the government is not serious about it. When I was born teachers used to strike and even now they are striking. Government should take strict measures to curb this. Like last term it went up to two months, and when you look at the performance the private had high marks compared to public school. so there the government is to be blamed. So there is need to overcome this challenge and what they can do is to employ teachers in contract for five years, and when the five years are over they employ others for the same. This will reduce unemployment of teachers, and pay them well and this will clear this strike. Government should employ teachers in durations (S-FGD-KAW-S-MAK)

Student:...Government should give the teachers their demands, even the president passed through the hands of teachers and spend more on teachers, you can think that the teachers are the poorest paid and are the ones who do a lot of work to make the country develop in terms of technology (S-FGD-KAW-S-MAK)

Student:...Concerning the students strike, in my view I think the government also has failed, there is a school at home in my village back it was involved in the strike the minister of education of the area were informed that the problem was the principal, the principal just remained in the same school, who should be blamed? I think the government should be blamed because they were called but they didn't solve the problem and also I think they should liaise with people to talk to students they come annually and if there is any problem the students will just suppress and form a strike for that juncture people should be there consulting schools and solving problems (S-FGD-KAW-S-MAK)

Student:...about the teachers also, the government should be concerned about the welfare of the teachers so that it is regular that the teachers are in school and shy away from this thing of teachers striking (S-FGD-BUT-S-BUS)

9.9.16.4 School Fees

Learners identified inability to pay fees as one of the hindrances to learning .they requested for financial support for those who were unable to pay their fees.

Student: fee support like those who are not able to pay for their fees (SFGD-IFTEN-S-GAR)

According to the learners the gap between the rich and the poor should be addressed. Many children from the poor families are out of school because their parents don't have enough money to pay school dues. They miss out on learning.

Student: In terms of the economy, it must be changed because in this country 80% are poor and only 20% are rich. If you go out there a lot of children are out of school, why? Because their parents have no money to take them to school. (S- FGD- ATHS- BAR)

Student: Issues on school fees, you will find that for example students may be sent home for school fees, when you enter in to the class a teacher may be teaching only 6 and the rest are absent, the others are lacking what others 6 are learning. So we need to be equal in school... My request to the government is that schools fees must be paid per parent because some parents have six children in secondary school and are paying 10,000 and parent is a peasant farmer, so that's a challenge to that parent (S-FGD-KAW-S-MAK)

They link high fees to emotional stress among some learners whose parents have difficulty raising the required amounts. They would like the fees to be reduced.

Student Leader: the country should cater for the needs such as reducing school fees. Most of the students get disturbed due to what their parents are going through. Like this year, many students have been sent home due to school fees being hiked (**SL- MakGS -MAK**)

9.9.16.5 Discipline in Schools

Parents observed that removal of corporal punishment coupled with the stress on children's rights impedes on instillation of expected values in the youth in schools .this because teachers shy away from administering punishment thus giving too much freedom to the learners. They suggested that we need to rethink this act.

Parent: There is another one, this may look like it's not there but it has got its own effects. You know pupils or learners have been given too much power. Teachers have no control over the pupils. There is this children rights, its like teachers do not have their children. They have been kept so low, that we don't have the power over our children. You stay like friends, if they start doing bad things and because they have the power and can spoil your employment, you forget about the child and you earn your living. So that is also affecting the education of our children. And it should somehow be taken back to the way it was (**PA-FGD-MUTG-S-KIT**)

The removal of corporal punishment and human rights requirements, have made it difficult for teachers and parents to instill expected values (**PA-FGD-KITUN-S-BUN**)

Student: Indiscipline cases should be looked into because they are many cases...I think other students cracking some stupid jokes about your physical appearance should be told to stop (**S- FGD -Oloo- KAJ**)

However, they indicated that suspension from school may not be an effective way of dealing with indiscipline. Other ways should be devised. They indicated that excess disciplining by teachers should be discouraged. A student leader cited peer pressure as the genesis of most indiscipline and immorality among students. He went on to suggest that introduction of basic Psychology coupled with discussions could stem this issue.

Student leader: Okay there is something I don't know how it can be taught. The peer pressure in as much as we have the guidance and counseling it's the peer pressure that messes things. It's where indiscipline and immorality comes from. It's like maybe they can introduce some psychology learning and introduce positive discussions in students (**SL-MBIT-S-HOM**).

Parents cite discipline as a social issue. Parents also blamed peer pressure as a major catalyst for the negative vices that youth undertake. They would like teachers, counselors, and religious leaders to work together on tackling social and moral issues that affect the learners.

Parent: you will get a child who has been brought up well and one who is not, since they are age mates the one with bad character teaches the good ones bad things. If it is a girl, she is impregnated, if it is a boy is taught drug abuse, smoking bang... so this age grouping..... I.I... don't know if it has medicine!! (**PA-FGD-MUTG-S-KIT**)

Parent: In many schools there are discipline issues such as homosexuality and I as a preacher sometimes I engage in counseling boys who have been sexually molested by peers in school and after talking to them they change their behaviour and focus on education (PA- FGD- NDUR-S-LAIK)

As far as discipline is concerned parents expressed the willingness to collaborate with teachers to instill good discipline among the learners.

Parent: I can say that there should be unity between parents and teachers so that parents continue training children on good behaviour even when they go home after school. They should collaborate in disciplining children.(PA- FGD- NDUR-S- LAIK)

For students to be able to achieve competencies, parents advocated for corporal punishment.

Parent: There should be corporal punishment which is controlled by the discipline matter. This will assist the students acquire the competencies (PA-FGD-KIS-S-NYA)

9.9.17 Unity

Learners observed that there is need to be taught the basic history of the country for purposes of enhancing patriotism and national unity.

Student Leader: What we should have first of all is basic history of the country. There are some countries where it is compulsory to know the history of your country. That will be able to bring patriotism which will curb various things like tribalism because people will see like what happened in 2007 and will take measures to avoid that (SL-RAP-S-MIG)

Student Leader: Like the guidance and counseling department ... you find most of the guidance and counselors are employed mostly in hospitals yet most people fear going to the hospital to look for advice. If they introduce them in school it would be a good thing (SL-RAP-S-MIG).

Parent: Education you know when they study, like here in Samburu , if they study they will be like brothers so when they get out from offices they will work as Kenyans ,so they need not see themselves like Turkanas, Samburu but Kenyans. Education should foster unity (PA-FGD-KIRIS-S-SAMB)

9.9.18 Child labour and Abuse

A student suggested that there is need to fight child labour and child abuse

Student:...fight against child labour (S-FGD-KWANG-S-KIT)

Student:...about child abuse I think the government should try to change the attitude of the parents by maybe educating them and teaching them on the importance of educating to the children (S-FGD-BUT-S-BUS)

9.9.19 Political Stability

A student noted that tribalism should be addressed through the curriculum.

Student: ... here in this region of ours there is a lot of tribalism, like for example, this tribe is competing with this other tribe and if you just look at the school, even there is existence of dirtying in the school... and the people should be mixed in order to enhance peace (SL--MARMD-S-MARS).

9.9.20 Security

Students also noted that security is key for development to take place. This will even lead to raising of education standards and development of infrastructure.

Student: We need to embrace security. In Samburu there is a problem with security and if the government can provide security then people will be able to carry out their activities. They can also improve the infrastructure, transport and communication. (S-FGD-MOG-S-SAM)

9.9.21 harmful cultural practices

9.9.21.1 Female Genital Mutilation (FGM)

Students were of the opinion that harmful cultural practices, like female genital mutilation should be dealt with. They said learners should be sensitized on pertinent issues like FGM so that they can be able to make a stand.

Student: You should be a person who can make change. Like FGM in our community you are supposed to teach them it is not allowed. Make change my making them understand these things are not healthy for life of a woman. (S-FGD-KIS-S-NYAN)

Student: Harmful cultural practices, like female genital mutilation, harmful to the girl child. Early marriages affect the girl child (SL-MAL-S-KIT)

The learners also indicated that the government should provide security for the girls faced With female genital mutilation

9.9.21.2 Circumcision

One of the social issues that affect learning that was cited by learners is circumcision in some communities.

Student: Yeah, like cultural things like circumcision in some communities. Yeah you find after a certain period of time, many boys were not in school and they miss school a lot. (S FGD MurS MUR)

9.9.22 Intimidating sexual acts like gayism, fornication.

A parent highlighted the issues of homosexuality and lesbianism as affecting students.

Parent: Long ago we used to have mixed school and those kids have come to hear those things when they are in college. I am biology teacher, and when we put the same sex together you tend to bring homosexuality and lesbianism. There is something we missed when we did away with mixed school. (PA-FGD-NYAKI-S-NYA)

Parent: There are so many bad things that have come up like a child has joined Form one when he is good and after form four ... others want to marry other men. (PA-FGD-NJAB-S-NYA)

9.9.23 Corruption

Parents and students also identified corruption as a pertinent area to be taught to learners.

Parent: currently the issues of corruption, our country is actually dying because of corruption, that is the issue which should be dealt with from lowest level to the highest. *Officer* (PA-FGD-MOIG-S-UG)

Student: Student should be taught about corruption and disadvantage of corruption in the society and how it goes about. When u go to school you be an agent of change in the society. (S-FGD-KIS-S-NYAN)

Parents noted that the issue of corruption and especially relying on godfathers to get a job should be addressed.

Parent: Even corruption contributes a lot on this because even when they pass their exam they fear they will not get jobs at the end of it. And sometime the work is given those children who have god fathers. (PA-FGD-NYAKI-S-NYA)

A parent was of the opinion that issues of corruption should be incorporated in the curriculum so that they are not tempted to make easy money.

Parent: ... avoiding our children of going to astray for looking easy money. And majority of youth are supporting corruption and it overwhelming and majority of them are making good money. (PA-FGD-NYAKI-S-NYA)

Student: Learners should be taught that corruption is bad and also be educated on effects of corruption so that when they grow up, they can work hard to reduce corruption (S-FGD-MUS-S-KAK)

9.9.24 Support for Learners

It was pointed out that students need to be shown love as they go on with their studies

Student...We need love and support for all students even if they get a D they get a certificate...education is the gate to success and without education you can't stand before people and tell them anything. (S-FGD-StCNAM-S-BUS)

Learners should be supported to go through difficult issues. As such guidance and counseling should be in all schools.

Student: I think we should encourage more schools to have guidance and counseling departments so that if someone has a problem they can go and approach and explain the problems if someone has lost a parent... the learners can be able to go, go to them talk give out their problems at least the people who are there knowledgeable about ...issues in they are experienced... help you see your life in the future better than just and pondering on what happened may be three years ago your time is moving, you are supposed to be clearing your school and you still haven't settled down.(S FGD St MarS NAR)

Some learners have talents but are needy. Such learners can be supported through provision of the necessary equipment. Parents observed that poverty has led to the youth dropping out and engaging in vices. They suggested that this could be stemmed if the government could support polytechnics so that those who do not transit to secondary levels can be absorbed and given skills leading to self employment.

Parents: There are parents who are very poor and can't afford. Anaomba mtoto wake akimaliza class eight aanguke mihahi kwa sababu hana fee ya kumpeleka secondary (*they pray for their children to fail exams since they are not able to pay for them*) (PA-FGD-MAKG-S-MAK)

Parents: When 8-4-4 was being introduced, the idea was after finishing certain level you can be employed. That idea of that time is no longer there nowadays. In primary level, they would be taught kushona, mambo ya mbao. If we can make use of polytechnics that are just near us and the government pays for such children, itasaidia (PA-FGD-MAKG-S-MAK)

Parent: the child can join polytechnic after class eight, and then we can have gradual attainment of grades. After attaining this grade you go to the next one. And if possible the government be employing them....if you are a mechanics it doesn't matter whether you have degree or from polytechnic, what matters is the practical part of it. The skill of doing the job as required. (PA-FGD-MAKG-S-MAK)

Different stakeholders were said to be probable support givers. They include government (county and the national government), parents, well-wishers and Organizations like UNICEF, sponsors, CDF, School committee.

A student suggested that more girls ought to be educated.

Student: I wish more girls to be educated more than boys, like in rural areas most of them are not educated they are just looking after the goats. (S-FGD-MARM-S-MARS)

9.9.24 Role of education in Addressing Emerging Issues

The parents indicated that the following issues need to be addressed in the school curriculum; terrorism, peer pressure, HIV and AIDS, security, causes and effects drugs and substance abuse, homosexuality, social media, pornography, how to live with others.

Parents lamented the lack of patriotism in learners which led to lack of integrity in work values.

They suggest that a subject on patriotism be introduced in schools to instill work values.

Parent: on side of education, the students we are producing are money minded. Hata mtoto akimaliza form four, they are not patriotic. Roho ya kufanya kazi hakuna. They look for shortcuts to get rich quickly. If they can get somewhere where aibe mihani apite, it doesn't matter, provided they get certificate. I think from primary to secondary we need a special subject on patriotism (PA-FGD-MAKG-S-MAK)

Parents admitted that they had not done their part to be role models for their children in terms of implicit and explicit values that they ought to teach their children. They requested for parental education to be given to them by the government.

Parent: you see in the society people walk with their children. As you walk you want to tell people this is my daughter. Some parents can't say this is my daughter or son because of the dressing. Unakuta kama mzazi unashindwa kwenda na yeye. (*You find that a parent is unable to walk with their child*). Especially we men. Unashindwa kwenda na mtoto wako wa kike kwa sababu ya mavazi yao. (*You are unable to walk with your daughter due to the immodest way she is dressed*). Lakini wazazi wengine wa kike ndio wanaharibu the daughters (but *some of the mothers are the ones spoiling the daughters*). Because of the clothes they buy for the daughters. Very ashaming yet bought by the mother. Hata mama mwenyewe vile amevaa ni aibu. (*how the mother is dressed is shameful*) . Sijui tutafanye nini? (*What should we do?*) Such mother can't tell the daughter is dressed badly. The society is rotten **PA-FGD-MAKG-S-MAK**

Parent: I think the government should come up with training or seminar of parents on parenting (**PA-FGD-MAKG-S-MAK**)

CHAPTER TEN

QUALITATIVE DATA:

TERTIARY LEVEL NEEDS

10.1 Introduction to Chapter Ten

This chapter presents the qualitative data findings of the tertiary level. It specifically covers TVET and teacher education. The findings are presented in themes based on the objectives of the study. These are the societal needs, competences, content/learning areas, pedagogical approaches, resources, identification and nurturing of talents and cross cutting issues. These findings came from focused group discussion of the TVET and TTC students and parents and interviews of TVET and TTC student leaders and key informants and from the memoranda from the public.

10.2 Teacher Education Needs

10.2.1 General Teacher Education Needs

Teacher training institutions in this study refers to institutions that train teachers that teach at all levels of learning apart from the university. This study sought to find out the needs of teacher education. This information was sought from students from private and government teacher training colleges as well as from parents and key informants. The following are the qualitative findings:

The students advocate for the scrapping of P1 certificate course and instead upgrade it to diploma, because the P1 certificate course is more expensive than the diploma course.

Student: P1 certificate should be done away with, upgrade to diploma. The P1 certificate costs 160 KSH while the Diploma is less yet it's of higher value. (CS - FGD - TTCPKIL – KIL)

Student: The course should be elevated to diploma and duration to be increased to 3 years. (CS - FGD - TTCPMAC - MAC)

KI: The minimum qualification should be a diploma. For lower primary and early childhood education, better qualified teachers need to handle the pupils because this is the foundation of their education (JWM-IS).

The trainees suggested that their course should prepare them to be able to develop a whole child who is able to fit well in society

Student: As a teacher you need to be able to prepare and develop children to be effective in society and it needs many areas we cannot just be taught examinable area, we must be taught how to develop the learners. (CS - FGD - TTCPKIL – KIL)

The respondent said that there is need for competent teachers who are able to identify learners' needs, offer guidance and counseling and have the ability to cope with different culture

KI: To identify the needs. To create content. That is important because how many teachers do we have in this country? I tell you they are many who if you remove textbooks in their hands they are as blank as the next person in the market. The third one would be aah, our teacher education is stillGuidance and counseling teacher whose job is to guide and counsel... The job of teaching is actually guidance, the job of teaching is actually counseling so for me every teacher should of necessity in teacher education be given a good dose of guidance and counseling during training so that every teacher is a guidance and counseling maybe Finally in teacher education, aaah, geographically and politically constituted our country of late so that we have teachers who can only perform in their homes. They cannot adapt to other climates, they cannot adapt to other environment so we need to give them the ability to diverse in culture.... (CEB – DR. CHARLES NYANDIGIRISI - NYAMIRA)

The respondents proposed the need for frequent in service course for teachers to update then on the changes in the education, they suggested the course should be on proficiency not the content.

KI: Pedagogy, in-service, attitude, training on talents identification should be focused on application not the theories (KI-WIPER)

KI: I also totally feel that we need to do refresher courses if the teachers rise to the level of becoming a principal or a head teacher I feel it should not be the many years you have stayed in school there are some who are young and can be good managers and not everybody who is a teacher can a manager-(KI CPC NAI).

KI: I think with change of time things have changed. I totally feel like after every five years there must be special exam that teachers should sit so that these exams determines what level they are at. Whether you need refresher courses or whether you are weak at some point you need to be helped because you know again we are different and we cannot say all teachers go and do mathematics. I don't think we are doing it right we need to be very specific, identify the weak points and the teachers can actually say the ones who were trained earlier may be they were not computer literate, so after five years there can be some of things that tells you must be computer literate by this time-(KI CPC NAI).

KI: In the teaching education we need to mount regular in subject for our teachers, secondary school association do workshop for them but primary school teacher has left 30 years down the line nobody has in serviced them, so they keep on using the same content... officers from KICD who had come and we called the private school teachers and most of them had not seen the syllabus they were using the outdated, so I think of in servicing and professional development workshop, and then we need to look at the content that we are teaching at the college level, university level so that we meet the demand. (KI-CDE-KIT)

KI: There is mass production of teachers and many of them when they come ...in fact you spend more time managing the teacher than managing the child. **(KI-CEE-KAK)**

KI: we must have a well programmed teacher in service training which is graded and is a must you go through this training to go to the next stage ,no promotion if you haven't gone through the said stage i.e. Japan we should train the teachers to change them. Pre serviced teacher syllabus should come out in time that those who come out of the system are already in the system when it is being implemented. ... For serving teachers the need rigorous in-service retraining; it is not training on the syllabus but it is on proficiency not the content. TPC is for promotion but this is for reengineering the teacher rebuilding the teacher in the content in service is for everybody and should focus on 21st needs of the century. Curriculum is endangered if granddads graduate with yesterday skills. **(CEB – OYAYA – SIAYA)**

KI: Constant capacity building of teachers is important. You know we have teachers who just come into the system and just stay there. I like what the teacher service commission says, that these people should be renewing their licenses... **(KI-TCD-GAR)**

KI: our teachers are still former students who are not grounded in practical skills... they also limited, because even at college level they are limited to practical subjects... they have been exposed to listening and talking which is not good **(KI-MCDE-KAK)**

KI: A provision for the teacher within five years to have at least an added capacity for at least one year of capacity building **(KI-MCDE-BUS)**

KI: they need to create time for a course to also to update their skills and knowledge... go for deduction even for three months to update certain skills that can help the coming up students...sustainability continues ... So that when the target group has been trained for consistence that every two years people will be going to update their skills in this area ...people will teach practical project method they will use all other method that can enhance capacity in children ... **(KI-NACECE-BUN)**

KI: Change of attitude, in-service and pre-service training of teachers on pedagogy and mastery of subject to be taught. **(KI-TCD-GAR)**

KI: There is no quality of education that is higher than teachers, we have to improve of education to improve the quality of teacher, and if we have to improve the competency of learners then it must come from teacher... the government and ministry they are coming up with policy. ..How long must a teacher go back for training? **KI-CEMASTEANAI)**

KI: they need to create time for a course to also to update their skills and knowledge... go for deduction even for three months to update certain skills that can help the coming up students... sustainability continues ... So that when the target group has been trained for consistence that every two years people will be going to update their skills in this area ...people will teach practical project method they will use all other method that can enhance capacity in children ... **(KI-NACECE-BUN)**

A key informant mentioned that there is need to update the capacity of the teacher trainer and the trainer of trainers at the university.

KI: so we need also to put structure and systems to improve the trainer of the teacher and the trainer of the teacher trainer you need those systems... Yes, improve the ways teachers are training. **(KI-HQUASO - PWANI UNIV)**

The respondents proposed the review of admission criteria for teacher trainees at PTE and diploma level. Currently, the entry levels are very low and proposed that people who get grade A should be the ones joining teaching and must be paid well

KI: I feel that as we seek for doctors to have A, the people to join teaching should be the people who are A and they should be paid very well. Why? A teacher teaches other professions, so teaching is biggest profession ever because you are taking care of other professions. How do you teach me to become a doctor and you performed poorly? Are you teaching me to get an A and you got a c+ or c-? The students who pass very well, the A students should actually go into teaching so that they can be lecturers and teach doctors who might have scored B or an A- . But teaching must be the best paid profession in this country **(KI CPC NAI)**.

ME: The minimum qualification should be a diploma .For lower primary and early childhood education, better qualified teachers need to handle the pupils because this is the foundation of their education **(JWM-IS)**.

KI: Basic qualification, for people going to be teachers should actually be higher...the most important thing for a person is the content that that person has. But the content they have gotten in high school is key and the potential they have...we have teacher education ECD, then primary.... Clustering, you know currently we have teachers teaching almost everything. The issue of clustering should arise so that the teachers are clustered **(KI-TCD-GAR)**

The respondents expressed the need for professional development among teachers, for 21st century changes, as well as making signing of teachers' performance contracts compulsory since their role is key in education

KI: The role of the teacher is so central and focuses to be given on the 21st century teacher we need. Signing of teachers' contracts should be made compulsory. Gender equity and equality should be stressed. **(KI-FAWE-NAI)**

KI: Because the TSC has now picked on the act the issue of professional development and KICD is now coming up with a curriculum. I think there will be an important linkage between them and us, so that we can see how well that can be delivered and the structure of teacher education is very good, they have head of department , in-charge of exam, so already we have a structure, and I think we should learn from Japan and China on how they have structured their education system, I think the way they have structured that once a teacher joins a school, there are already teacher mentors to be; so that they don't assume they have all the knowledge, he is coming to an environment he is supposed to gain further induction.**(KI-UNESCO-NAI)**

The respondent suggested that the teacher should be well motivated so that they are able to deliver.

KI: yeah our teachers need to be motivated, in all ways possible... in all possible ways, he is better than anything in the world... before you become that doctor, you pass through that teacher. The teachers, they determine so many things in our society right from primary, secondary...., that's the person who will determine life, all of us here, remember our nursery teachers. Partially the reason we are the way we are, so I think our teachers, better salaries, better resources, better houses, allowances, traveling, will be motivated. **(KI-FGD-PWN)**

The respondent emphasized on the importance of adequate preparation of teachers in order for them to be able to effectively implement the envisaged curriculum.

KI: We can come up with good curriculum but if we don't train our teachers, will they be able to implement this curriculum (**KI: REG-LAU**)

Respondent suggested that the teacher education curriculum should be reformed and made attractive to the top performing students so that they can effectively implement the curriculum

KI: we need to reform the curriculum in a manner that attracts students, the top students to teaching, the top students will be the best teachers, if we have the best students and the best teachers delivering a curriculum then, we can expect outcomes of the curriculum to be more effective and the impact in the market (**KI-SGKN NAI**)

The respondent observed that there is need for teachers to act as role models to students

KI: We might not succeed if we just look at the curriculum in our schools and ignore the implementers. You can have the best of the curriculums in the world but those to implement it are not ready for it or are not well trained, there is a big problem in fact it would be advisable especially from your end look at the curriculum in teacher training, look at the curriculum students learn at the university because the character of the teacher is what forms the child and even in Kenya I know we have the history of good teachers who are known and whose products are seen because like Griffins of Starehe and even the one of Alliance Khaemba you know people are looking up to them as role models because the students they produced can be seen. (**KIT - BIS. ONYUKA – HOM**).

The respondents suggested that teacher Training colleges should impart enough skills and competencies to their trainees

Parent: ... You may find a teacher is supposed to teach computer, but he is not trained. Technical schools used to train teachers thoroughly. The teacher would be very competent in what they do. But today the teachers are shallowly trained. The training of the teachers should be thorough. If it's a teacher for tailoring, he/she should be well trained. (**PA-FGD-UNOAP-MAK**)

The respondent expressed the view that the training of teachers does not provide teachers with adequate practical skills.

KI :our teachers are still former students who are not grounded in practical skills... they are also limited, because even at college level they are limited to practical subjects... they have been exposed to listening and talking which is not good (**KI-MCDE-KAK**)

The students expressed their desire for education to enable the trainees to be persons who are not only holders of certificates but responsible in society and transformers of the community where they come from and to enable their students to have skills.

Student: We are saying that the education must produce teachers who are positively responsible to the society, individuals who have not only certificates but who can help the community, and must also produce students who have specific skills (**CS - FGD - TTCPCBAR - BAR**)

The respondent expressed concern that there is a mismatch in training colleges in relation to what trainers learned at the university and what they actually handle at the TTCs

KI: They have been let down. People training in TTCs trained in university specializing in subjects like Biology, Chemistry but when they go to colleges they are teaching general sciences and therefore do not use the skills they were trained in. Principals who fail to deliver in leadership are dumped here. Are we really getting the right products? Lecturers in university are BSc. Graduates no teaching methodology (**KI – CDE – BUN**)

10.2.2 Teacher Education Competencies

Competency is a set of defined behaviors that provide a structured guide enabling the identification, evaluation and development of the behaviors in an individual. Some scholars consider "competence" to mean a combination of theoretical and practical knowledge, cognitive skills, values and behavior used to improve performance; or a description of skills, knowledge, attitudes and behaviors required for effective performance of a real-world task or activity (Weddel, 2006, p2). Competency is related to capacity, that is, a person's ability to evaluate information received and make choices based on the same. It is a word used to denote a person's ability to acquire, retain and evaluate information (Drew, Hardman & Hosp, 2008).

Teachers need to be equipped with some competencies to teach effectively. This study sought to find out the competencies that should be included in teacher education curriculum. The competencies were sought from TTC students, parents and key informants. Competencies identified by respondents are: Guidance and counseling, teaching, assessment, Life skills, social skill, living together skills, veterinary, slaughtering of animals, home Science, carpentry, agriculture entrepreneurship, internship skills, mentorship skills, life skills, alternative means of assessment apart from academics, handwriting skills.

The student said they need to have competencies on social skills, communication skills in English and Kiswahili, leadership skills ability to work with other staff members, ability to handle different children and social skills

Student: Since we are teachers we need teaching skills Communication skills, sign language, ICT skillsthose talented with Technical skills should develop them fully....Skills in management and administration....Knowledge in specific subject areas and ...I mean specialization: (**CS – TTCMAC - MAC**)

Student: Being a teacher because this is a teacher training institution, I want to leave here as an all rounded person. He who can do everything, because we are trained in very many skills of life, how we can improve ourselves, work with the resources and more so how we to live in any surrounding. As a teacher I would like that when I live this college I should be the one who can deliver what I have learned and impact the values I have learned here in college to the young ones. (SL- TTCP- MIG- MIG)

Student: Education must produce students who are positively responsible to the society, individuals who have not only certificates but ...have specific skills. CS - FGD - TTCPCBAR - BAR)

Student: we should be prepared with communication skills...in English and Kiswahili....so as to teach everywhere in the world, also to teach and deliver in any subject at primary level... (CSL-TTCPCMAC - MAC)

Student: ability to work with others as trainees we should know how to handle different children, situations, management of school, and how to handle staff, relationship with the public. Good leadership skills and how to handle students. (CS –FGD -TTCPSHA- SHA)

Student: They should also include other skills like social skills, so that we reduce these things like tribalism and whatever. . (CSL – TTCP - NAR -NAR)

The respondent stated that teachers should be equipped with certain competencies such as handwriting skills. Since teachers are unable to write well on the board. They lack basic skills like observing proper hygiene and maintaining cleanliness in the classroom. In addition teachers should be equipped with skills like veterinary, slaughtering of animals, home Science, carpentry and agriculture

KI: Things like handwriting you start training again a teacher because those are some of the things we are expecting to see the basic skills. They can hardly write on the blackboards neither can they write well, in fact you go in some classes to see the positioning the book. You find even the teacher doesn't understand they go to the toilet and doesn't wash their hands. Even sweeping you find like you should pour water on floor before sweeping but practically you don't find the teacher doing that, you find the teacher supervising children and there is dust all over so that one is for the exam, the real practice is not instilled in the children So as much we learn the general but also the specifics are very important because I remember during the colonial times the teachers who were trained then..... ... This teacher would go to treat a sick cow in the village..... and if it came to slaughtering they knew so you could see this teacher applying the skills. Others were very good in carpentry..... other would find out they are good in agriculture, ... the lady teachers did home science and they would even make soap, children would be told to bring pieces of soap .children those day could make simple things like butter because there was a lot of milk ghee, cheese, tell the children of nowadays they don't know they are no longer there simple things like baking and making a simple meal but today it's not there. (KI-CEB-NAR)

The respondents expressed the concern that the training of teachers is impractical, and proposed teachers should be exposed to practical teaching skills

KI: our teachers are still former students who are not grounded in practical skills... they also limited, because even at college level they are limited to practical subjects... they have been exposed to listening and talking which is not good (KI-MCDE-KAK)

KI: TTCs are struggling to meet the academic requirement and not children requirement. Take teachers through pedagogical approaches and give them time with the child as their target. The teacher must deliver according to the needs of the child. **(KI-CEC-BUN)**

KI: teachers should understand what they are supposed to do .teachers also need to be empowered. **(KI-CUE-NAI)**

KI: I would very much recommend on practical in teaching approach where by students are exposed to practical work....Develop teacher methodology to bring out teacher to more practical work during their training so that they can pass the same methodology to students, when they get more of the theory they will also give theory, but if they are exposed to practical they will give more to students, and we need to come up with these competency so that they can have practical curriculum and also they make use of proper teaching resource and materials.**(KI-CBE-KIT)**

The respondent suggested that teacher education should train on sensitivity and observation skills to identify and nurture diversity of learners and learning needs.

ME: It would be prudent for teachers to be trained so that they are more observant to their student's abilities. My daughter is a left-handed child in intermediate - nursery. Each year, I have to bring to the attention of the teachers about her being left-handed when she faces pressure or 'gently' forced to write with her right hand. If teachers were trained to identify these talents, am sure they would be able to bring out the best in the students. **(ME-SN-IS).**

Respondents proposed inclusion of skills in handling indiscipline among learners in the teacher education curriculum

ME: The total ban on corporal punishment in 2001, teachers have not been equipped with different skills of handling indiscipline among learners... For sustainability, teachers should be imparted with positive discipline skills. **(ME -KCP-RI)**

The respondents advocated for development of skills that enhance life in the 21st century. Such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking

KI: Soft skills; 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness, and Teacher professionalization programmes through mentorship. **(ME-CEMASTE).**

KI: Competencies related to life skills development in areas of negotiations, communication, relating to strangers are crucial for young children. For those who are training as their teachers need to be more careful to exhibit the very values desired of the children. **(ME-BK-IS).**

10.2.2.1. Values and Attitudes

Values are the principles and fundamental convictions which act as general guides to behavior, the standards by which particular actions are judged as good or desirable (Halstead, 2000). Other views indicate that values are the ideals that give significance to our lives, reflected through the

priorities that we choose and that we act on consistently and repeatedly (Brian, 2004).It is important for the education system and the curriculum to foster values and attitudes among the teachers who should inculcate them in student's. This study sought to find out the values and attitudes that need to be included in teacher education curriculum. This information was sought from the TTC students, parents, key informants and from the memoranda .The respondents identified the following values:

Role models, Peace, socialization, love, integrity, honesty, respect, transparency, obedience, responsibility, kindness and love. Loyalty, consultation, helping others, appreciation, corruption and peace, responsible citizenship, kindness, trustworthiness, harmonious co- existence, generosity, unity, integrity, cohesion

Student: Things like racism and tribalism, lecturers should also take time to encourage students. To avoid such acts in school and to have a peaceful nation (**CS-FGD-TTCP- KAG-NYE**).

Student: I think about the politics in the country...the education should maybe emphasize on integrity (**CS – FGD - TTCPP - MAA -KAJ**)

The students identified the following as values

Student: Eradicating tribalism and emphasis on national unity, nationalism and emphasis on cohesion (**CS - FGD- TTCPMAC- MAC**)

The students were of the opinion that college students need to be taught how to avoid tribalism and corruption.

Student: I think we need to be taught how to co-exist as Kenyans...we need to be taught how to avoid tribalism...corruption and so on. ... (**CSL- TTCPMAC -MAC**)

Student: Yes they can. When you involve them in these issues like sharing together...they will also know that this is part of me, so that they avoid the situation of saying you come from this or that tribe (**CSL – TTCPP – NAR - NAR**)

Unequivocally learners said that education can help people resolve conflicts in society hence live harmoniously in unity.

Student: Hmmm...maybe conflict resolution...yeah it can help. If there is conflict between people, between families, you can use the knowledge that you have and it would really help in resolving the crisis (**CS – FGD - TTCPP - MAA - KAJ**).

Student: Ok. These learners should know that in Kenya, we are living as one. They should know that we are living in harmony with each other. So they should also develop that attitude of mindful to others, being generous to others, honesty, those attitudes (**CSL – TTCPP- NAR- NAR**)

Student: They should know...how to walk together as a community. For example, in school here, we are encouraging our students here as we are being encouraged by our teachers to work together in group work. We are promoting that coming together. In working with this person, I will assist him or her and they will assist me too. That coming together enables people to socialize and also use their time in a positive way (**CSL – TTCPP – NAR - NAR**)

KI: Issues concerning conflict resolution be included, assessment should be comprehensive. . (**KI KPSEA UG**)

The respondents proposed that curriculum should revive the values of the society which includes honesty, diligence, caring, compassion, patriotism and morals.

ME: Values are eroded in our contemporary society. There is need for a curriculum that emphasizes on reviving values like honesty, kindness, love, unity, trustworthy in young children. Such values will uproot corruption which is the cancer of the nation. (**ME-DBK-IS**)

The key informants indicated that our curriculum should put a lot of emphasis on content and no other aspects of life like humanity, dignity and values. The curriculum should address aspects like care and love.

KI: The value of the education is not just the degree. There are the other aspects of our life, the humanity, the dignity, the value, you know? Basic things that are in us. And all the other things we used to see in international schools, we used to see at KCCL. The first thing we look for is a happy child. While really, this child can cheat to cover content can do manner, all manner of things. So our curriculum doesn't teach us to care, you know. It doesn't teach us to care, or to love, or. I mean, it's, I don't know, it's strange. (**KI-CITAM- NRB**)

10.2.3 Talent Identification and Nurturing

Teachers need to be aware of the ways of identification of talents among the students and how they can be nurtured .This study sought to find out the ways of identification of talents and how they can be nurtured. The findings were sought from TTC students, parents and key informants and from the memoranda.

10.2.3.1 Identification of Talents

Respondents identified the following talents: music, reading, drawing, writing, football, swimming, creative arts and drumming

Student: If the child is talented in the drum thing we ensure that he or she performs to their level by establishing some talent academies (**CSL TTP BAR BAR**)

Student: Education system in our country should be in such a way that it is fair to everybody.... the current education system is more of examination oriented...there is a group of students who are not gifted with these brains...this is where...we need an education system that will have things like talent schools...there is a person who is talented in swimming, music...if we have something like football academy, like it is done in those countries that are developed, you can find somebody 6 years old and already in a football academy, now you shape the life of this child in to the right direction that is in future this child will be able to do what he is good at such that we will not leave anybody outside. (**CS - FGD - TTCPCBAR - BAR**)

The student suggested that talents could be identified during the teaching of creative arts, physical education and sports

Student: talents can be identified when teaching creative arts.....during physical education and competitions. (CS - FGD - TTCPMAC - MAC)

The students identified the need for them to have lecturers who are good at identifying talents and are also good role models.

Student: I think we should have talented and qualified lecturers who can be role models for us....and can help to identify talents in students. (CSL- TTCPMAC- MAC)

In addition the students advocate for the use of professionals in identifying talents.

Students: use the professionals we have in the country for example the footballers like Wanyama.... in identifying the talents. (CS - FGD - TTCPBAR - BAR)

The students further indicate that talents can be identified through participation in activities in school at home and in churches.

Student: You know when these pupils are young...that is when they realize their talents...like creative arts and music...so if the music was introduced, at least it would be better...because there are those students who maybe don't have an opportunity to go to church and sing...and realize their talent. But then when they realize they will be doing it... (CS – FGD – TTCPP – MAA - KAJ)

Student: For example, in creative arts...there is this imaginative quality. You will find that there is that person maybe while drawing cows grazing...there is that person who does it very well, such that you see he or she never struggled in any way. You see the person has drawn it clearly. Yes, it is a cow grazing. You also find that there is another person...the teacher can tell that that person is talented (CS – FGD- TTCPP - MAA -KAJ)

Student: The learners have different talents. These talents we can be able to see in a child from a very young age. So the interest of the child maybe is having an interest in maybe football. You can just see that this learner might be interested in this. These outdoor activities should also be encouraged (CSL - TTCPP – NAR- NAR)

The respondent in addition said practitioners need to be involved in the identification of talents.

ME: Practitioners must be actively involved in the identification of talents at all levels and in all relevant fields. Physical activities, Community service, spiritual activities, arts and crafts, and creative arts are all areas that include search for talents. (ME-KCCB-RI).

10.2.3.2 How to Nurture Talents

This study sought to find out the methods that can be used to nurture talents among the learners .The findings shows respondents suggested the following as ways of nurturing talents among the learners:

The TTC students suggested the is need for provision of adequate time for games and academics

Student: .Be given enough time, in an institution, that a teacher comes in to have a lesson to in between the time for games, so this teacher does not see the needs to nurture talents, giving equal time to learning areas (CSFGD TTCP NAR NAR)

In addition the college student expressed the need to expose learners to activities where talents can be identified and provide adequate materials and talented human resource e.g. competing in music festivals and drama outside the school

Student: So on the side of talent exposes them, give them materials and then provide a conducive environment for the play and for performing their talents and activities (CSL FGD TTP BAR BAR)

Student: You find it is very difficult to nurture other people's talents because the facilities are not there. .. In the field of athletics there is nothing in the field that you can call a field for athletics, hand ball, rugby. So those facilities must be equipped in order to nurture people's talent in college (CS FGD TTCP MIG MIG)

Student: Institutions like Kenya Polytechnic they have shown where they host celebrities to nurture them but in a TTC and here I've never seen that. So you can find people are here and they are musicians but the way of getting that talent out of them is very difficult because things like shows are not conducted here. ...you find something like entertainment. During the week you have been busy but during the weekend you need something to refresh your mind you need to entertain yourself, listen to music but you find that those equipment are not available like the systems (CS- FGD –TTCP- MIG- MIG)

Student: This can be done by providing equipment to assist in developing talents such as piano, recording room and other relevant materials (CS - FGD - TTCPMAC - MAC)

Student: They can provide game facilities ...participation in games, music festival. We should have talented and qualified lecturers who can and grow talent in students. Talents can also be grown through club work....and lectures can help us to participate in inter college activities. (CSL TTCPMAC MAC)

Students: avail resources, organize talent shows, and encourage participation and provide a variety of equipment and leaner is allowed to access the equipment. . (CS - FGD - TTCPMAC - MAC)

In addition the students suggested that teachers need to be creative and improvise materials that can be used for talent nurturing rather than buying

Student: The teachers should also be creative and use improvised materials to bring out the talents in children. We should then be given the materials to improvise for example balls. (CS - FGD - TTCPBAR - BAR)

The TTC students also suggested the need for establishment of talent academies and clubs

Student: If the child is talented in the drum thing we ensure that he or she performs to their level by establishing some talent academies (CSL TTP BAR BAR)

Student : They can set aside a training (center) so that after here we go and they can polish you up...to improve on what you have...so that after that you can be released into the industry...if it is music you can be in the music industry (CS – FGD – TTCPP - MAA – KAJ)

Student: education system in our country should be in such a way that it is fair to everybody.... the current education system is more of examination oriented...there is a group of students who are not gifted with these brains...this is where...we need an education system that will have things like talent schools...there is a person who is talented in swimming, music...if we have something like football academy, like it is done in those countries that are developed, you can find somebody 6 years old and already in a football academy, now you shape the life of this child in to the right direction that is in future this child will be able to do what he is good at such that we will not leave anybody outside. (CS - FGD - TTCPPBAR - BAR)

Student: Talents can also be grown through club work....and lectures can help us to participate in inter college activities. (CSL TTCPPMAC MAC)

The students suggested the provision of swimming pools in their communities for nurturing of talents

Student: There are also some that have been forgotten like swimming, there are some who swim in rivers and are very good, if they could be facilitated with one swimming pool in one zone it will help to nurture these talents and take as far (CSL TTP BAR BAR)

Unanimously, learners suggested that talents can be nurtured through government networking with schools and colleges and in sponsoring the development of talents

Student : I think the government can come up with a forum in that...ok...they communicate with the colleges and schools...whereby...a person is talented in something like music...there should be that communication whereby...if I am talented in something...the government should have that knowledge that somebody called this...has talents in this and this. So, at least the know how to get that person. (CS – FGD – TTCPP - MAA- KAJ

Student: Maybe if I am talented in music...they can like...connect me with those people...because I don't know the production whereby maybe if you were like a musician...they can help you now to go and start whatever you were talented in. (CS FGD – TTCPP – MAA – KAJ)

Student: Maybe if you are talented in creative arts, that are the art and craft, I think the government should come up with a process that they make room for those who are talented. They go and participate in that drawing...and after each drawing (competition), the participants are rewarded...maybe in terms of money so that they can boost themselves. (CS- FGD –TTCPP – MAA – KAJ)

Student : I think you should come up with institutions..., which...they can sponsor them and through them people who get chances can polish up...instead of...I think that's the best way. (CS – FGD- TTCPP-MAA - KAJ)

The students said that those who excelled in talents should be used as role models to share their success stories with other students

Student: Those who excelled in areas of talents should be used as role models to share their success stories. (CS - FGD - TTCPPMAC - MAC)

The students were of the opinion that recreational centers be set up to support nurturing of talents

Student: Multipurpose recreation centers, if we take music e.g. the various talents can be enhanced with the relevant instruments (CS - FGD – TTCP –THO – KIA).

10.2.4 Content/Learning Areas

Learning area refers to content to be taught and learnt. The school curriculum defines learning areas as content to be taught and learned, by whom, when and where (UNESCO-IBE Korea – 2015). This study sought to find out the content /learning areas that should be included in teacher education curriculum. This information was sought from TTC students and parents in focus group discussion and from interviews with student leaders and key informants, and also from the memoranda .The qualitative findings are:

The students suggested to be taught the following: Chemistry, Biology, Mathematics, library science, soccer, Agriculture, Medicine, engineering, Bible Study, Science, Mathematics, Computer Education and Kiswahili, wood work, metal work, security, terrorism, Motivational speaking and guiding and counseling, mentorship, racism and tribalism, entrepreneurship

Student: Like introduction to business, entrepreneurship, I think it would be better as we wait for employed by the government. The schools are becoming at least they are increasing the private schools but still they are under paid as you can see if somebody had a business idea as he is awaiting this time, this period, this 10 Years in future I believe it might go up to 20 years to be employed we need to be diversified (CSL – TTCP- BAR -BAR)

ME: Some of the areas to explore in the revised curriculum should include soft skills such as entrepreneurship, leadership training and mentorship (ME-Collins Ouma, DN, 2016).

The students added that they needed to be taught about the prominent people

Student: we have some people that are in minds of people, though they are deceased but to the people who saw them they felt like they contributed to the being of our country and maybe there participation in politics so much appreciated though we find that such people, some of them are not captured in the syllabus in that the current generations cannot be aware of them ... somebody like Robert Ouko. I've heard so much about him but I've never read anything about him (CSL – TTCP – BAR -BAR)

Respondents' further added they needed to be taught about stress management

Student: You will find that maybe someone has a social issue at home and the only Solution what he thinks of is committing suicide, so I think that such issues also when they are

incorporated in the curriculum they may also help to relieve such issues (**CSL - TTCP – BAR - BAR**)

The students expressed their desire to be taught the following subjects, Religious education creative writing , performing Arts, Insha/composition, Poems/ poetry, comedy and drama, technical subjects such as creative arts, home science and agriculture

Student: Religious education is a must so that we can get values and attitudes...subjects which help in nurturing talents such as creative writing and performing Arts, Insha/composition, Poems/ poetry; Comedy and drama....technical subjects such as creative arts, home science and agriculture should be emphasized. (**CS - FGD - TTCPMAC - MAC**)

Though some students wanted to be taught specific subjects, there are those who thought more time should be spent on teaching methodology instead of theory and time for teaching practice as we as preparation of teaching resources to be increased

Student: Teacher training course should emphasize more on teaching methodology instead of theory. Time for teaching practice should be increased and enough time allowed for preparation and making teaching resources. (**CS - FGD - TTCPMAC - MAC**)

Student: .Most of the things should be to prepare the learner, e.g. methodology, how you can teach. Somebody (**CS -FGD –TTCP –THO-KIAMBU**)

ME: Dedicate more time to practical teaching and professional formation of the teacher than theory in the teachers training. Pay greater attention to teaching practice and educational management. (**ME-KCCB-RI**).

Student: I came to college to be trained on how to teach but not to lean a lot of what we learnt in high school and primary. We should be taught only basic things such as how to teach and just basic skills. We don't need to be taught algebra etc. You need to be taught the methodology but not theoretically to understand how you will be required to teach. (**CS - FGD - TTCPKIL - KIL**)

Respondents suggested that Teacher training colleges should equip teachers with competences of 21 century and professional development and include values

ME: Training of teachers be overhauled to fit in with the modern demands of education in the 21st century; Concentrate on professional formation of the teacher as opposed to the current practice which dwells on the academic formation of the teacher. ..Re-introduce and emphasize philosophy of education and other educational foundations courses in teachers training colleges. For every subject there must be a competency, value and attitude to be acquired at the end of every course. This will make it easy to domesticate the skills. (**ME-KCCB-RI**).

The respondent was of the opinion that at the college level the teacher should be taught pedagogy, mastery of subjects, and communication in Arabic language

KI: At teacher education the teachers should be taught pedagogy – mastery of subjects, communication in Arabic language, professional development. (**KI-TCD-GAR**)

The respondent suggested that life skills should be addressed in the teacher training curriculum

KI: such things like life skills is not even taught to the teacher for them to deliver so maybe something in the curriculum of teaching something on life skills maybe introduced so that the teacher knows that there is an extra subject to be done in school other than the subject he is coming to teach. (**KI – CEC - SAM**)

The student leader indicated the need for the teacher trainees to be offered the following subjects irrespective of their specialization, environmental studies, leadership skills, integrity and constitutional core values, mathematics.

Student: I think there should be more emphasis on core subjects which should be mathematics and environmental studies....I cannot forget integration of leadership skills, nationalism, integrity and constitutional core values regardless of subject of specialization. This is coz as a teacher when you go to that class; you become a leader...a role model for the learners. Otherwise we will be manufacturing wrong characters in the society. KICD should consider that as they do the new curriculum. (**CSL -TTCPMAC - MAC**)

KI: Issues concerning conflict resolution be included, assessment should be comprehensive. **KI KPSA UG**)

ME: Environmental conservation including flora and fauna welfare should be encouraged and taught so as to help not only preserve but also have our biodiversity flourish. (**ED-AC**)

Students suggested that non examinable subjects in primary school such as P.E should not be taught, however another one contradicted him by arguing that that there is need to be learn all because the syllabus can be changed anytime and you have to teach them if they are reintroduced

Student: Subjects that are not examinable should not be emphasized or learnt at the TTC, for example PE. (**CS - FGD - TTCPKILI - KIL**)

Student: I think we need to learn all because the syllabus can be changed anytime and you have to teach if they are reintroduced. (**CS - FGD - TTCPKIL – KIL**)

The students expressed the need to be trained as carpenters, drivers and farmers so as to impart same skills to the students

Student: After our course there is knowledge that we are supposed to gain to integrate with qualified teachers... in the classroom there are some pupils not comfortable working in class but if you impart something in them that can help them be carpenters, farmers, drivers and we have even be taught something in ICT (**SL – TTCP – MIR – MIR**).

The student suggested subjects that are taught in primary schools should be taught in TTC. Hence the need to be taught music

Student: Ok...maybe an example of a TT College; it should be the same as what we are going to teach there. It should not be like here we are being introduced to music...and when I go out there, I cannot teach anywhere. So, they have to ensure that whatever is in this TTC, they are also back there in our primary schools. (**CS – FGD –TTCPP - MAA - KAJ**)

Key informants pointed out that teacher education should have ICT integration as a major component to facilitate learning and skills acquisition

KI: we must integrate ICT as an important tool for the teacher, not only being IT expert but on the resources and changes to information, because ICT should be a gateway to information to enrich and also apply so if we talk about teacher education we should look at teacher in terms of ICT, engagement, we should look at attitude of that teacher, the kind of skills that can help the teacher and make use of content, Teacher Education should be more of practical.... so if we can front Teacher education system at pre-service that delivers those competency towards skills and attitudes and integrating ICT, so then we have a good composition. **(KI-UNESCO-NAI)**

The students gave the opinion that students should be empowered to manage families.

Student: They should be taught on how to manage family as they are so close to marriage age **(PL- FGD-KIP-UG)**

The respondent suggested that teacher education should train on sensitivity and observation skills to identify and nurture diversity of learners and learning needs.

ME: It would be prudent for teachers to be trained so that they are more observant to their student's abilities. My daughter is a left-handed child in intermediate - nursery. Each year, I have to bring to the attention of the teachers about her being left-handed when she faces pressure or 'gently' forced to write with her right hand. If teachers were trained to identify these talents, am sure they would be able to bring out the best in the students. **(ME:SN-IS).**

One of the respondent in the memoranda suggested that CRE, social ethics, pastoral Programme of Instruction, guidance and counseling, and Health Education to be taught and made compulsory at teacher education levels.

ME: CRE be a compulsory subject at teacher training colleges....to promotes sound moral and religious values among learners. ..guidance and counseling to enhanced and offered ...the church to be involved in identifying and recommending teachers who are assigned these subjects (CRE, Social Ethics, PPI and Guidance and Counseling). **(ME-GA-RI).**

A respondent proposed inclusion of ways of fostering positive discipline among the learners in the teacher education curriculum.

ME: following the total ban on corporal punishment in 2001, teachers have not been equipped with different skills of handling indiscipline among learners... For sustainability, teachers should be imparted with positive discipline skills. **(ME-KCP-RI)**

The respondents expressed the need for the curriculum to include the national values as enshrined in the constitution, and further, that civic responsibilities should be emphasized.

ME: The curricula at different levels should aim to enhance Accountability, Integrity, Responsibility, Peace, Commitment to work, Negotiation, Acceptance and environmental preservation. This can be achieved by involving learners in community service at all levels during holidays hence inculcating Nationhood in learners. **(ME-OCO-IS).**

ME: Values are eroded in our contemporary society. There is need for a curriculum that emphasizes on reviving values like honesty, kindness, love, unity, trustworthy in young children. Such values will uproot corruption which is the cancer of the nation. **(DBK-IS)**

ME: The content of the curriculum should emphasize ... acting in an upright manner, yet just teaching abstract values will not be enough; we must make them real and practical/experiential so that people have the knowledge to live with integrity. **(ME-WM-AC)**.

KI: I think in teacher education, apart from content... the kind of competency we want to look at a teacher is attitudes and values, the commitment on what they do, the driving force, because if a teacher does not have right attitudes and develop right skills in the process then I think we are lost already. ..Build more of attitudes and how to use the knowledge they have. **(KI-UNESCO-NAI)**

Key informants expressed the need to train teachers in information in order to meet skills demand and stimulate industrial development

KI: Should also become a mandatory requirement that all teachers must be taken through a curriculum for IT competencies **(KI-CA-NAI)**

The key informant was of opinion that the teaching on sexuality encourages learners to develop rational set of personal values, attitudes and skills for meaningful and respectful relationships. In view of this, the key informant said there are some negative sexual misconduct such as homosexuality and lesbianism happening practically in every school and could be addressed through sexuality education.

KI: with what we are seeing today the media, which was not there many years ago, that one should have a curriculum, I know judges will be opposed but the truth of the matter is we are the parents these are our children we must address issue of sexual education, that's an emerging issue **(KI-KNPA-NAI)**

Key informant explained that it was important for the preschool teachers to be taught the developmental milestones of their learners in relation to their respective ages.

KI: Teachers should be given a lot of competences especially ECD being made to know the levels of the kids and what they need to know the mental score so that they don't overdo it because of lack of training of ECD teachers the teachers should be able to know the score, age and what the learners can take at their particular ages. They should also not give so little that the child is not challenged. **(KI – PAS. JOHN MACHARIA - NAIROBI)**

The key informants suggested that education policies e.g. TSC act, the code of conduct and ethics should be taught to the teachers

KI: So they seem to lack knowledge on TSC act, the code of conduct and ethics, they also seem not to know much about the basic education act and what is required of them, the legal frame work that governs education and that governs teaching and learning, so you find they make very glaring mistakes which land them into problems with employer or even with judiciary system. So something should be done to incorporate that if not then the employer might think or we may have to propose an internship or some kind for anyone who wants to be a teacher before they are employed by the commission. **(KI-TCDE-NYE)**

The key informants pointed that teacher education should include child /student psychology to enable them handle young learners

KI: When we talk of teacher education when they go through their two year course they should be able to demonstrate competency in curriculum delivery, they should also be to have team work, spirit work, they should also have good understanding of child psychology because all their life they are going to work with child and understand child well in order to deliver well. **(KI-CBE-KIT)**

10.2.5 Resources

Resource refers to any inputs that are used in the learning environment to effectively achieve the desired outcomes. These could be human, infrastructure, realia or financial resources. Resource is also referred to as teaching and learning curriculum support materials. Resources in education play a very important role in facilitating learning (McAliney, 2009). For effective curriculum implementation, quality physical and human resources are required. Resources enhance learning by making it enjoyable and enhance understanding. This study sought to find out the resources that are needed for implementation of teacher education curriculum. The findings are from TTC students, parents and key informants and the memoranda .The qualitative findings are:

Respondents identified the following resources as necessary for the implementation of teacher education curriculum: Books, electricity, musical instruments, smart boards, hand ball, rugby, balls, play grounds, laboratory, more colleges, library, universities and polytechnics

In addition the students expressed the need for more classes' laboratories and equipment in schools where they conduct their teaching practice to reduce congestion

Student :We have gone to teaching practices where you will find 60 to 70 pupils in a class; I think the government should do something to expand these classes so that we can have at least pupils which we can handle, at least 35 because 70 is like teaching a double class **(CSL – TTCP - BAR - BAR)**

Student :The classroom, the accommodation sites, food and so many other things require us to have more equipment like educational materials because it is the government ids the one that set the exam and regulates the curriculum so they know what we need SL-. **TTCP - MIG – MGR)**

Student: .Ok in the classrooms the smart boards should be placed there to enhance reading. When a teacher comes in he doesn't use the chalk he uses the smart boards to write. When he uses the smart board I will be more attentive than when he uses the chalk. **(CS-FGD - TTCP - MIG – MGR)**

Student: .You may find that when you talk conductors and semi-conductors you are just telling people copper is a good conductor, wood is what but you don't see them so in short I may also say that laboratory facilities in most of our schools especially primary are not available **(CSL TTCP BAR BAR)**.

Respondents expressed the importance of having laptops, radio, TV and inspectors in collage to assist in their practical work

Student: So when we talk about laptops, you find that they are very necessary. It is important that we put our learners into the current situation or the market value of every place. For example as teachers on TP we have to draw on charts. Maybe you want to draw an elephant, you are not an expert on drawing, and you just have to draw a funny elephant so you see these laptops will be very effective, you can download an animal as a real thing (CSL – TTCP - BAR - BAR).

KI: Currently we use text books and the teachers own knowledge of the curriculum, i.e. Which areas to cover and assignments given which is okay, but I think we can introduce modern technology, go for the laptops, and radio and TV programs, have more charts in the classroom, inspectors, those who are cooperating with education providers can be encouraging. (KI KPSA UG)

10.2.5.1 Support

This study sought to find out the support that TTC need for implementation of teacher education curriculum. This information was sought from the teacher trainees. The findings indicate that the teacher trainees suggested that they be supported in the following ways: provision of Counseling and Guidance teachers, motivational Speakers, increasing the number of Computers, provision of library Books, field grounds, equipment for sports, laboratory, equipment's, seminars, infrastructure and more classes

Student: The issue of congestion in classes, for example not only in Narok TTC, but currently we are very congested, in class 85 – 96 pupils in one class, the government should provide extra resources (CS FGD TTCP NAR NAR).

Student. Schools should be well equipped, and funded... if we have better facilities, laboratories, and libraries. (CS – FGD - TTCPSHA - SHA)

Student: KICD should provide materials that will help teachers to explain some of these difficult areas like HIV and Aids so that they can see the seriousness of the disease. (CS - FGD - TTCPCBAR - BAR)

The teacher trainees suggested that the means of communication to their institutions needed to be improved

Students: .Infrastructure and also communication, you find most of the institution the site communication is not that good, the roads are not that favorable and the interior of an institution will not favor someone to go to that institution and communication also from different institution should be improved. The level of the communication from one institution to another will improve the Learning (CS- FGD–TTCP-NAR - NAR)

In addition the students expressed the need for provision of scholarship to needy students

Student: we are students...our country should give bursaries to students in TTC and loans by HELB just like university students. (CSL- TTCPMAC -MAC)

Student: .Give scholarship for those who have passed to go and learn, they choose candidates in private and public like three, three in private and government institutions (CS –TTCP- NAR -NAR)

The students further added that the government needs to employ more adequate lectures in TTC

Students: Teaching staff are less. You can get that two classes are placed together or you can find all second year classes and we are ten classes are placed together to be taught by one teacher (CS- FGD – TTCP- MIG -MIG)

The student advocate for more updated text books, libraries and laboratories and provision of better Braille machines and enough interpreters for Students with visual impairment

Student: okay....basically we need more text books and some facilities like the library need to be bigger to accommodate number of students .the books are also old versions and we need new versions.....equip the students with visual impairment with better Braille machines ...they also need enough interpreters. (CSL TTCPMAC MAC)

The students expressed the need to be supported in teaching and learning materials and qualified teachers by the government.

Student: I guess under resources...for example here we are doing creative arts...and we have art separate from craft. For example, under craft, we have those practical...the resources that we need to see the drawings...but we have never seen such an instrument or such a tool. So it would be better if they can support the colleges and the education system so that they purchase those tools and equipment so that when it's time for that subject and the teacher is coming: "Today we are going to learn about these tools and equipment and how they are used..." At least I am able to see it, and I am able to touch and use it, rather than I am just shown theoretically. (CS- FGD – TTCPP - MAA- KAJ)

Student: For a certain subject, there should be qualified teacher...for example I'm going back to P.E...you find that some teachers who teach P.E...they don't have that knowledge of P.E. That is why you find that a teacher is unable to take students out for practical...you will just teach theoretically. So, the teachers should be well trained. (CS – FGD – TTCPP - MAA- KAJ)

Student: In Kenya nowadays, education has become a business. Many people are not concerned with imparting knowledge on the pupils. You find they just construct a building and start a school and take two three teachers from nowhere...and they start teaching. They are not so much concerned with what the child is going to gain, other than business. So, the government should ensure at least they inspect every school and make sure that the teachers who are there...they are experienced, they are learned; and also the schools are structured...and have all the resources (CS – FGD- TTCPP - MAA - KAJ)

Student: In terms of schools, let us say colleges, like this Narok Teachers College. You find that there is a big challenge in terms of resources in the school. So you find that the places students are living in are very congested. Just like what I said earlier, you find that the government is giving the college some money in bits. So you find that that little money cannot be able to build a dormitory. So if they can just be given that money once, they can do something constructive (CS – FGD - TTCPP MAA KAJ)

10.2.6 Pedagogical Approaches

Pedagogy are instructional strategies and techniques of carrying out instruction in the delivery of curriculum content. In teacher education there is need for use of varied teaching approaches to enhance learning and make it enjoyable as well as exposing the teacher trainees to the pedagogical approaches they are expected to use after their training. The study sought to find out the pedagogical approaches that can be used in implementation of teacher education. The information was sought from TTC students, parents and key informants. The qualitative findings are:

Respondents suggested that the following approaches be utilized in Teacher training Colleges: Discussion groups Laboratory demonstrations and experiments, field trips. Research projects, peer teaching,

KI: I would give a very broad answer and say anything that liberates the learner Approaches that are discursive, dialogic, anything that is interactive, where there is actual interaction not you know for most of our teachers interaction is something like ask a question and the student answers. There is no interaction there..... It calls for creativity on the part of the teacher and it calls for inventiveness Then they also need capacity to some kind of flexibility (**CEB – DR. CHARLES NYANDIGIRISI - NYAMIRA**)

Student: we are encouraging our students here as we are being encouraged by our teachers to work together in group work. We are promoting that coming together. In working with this person, I will assist him or her and they will assist me too. (**CSL – TTCP - NAR -NAR**)

Student: Projects, discussions, spend extra time with slow learners, peer teaching (**CS -FGD - TTCP – THO –KIA**)

KI: the approach should be they normally call it, it can be participatory within the content, where the teachers know what the students have not learnt from the previous lesson, it has to be more of the children enquiring from the teacher, than the teacher enquiring but how does the child enquire if you don't give them the task, and you just talk (, **KI-UNESCO-NAI**)

ME: The content of the curriculum should emphasize ... acting in an upright manner, yet just teaching abstract values will not be enough; we must make them real and practical/experiential so that people have the knowledge to live with integrity. (**ME-WM-AC**).

Respondents from the memoranda suggested that child center approaches and research be utilized in teaching

ME: Adopt child-centered approaches and pedagogies which promote critical thinking, reasoning, reflection, creativity and problem solving. Re-introduce and emphasize philosophy of education and other educational foundations courses in teachers training colleges This will make it easy to domesticate the skills. Facilitate and encourage research in teacher education issue (**ME-KCCB-RI**)

ME: The school will be expected to adopt teaching methods which, like the Montessori approaches, are more student- centered than teacher or content centered. It is expected that the school will move from traditional approaches to the more modern approaches or methods of teaching. (**KCCB-RI**).

The students proposed field trip, to be used in teaching in TTC.

Student: We can observe how they are performing and their outcomes...and find out how they have come to be successful. For example, that cultural day which was in the university, it did not end well because of those clashes that came. So you can see that maybe this thing is not doing well, and you leave it out. But when you practice it daily, you take these children out daily and then you see the outcome as the day ends, if you achieve what you wanted, then you can say that you know (**CSL – TTCP – NAR - NAR**)

The students said there is need for subjects to be taught in both theory and practical

Student: Most of the learning offered is in theory where by home science is a practical subject but given in theory only....so you find that when you want to go and implement on the field you find that you don't have that practical part. (**CS - FGD - TTCPBAR - BAR**)

The respondent suggested core teaching with great link to the industries where the teacher and the learner have to spent more time in the industry in order to acquire desired competencies

KI: And so the pedagogical skills requires will be needed both in the private sector, will be core training and academia in terms of vocation institutions and it requires the same sort of pipeline where lectures and trainers have access to industry to train the trainer modules which enhance the pedagogical skills but also the relevance and quality of skills. And they have to be closely linked to the industrial world which demands attitudes, attitudinal skills, time skills, communication skills etc. And so the link has to be great in order to show that we efficiently able to transform both entities (**KI –CON NAI**)

The students urged the teacher to embrace improvisation to cater for the need of teaching aids in class.

Student: The teachers should also be creative and use improvised materials to bring out the talents in our children, for example making balls; we should then be given the materials to improvise. (**CS - FGD - TTCPBAR - BAR**)

A key informant expressed the view that teachers should not only lecture, but use a wide variety of pedagogical approaches

KI: teachers to use as many methodologies in their teaching. Not only lecturing and talking the whole day. They should understand their learners, they have different abilities we teach them to cover the syllabus (**KI CEE KIL**)

The students are of the view that teacher trainees need to be exposed to a lot of research and computers

Student: we need to make teacher training more advanced because it is still so manual, we need more research, use computers and others ways developed so that we don't rely so much on texts. (**CS - FGD - TTCPKIL - KIL**)

The respondent suggested that we adopt other methods of teaching such as use of ICT, radio, TV programmes and charts.

KI: Currently we use text books and the teachers own knowledge of the curriculum, i.e. Which areas to cover and assignments given which is okay, but I think we can introduce modern technology, go for the lap tops, and radio and TV programs, have more charts in the classroom, inspectors, those who are cooperating with education providers can be encouraging. **(KI KPSA UG)**

The respondent stated that learning should be friendly and teachers should be equipped with Montessori as a methodology in teaching.

KI: For me make it friendly. For me I would like to take an early something like Montessori but Montessori if offered in two places in Kenya one is a mission school in Kayole and the other one is Montessori school here in laving ton the laving ton is very expensive it can only happen during working hours even doctors now are learning at night. But you can open up no learning implication for training. **(KI CITAM NRB)**

10.2.7 Assessment

Assessment is a means of measuring leaning outcomes. In education context it is the process of ascertaining whether students have attained curricula goals.

Assessment of learning in PTE is both internal and external and takes threeforms continuous assessment, a final examination and assessment of TP. Continuous assessment contributes 30 per cent of the total marks while the other 70 per cent comes from the final examination administered by the Kenya National Examination Council (KNEC). This study sought to find out the assessment modes that should be used in teacher education. Information on assessment modes was gathered from TTC students, parents and key informants .The qualitative findings are:

The learners expressed the view that the new grading system in the primary teacher training colleges disadvantages the teacher trainers who graduated earlier during recruitment by the Teachers Service Commission

Student: I think I can make a comment on the measurement of this examination. For example, in teachers colleges, in previous years, I think probably around 2006, the outcome of PTE results maybe you find that they were grading everything. From maybe 2007 to last year, they were grading differently, the best six. This year, the one who did the PTE previously, they have graded again these results again. So you find for example, when a teacher graduates from college, when you go to file for jobs, you find that there is that marking scheme from the TSC for those who acquired, let us say 8 to 14 points, you get these marks. From 15 to maybe 18, you get these marks. But you will find that these points will be different eventually because let's say a person finished school in 2000; and that person has not been employed to now, how will they measure this? Even if the TSC may know about this, they can give a different marking scheme. We are also facing some challenges because when we go for PTA interviews, they might not know about this. The measurement should be uniform **(CSL – TTCP - NAR -NAR)**

The respondent in the memoranda proposed that education should adopt an assessment method which will assess problem solving and critical thinking skills.

ME: Teaching culture, methods and assessment which advance critical thinking and problem solving. This should incorporate learning styles (such as “Kolbs” learning style model) to ensure content is taught in a way that is understood by different kinds of learners. This recommendation proposes a shift away from the current exclusive mean grade/summative culture. **(ME-Hatua-RI).**

The teacher trainees suggested doing away with final PTE exams. They advocated for continuous assessment tests (CATs) at the end of every topic and eventually the marks from these CATs are compiled to make an average grade and include the TP marks.

Student: The best assessment methods are immediate random tests. Mocks, TP, **(CS - FGD – TTCP-THO – KIA)**

Student: This is a tertiary institution- we should be tested immediately after every topic. The tests cover many topics. We need to be tested at the end of topic, and if you fail you resist immediately rather than have a referral at end of two years. I think we should do away with final PTE exam teachers can get the average of tests done and get a final grade. Thus CAT’s can be used for grading students. **(CS - FGD - TTCPKIL –)**

Student: .The best for me would be an average of the continuous assessment, this is because if you base it on the summative ones one can reach that period and becomes sick and becomes a disadvantage. You fail but you have been passing. Also taking it more regular **(SL – TTCP- MIG - MIR)**

Student: My opinion about the KNEC exam it is better for us to do the exam after the end of every year than to wait for three years like in universities **(CSFGD TTCP KAG NYE).**

Student: The mode of assessment should be like university, topic after topic. We have 12 subjects, where they are examined at end of the course; it should be done after every topic, instead of piling all at the same time. Like first year we handle 12 subjects and are assessed at the end of the term. First year we handle 12 subjects, and those 12 subjects are examined at the end of term, since we have teachers and we also trained like teachers **(CS FGD TTCP NAR NAR)**

Student: End of year, end of course, combined assessments. Like university each year assessment is done then an aggregate done **(CS FGD TTCP – THO – KIA).**

In addition the teacher trainees added that assessment in TTC should have more research work

Student: The mode of testing or assessment in TTC, should change as a primary teacher you should enquire and have more research for example you go outside there you are being assessed for example after every first year you are being assessed for that year and go to second year whatever you learnt in first year you will not be recognize what you learnt, it should be placed for first year and second year, like a learner ask you a question pertaining the things you did first year you will remember faster**(CS FGD TTCP NAR NAR),**

Student: The mode of testing or assessment in TTC should change as a primary teacher you should enquire and have more research **(CS FGD TTCP NAR NAR),**

The students further added that ICT should be examined by KNEC at teacher education level

Student: For the TTCs, I think that subjects like ICT to me, I think it should be examined at the KNEC level other than just been handled internally (**CSL TTCP BAR BAR**).

The TTC students gave the opinion that the quality assurance officers need not assess them

Student: I get so irritated that I'm been assessed here and when you go to these other schools you rarely find these, why do they do it at the college level because I've taught a trained teacher and you will find a quality assurance officer asking one question or he doesn't even ask and goes(**CSL TTCP BAR BAR**).

The students further added that there is need for practical exams for all subjects like agriculture and social studies

Student : we need to have practical for these subjects becauseall subjects even agriculture and social studies can have practical...like map work in social studies. (**CS –FGD – TTCPMAC - MAC**)

The students suggest that assessment in TTC's should mainly be practical and projects continuously during the learning process

Student: According to me, student teachers should be assessed in Practical teaching because this is what matters most in their course... and projects continuously during the learning process. (**CS –FGD – TTCPMAC - MAC**)

The students advocate for a new way of measuring learner's achievement other than paper exams

Student: The government should look for different ways to examine so as to reduce the maddening focus on exams as a way of measuring a person's capabilities. (**CS – FGD –TTCPMAC - MAC**)

ME: Assessment should be based on not only written but practical and whether the child can demonstrate learning. (**ME-TKS-IS**).

The students suggested that incase of failing in a subject a candidate should be graded but not resit for the subject again.

Students: On exams – I suggest referral should be stopped because sometimes you pass all subjects and only get a referral in one subject. I think this should be added to and one is graded instead of one having to come back to re-sit for exams. (**CS - FGD - TTCPKIL - KIL**)

The students are of the opinion that PI course be scrapped since it offers only a certificate

Student: The P1 course is cumbersome for example our friends in Tanzania have done away with the certificate. Kenya can do something to this effect because we train a lot and use a lot of time only to end up with a certificate that takes time to get employment (**SL – TTCP –MIR –MIR**)

10.2.8 Contemporary and Cross cutting Issues

Cross-cutting issues are commonly defined as areas which, by their very nature, have a strong impact psychosocial behavior of learners. These are issues that touch a number of different aspects of the society and affect learners at all levels. This study sought to find out the cross cutting issues that should be covered in teacher education curriculum. Information on the crosscutting issues was gathered from TTC students, parents and key informants and from the memoranda .The following crosscutting issues was identified by the respondents:

Gender

A respondent in the memoranda proposed comprehensive gender awareness in teacher education

ME: hatred and discrimination towards those who are different (gender, race, religion, health and any other status) are social ills that should be eradicated if we are to do away with social inequalities and injustices in our societies. A boy who is effeminate and who prefers to be a girl should not be expelled on the assumption that he is a gay; he has a gender disorder and should be referred to a psychologist or counselor (**ME-TE-AC**)

Drug and Substance Abuse

The students noted the need for sensitization on use of drugs among the youth

Student: .Students should be sensitized on the negative effects of drugs since this has been a challenge to the youths of Kenya (**CS - FGD –TTCP - KAG - NYE**).

HIV/AIDS

Students suggested that HIV and AIDS and sexuality education be introduced in primary schools be introduce in

Student: Corruption, HIV & AIDS and it be as open as possible. Sexuality education and adolescence be given ... Safety, terrorism problems, substance and drug abuse, relationships (**CS - FGD –TTCP –THO – KIA**)

Immoral behavior

The students made reference to issues of immoral behavior like corruption in the society which should be included in the curriculum

Student: Corruption, like giving bursaries, and the CDF, at the county, you know people they cater for who are poor but they give the rich depending on which office they are, and forget about the needy children (**CS -FGD – TTCP - NAR - NAR**)

Student: Emerging issues like of corruption be taught (**CS - FGD –TTCP –THO –KIA**)

In addition students mentioned that some cultural practices have led to early pregnancies, and early marriages among the youth and need to be included in teacher education.

Student: I would like to talk about culture because it is affecting education, for instance the county where girls are being undermined, and are forced to marry instead of going to school. Education more so the curriculum developers should do away with the culture (CS FGD TTCP NAR NAR)

Student: One of the things we have a problem is the way everything is ethnically driven (SL –TTCP –MIR –MIR).

The students further suggested that there was need for teacher education to promote culture in order to enhance unit in the country

Students: those cultural activities that are done in the 42 tribes should be enhanced in the schools to promote national unity in the learners in the school (CS– FGD- TTCP- MIG- MIG)

Students: we normally hold cultural festivals. So each group, each community brings in something so from there you can observe what they are doing and you see this one is good at this, this one is good at that. So if we can embrace that everywhere (CS- FGD-TTCP- MIG- MIG)

Student: We share different cultures amongst ourselves. Understand the culture of one another (CS–FGD -TTCP –THO–KIA).

The respondents in the memoranda suggested that FGM is still a rampant social vice that should be addressed through the curriculum.

Respondent: I think ...the issue of FGM is still rampant in some societies thus let learners be taught challenges that comes across with the CUT. More so male gender should be given consideration when discussing FGM since girls thinks if they are not CUT they won't get a husband to marry them. (ME-RODW-IS).

ME: I think ...the issue of FGM is still rampant in some societies thus let learners be taught challenges that comes across with the CUT. More so male gender should be given consideration when discussing FGM since girls thinks if they are not CUT they won't get a husband to marry them. (ME-RODW-IS).

Security

The students and key informant noted the need for teacher education curriculum to address insecurity and terrorism and government to provide security in schools to remove fear among the learners

KI: These people are in doctrine, the issue of terrorism and our particular teachers should be taken for training for radicalization and approach the issue of terrorism. And also look at this component of peace and conflict resolutions. ..(KI-CDE-GAR)

Student: When we talk about insecurity we have to let learners how to teach them what causes insecurity in our country and in case you are attacked how can you evade from such a scene (CSL – TTCP – BAR - BAR).

Student: The issue of terrorism around the colleges because every time you hear al Shabaab is around. That one can be addressed early to the police so that we can get that security around the college (**CSL – TTCP -MIG -MIG**)

Student: .The security of the school should be prioritized to avoid in security and fear among students (**CS -TTCP- KAG -NYE**)

Student: The government should ensure that in every institution there is security (**CS -FGD -TTCP-NAR-NAR**)

Noise pollution

The students are of the opinion that schools should be located in conducive environment not in noisy areas

Student: The things like industries and that make people in the local affected in learning areas in school should be in a conducive environment not in noisy places (**CS –FGD –TTCP-NAR - NAR**)

10.2.9 Teacher Education Summary

The students advocate for the scrapping of P1 certificate course and instead upgrade it to diploma

Student: The course should be elevated to diploma and duration to be increased to 3 years. (**CS - FGD - TTCPMAC - MAC**)

The trainees suggested that their course should prepare them to be able to develop a whole child who is able to fit well in society

Student: As a teacher you need to be able to prepare and develop children to be effective in society and it needs many areas we cannot just be taught examinable area, we must be taught how to develop the learners. (**CS - FGD - TTCPKIL – KIL**)

Key informants proposed the need for frequent in service course for teachers to update then on the changes in the education, they suggested the course should be on proficiency not the content.

KI: Constant capacity building of teachers is important. You know we have teachers who just come into the system and just stay there. I like what the teacher service commission says, that these people should be renewing their licenses... (**KI-TCD-GAR**)

The respondents proposed the review of admission criteria for teacher trainees at PTE and diploma level and emphasized on the importance of adequate preparation of teachers in order for them to be able to effectively implement the envisaged curriculum.

KI: We can come up with good curriculum but if we don't train our teachers, will they be able to implement this curriculum (**KI: REG-LAU**)

Respondent suggested that teacher education should train on sensitivity and observation skills to identify and nurture diversity of learners and learning needs. The respondents advocated for development of skills that enhance life in the 21st century. Such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking

KI: Soft skills; 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness, and Teacher professionalization programmes through mentorship. **(ME-CEMASTE A).**

ME: Some of the areas to explore in the revised curriculum should include soft skills such as entrepreneurship, leadership training and mentorship **(ME-Collins Ouma, DN, 2016).**

The respondents indicated that values ,talents ways of identifying talents and nurturing talents be included in teacher education.The college student expressed the need to expose learners to activities where talents can be identified and provide adequate materials and talented human resource e.g. competing in music festivals and drama outside the school

Student: So on the side of talent exposes them, give them materials and then provide a conducive environment for the play and for performing their talents and activities **(CSL FGD TTP BAR BAR)**

The teacher trainees suggested doing away with final PTE KNEC exams. They advocated for continuous assessment tests (CATs) at the end of every topic and eventually the marks from these CATs are compiled to make an average grade and include the TP marks.

Student: The best assessment methods are immediate random tests. Mocks, TP, **(CS - FGD – TTCP-THO – KIA)**

Respondents suggested that the following teaching and learning approaches be utilized in Teacher training Colleges: Discussion groups Laboratory demonstrations and experiments, field trips. Research projects and peer teaching,

KI:I would give a very broad answer and say anything that liberates the learner ...Approaches that are discursive, dialogic, anything that is interactive, where there is actual interaction not you know for most of our teachers interaction is something like ask a question and the student answers. There is no interaction there...It calls for creativity on the part of the teacher and it calls for inventiveness ...Then they also need capacity to some kind of flexibility **(CEB – DR. CHARLES NYANDIGIRISI - NYAMIRA)**

Crosscutting issues like drug and substance abuse guidance, gender , gender,culture,early marriages ,sexuality ,security, circumcision , HIV and AIDS and guidance and counseling be include in teacher education curriculum.

Student: Corruption, HIV & AIDS and it be as open as possible. Sexuality education and adolescence be given ... Safety, terrorism problems, substance and drug abuse, relationships (CS - FGD –TTCP –THO – KIA)

10.3 TVET

10.3.1 Introduction to TVET

TVET includes TTI, national polytechnics and youth polytechnics. This section presents the qualitative data findings of TVET. The findings are presented in themes based on the objectives of the study. These are the societal needs, competences, content/learning areas, pedagogical approaches, resources, identification and nurturing of talents and crosscutting issues. These findings came from focused group discussion of the TVET students and parents and interviews of TVET student leaders and key informants and from the memoranda

10.3.2 General TVET Needs

This study sought to find out the general TVET needs. The TVET needs were identified by the respondents as follows:

The TVET students pointed out that there is need in TVET institutions to address teacher absenteeism, drunkenness, misappropriation of school funds as it hampers effective curriculum implementation.

Student: And still, I don't think, I don't know whether you can come up with aaah... nini of coming, mmm... of supervising some teachers. You find that teachers they don't come for some lessons. Simply because they have them after and months they will go for their salaries. So they don't mind if the syllabus is covered or not. Simply because, they will tell you, okay, I did my education, so struggle for yours. Or some teachers come to class while drunk. Simply, what will that teacher deliver to them? (CS - FGD - TTIP - WOT - MAK)

Student: Another thing the government has to inspect is concerning the money. It donates for the buying of learning equipment and books. You see the government can donate 25million to cater for the books and stationery materials in short. And you find the school fails to purchase such items needed in academic and then the students ends up lacking those essentials to support academic (CS - FGD - TTIP - WOT - MAK).

A Key informant suggested the need for TVET lecturers to be undergo some course on how to teach to be effective teachers

KI: We have a number of those trainers in the TVET institutions who did bachelor in science in mechanical engineering, technical engineering and are not basically teachers so we want to come up with curriculum whereby those who have not done education should go either back or be retrained in teaching

because there are number of them who have higher diploma who don't have basics in teaching (**KI DDE MUR**)

A Key informant suggested the need for TVET institution to be provided with adequate facilities like workshops and laboratories for effective teaching of practical work

KI: we need to have adequate workshops so we will be able to workshops and laboratories because in TVET we are sure you want to teach practically apart from theory you need also to teach practically (**KI DDE MUR**)

The key informants pointed that at technical level learners should have entrepreneurial skills which will enable them create jobs for themselves and others. They should also have positive attitude towards work.

KI: At technical level they need to be self-reliant by the time they complete their courses they need to be self-reliance or employability ...being able deliver and give, they should also positive attitudes towards work they should also have entrepreneur skills because most of them should not expect to be employed but walk out and be entrepreneur whereby they can earn and employ others. Again one other thing is innovation and creativity. (**KI-CBE-KIT**)

KI: Have adequate literacy and numeracy, should be employers not job seekers. Should address Issues in the village. Greatest concentration should be put in TVET. Focus on self-reliance. Gender must be mainstreamed. (**KI-FAWE-NAI**)

The key informant expressed the view that therein need for partnerships between the TVET institutions and the industries where the student in these institutions can take up apprenticeship. This will make sure the students are familiar with the work skills and the institutions will produce graduates who are ready for the job market.

KI: there should be a lot of partnerships between the TVETs and the field of work, these organizations, and the attachments, there should be a lot of collaboration. Because, if somebody is exposed to an organization, they develop interest and it adds value... I would suggest there be a lot of collaboration, between the place of work and those TVET institutions. (**KI-TCD-GAR**)

The key informants suggested the TVET courses be offered through different mode such as distance learning model, weekend, and evening so as to give room to the students to work or attended to their family issues. They can also learn through attachment.

KI: students should not sit in classrooms particularly in TIVET institutions where some of them have other responsibilities ... the programs can be flexible so that we can have part time learning and distance learning. Apprenticeship can be very helpful since when it is hands on it becomes more interesting. Attaching students to the industry will be very helpful. (**KI-CEE-KWA**)

A key informant indicated that TVET curriculum should be made post-secondary because form four leavers are mature enough to engage in TVET activities

KI: TVET, to be post-secondary not post primary as much as possible, because students passed from 4, and of course we have so many of them, are ready to engage in they are adult enough to engage in TVET(**KI-SGKN NAI**)

The TVET students are of the view that they should not pay for re- sitting the KNEC exams when they fail

Student: We should not pay for that exam those we have failed and we had paid for them at the first time. So it becomes hard and some drop out. It's as if they are looking for a way to push you out (**CS – FGD – ISTP- NIST - NYA**).

A key informant emphasized the need for core teaching with great link to the industries where the teacher and the learner have to spent more time in the industry in order to acquire desired competencies

KI: The pedagogical skills requires will be needed both in the private sector, will be core training and academia in terms of vocation institutions and it requires the same sort of pipeline where lectures and trainers have access to industry to train the trainer modules which enhance the pedagogical skills but also the relevance and quality of skills. And they have to be closely linked to the industrial world which demands attitudes, attitudinal skills, time skills, communication skills etc. And so the link has to be great in order to show that we efficiently able to transform both entities (**KI –CON NAI**)

Respondents suggested that there is need for monitoring and evaluation in TVET institutions by MoEST and KICD

SL: There should be genuine monitoring and evaluation from the ministry of education and KICD basing on academics. Because, you can find there are so many students, we are suffering down here but when we have that evaluation from the ministry of education you can find that they will report that education is taking place correctly and yet we are suffering down here (**SL TTI BUM BUS**)

10.3.3 TVET Competencies

Competency is a set of defined behaviors that provide a structured guide enabling the identification, evaluation and development of the behaviors in an individual. Some scholars consider "competence" to mean a combination of theoretical and practical knowledge, cognitive skills, values and behavior used to improve performance; or a description of skills, knowledge, attitudes and behaviors required for effective performance of a real-world task or activity (Weddel, 2006,p2). TVET students are expected to acquire relevant competences related to their desired jobs by the time they leave the TVET institution. This study sought to find out the competences that TVET students should acquire .This information was sought from TVET students, parents, key informants and from the memoranda. The findings indicate the competencies identified by respondents were: Pottery keeping, building, Research, HIV, time management, automotive, electrical engineering, presentation skills

,catering ,hotel management , social work , farming ,creativity, innovation, communication , music , Management ,community development. Teaching, business food and ,beverage, leadership, reporting, public speaking, singing, Sports/ football/ volley ball/ athletics, swimming, reading and writing, clothing, love for the country ,technical skills, entrepreneurship ,coaching , mentorship skills,Entrepreneur skills, independent living skills, creativity , carpentry , cooking, business, and computer technology

Student: Due to the technology we are living with right now it is better to engage ourselves in Form one. Because the generations we are living with in like my little sister she knows everything in computer. Let us start it at class 6, with packages. Then computer studies when you go to secondary school. In colleges you do programming and packaging. All the levels should be provided with the adequate computers (**CS – FGD – ISTP - NIST - NYA**).

A key informant emphasized the need for writing skills and communication skills and cited the journalists who lack communications skills and newspapers with grammatical mistakes. Training of journalists does not emphasize speaking or articulation skills. The key informant further stated that they need values such as patience

KI: Certainly there must be those aspects in the in the curriculum and so and particularly on the ability to write. Today if you if you go through nation media for example or nation newspaper you will at least pick ten mistakes even in a page spelling mistakes, grammatical ...The other concern that we have the training of journalists do not emphasize on speaking and articulation skills so that ... Most of the top the top five journalists working in radio getting the highest pack are not journalists at all the people that have communication skills and all those are things that should harness in our training. The other thing that we should be able to harness is patience as a value and the desire to make a difference as an individual through your work (**KI-CEO-MCK-NAI**)

A key informant pointed out that at TVET level students should have entrepreneurial skills which will enable them create jobs for themselves and others and positive attitude towards work.

KI: At technical level they need to be self-reliant by the time they complete their courses they need to be self-reliance or employability ...being able deliver and give, they should also positive attitudes towards work they should also have entrepreneur skills because most of them should not expect to be employed but walk out and be entrepreneur whereby they can earn and employ others. Again one other thing is innovation and creativity. (**KI-CBE-KIT**)

A key informant mentioned that TVET students should acquire skills such masonry and tailoring

KI: skills as masonry, jua kali... give these people skills, after form four, these people will become major designers, because they are innovative, (**KI KPISA UG**)

A key informant added that entrepreneurship and ICT competencies should be included in TVET curriculum which will aid students in development and in marketing of their products

KI: The entrepreneurship component leaves a big gap. The element of ICT has not been incorporated in our TVET. If we could have ICT empowered students then they can be able to use ICT to look for new designs or marketing their work (**KI-CEE KWA**).

A key informant mentioned that TVET students should be innovative

KI: In addition to having the capacity to innovate so as to improve on those skills for better results. They should accommodate other people with different skills and pull together. They should be innovative. (**KI-NCC-NAI**)

10.3.3.1 Values and Attitudes

Values are the principles and fundamental convictions which act as general guides to behavior, the standards by which particular actions are judged as good or desirable (Halstead, 2000).TVET institutions need to inculcate values and attitudes in students .The study sought to find out the values and attitudes TVET institutions need to instill among the trainees. This information was sought from the students, key informants and parent's .The following are the qualitative findings:

The respondents suggested the following values :socialization, corruption, loyalty ,self-awareness, peace ,negotiation ,honesty, co-existence, selflessness, respect, ,corruption ,faithfulness, transparency, positive values, etiquette ,respect, honesty, self-control ,patience, ethics and integrity, accountability.

The students expressed the need to acquire skills of learning how to live together in the society like cohesion.

Student: so the other thing that we should emphasize is the cohesion so that when we are talking. So you find the youth are educated and cannot find job (**CS - FGD - TTIP - WOT - MAK**)

Student: Yes, I have something. So what I was emphasizing it is about corruption. So if corruption it is eradicated early in the society or in our communities, this will help us our children to grow, to grow upright, yaani they develop upright without thinking about corruption. So that should be emphasized. And the best thing is to start early campaign about the corruption and that will help the people not to stop the corruption so the other thing that we should emphasizes, it is the retirement (**CS - FGD - TTIP - WOT - MAK**).

Students: We should be taught honesty, respect, patience, accountability transparency and Integrity ...how to respect our elders. (STTI –TTIPMAC- MAC)

KI: Certainly there must be those aspects in the in the curriculum and so and particularly on the ability to write. ..We should be able to harness patience as a value and the desire to make a difference as an individual through your work (KI-CEO-MCK-NAI)

The key informant emphasized on enhancing values even in the production and marketing of items.

Ki-This involves the doing of the technical design. Values are handy here as one does the technical work. May it be a stool, what quality is to be brought out? Bring out a product that is not questionable. The values acquired in lower levels can be reflected on the products i.e. using dry timber and creating standards. Even when selling products what language is it endearing? Creating values and high standards of excellence is key here. (KI-EAC-NAI)

Respondents in the memoranda proposed the need for integrity and appreciation for other people's culture and interrelationships.

ME: We need a workforce with strong resentment towards corruption and well equipped to fight it morally and otherwise. A workforce that appreciates the ethnic diversity and is able to amicably integrate in all engagements. We need Self-driven, all-rounded graduates who are able to comfortably go for self-employment as an alternative to formal employment, considering the increasingly reducing opportunities in the job market. (BUS.MAN-INF-NAI)

10.3.4 Identification and Nurturing of Talents

This study sought to find out the ways of identification of talents and how they can be nurtured among the students in TVET.

10.3.4.1 Identification of Talents

Respondents identified the following talents which should be nurtured among the TVET students: football, netball (sports), athletics, drama, karate/self- defense, dancing, swimming, music, modeling, Art and design, poetry, rugby, hockey, arts, comedians and modeling

The students voiced the need to have talents identified at the secondary level before they get to TVET institutions

Student: They should specify their talents in high school so that when they come out of the school they are useful. (STTI- TTIPRTI- UG)

The students from Machakos Institute for the blind wanted to be taught subjects that make them identify their talents such as, music in physical education.

Student: Let me say, for example in the curriculum if there can be physical lesson, such subjects can help in nurturing the talents. (STTI- TTIPMAC- MAC)

10.3.4.2 How to Nurture Talents

This study sought to find out the methods that can be used to nature talents among the learners .The findings shows respondents suggested the following as ways of nurturing talents among the TVET students:

Provision of facilities such as balls, playing grounds and referees ,provision of finance, appreciation, exhibitions, exposing learners to activities where talents can be identified like talent shows, sports day, time for practice, mentorship and introduction of clubs such as sports and farming

Parent: .4K clubs in schools where members do farming, they grow tomatoes, Sukuma wiki, so from there, the child goes out with skills to use at home, but these things are all gone. There were chicken bandas, others keeping cattle, so you see the 4K club is always there, others are selling milk, eggs, the child leaves the school with the talent, he/she goes to use it at homes, I am suggesting these activities must be revived at schools so that we sustain our children (PA- FGD TTIP- UKU -KWA).

KI: Each county should have a club or a talent center to tap the latent of learner e.g. footballers so as not to waste them. (KI – CDE – BUN)

Student: Yes... coming up with clubs which they can join and their talents are identified and nurtured (CS - FGD - TTIP - WOT - MAK)

Students: By coming up with clubs and going to music festival thus enabling them to nurture their talents (CSL - TTIP - WOT - MAK)

Student: And if somebody is, sasa, an example is good in playing soccer; he can get a sponsor in the same (CSL - TTIP - WOT - MAK)

Students: And if one knows he is more talented to something, he has to make sure, he has to find something that is going to expose him or her to the society so that none notices, and if one notices it will boost him to another area. So, you see, if he is boosted, one will notice this is more talented and will get a chance to have a job. (CS –TTIP- WOT -MAK)

Respondents indicated that apprenticeship can be utilized to nurturing talents among the learners.

KI: Giving my own example somebody can think I have learnt a lot but I only dropped out of school when I did my class eight and after that I just ventured into the Jua-Kali sector whereby my cousin played a major role in giving me some instructions that is, giving me knowledge then along the way I came and met these architectural people engineers who built me much on my work so...so that is how I prospered in this job (WEL-INF-NAR).

Learners suggested that education should not only concentrate on certificates but should recognize talents and provide activities for their development.

Student: It should not be all about the certificate if someone has a different gift say like practical skill it should be recognized. Education should be viewed on both ways theoretical and practical's. They should evaluate both sides (CS -FGD - ISTP –NIST-NYA).

Student: If you are talented in games or a scale, the school or the government should encourage you and motivate you to achieve that (CS – FGD – ISTP - NIST - NYA).

Student: I think those people who have talents, they must be, they must be given a chance to show off their talents now for example, much, for example. (CS - FGD - TTIP - WOT - MAK)

Student: To me, the exhibitions are introduced. People will show off their capabilities in various talents. It will enable various people to boost their talents. (CS - FGD - TTIP - WOT - MAK)

Student: Remember, and each here in school, members have activities like maybe, mmhh, talent shows. Yaah. I think those shows they can now, that person who has talent, can show off his talent there, and maybe it can be recognized (CS - FGD - TTIP - WOT - MAK)

The students proposed county government should get involved in sensitization of talent in the communities

Student: Then, they should be giving people to encourage the, people to be sent from the county from government and also from the country government to be sent to the communities and talk to those people now, who have their talents (CS - FGD - TTIP - WOT - MAK)

The students suggested that teachers should specialize in talent areas and be in primary schools as specialists in areas such as, poetry and music.

Student: we should have those specialists in those areas e.g. poetry, music, in primary and secondary, by the time they reach colleges they a lot in them. (STTI- TTIPRTI- UG)

The students suggested that the government build schools where students with talents can study in

Students: I require the government to introduce a talent school, where those students who are talented to be schooling there and be provided with all the requirements. (STTI -TTIPEGE -NYAM)

The students suggested there is need to set time in the time table to nurture talents; funds availed to buy items towards talents development.

Student: talents should be given more concentration... time table is set from 8am to 6pm so there is no time to go and nurture your talents so the school program should be adjusted to allow an hour to nurture talents just like other lessons...creating time for them...allocation of funds to buy items. . (STTI- TTIPRTI -UG)

Student: on the side of talents, those with different talents have been forgotten. Why I sat this, when you look at the Institute timetable it's just full of subjects from 8am to 5pm, then these people are rarely recognized. They should be allocated time and their own class. (STTI- TTIPRTI- UG)

The students from Machakos TTI for the Blind voiced the need for provision of a recording studio to enable them produce music, which will help in nurturing their talent.

Students: Like in an institution there could be a production studio whereby those who are talented can be able to record their music right there in the college. (STTI –TTIPMAC- MAC)

10.3.5 Content/Learning Areas

The relevant content need to be taught in TVET institutions that would enable students acquire the relevant skills at end of their training .This study sought to find out the content/learning areas that needed to be included in TVET curriculum. The qualitative findings are:

Respondents suggested that the following content should be taught in TVET institutions: Farming, entrepreneurship, drawing ,procurement , web design, driving, pottery keeping, building, Research, HIV, time management, Welding, Masonry, Carpentry, Tailoring, Automotive, catering ,electrical engineering , presentation, catering, hotel management, social work, communication, management, community development. Teaching, business, food and ,beverage, leadership, reporting, public speaking, singing, healthy living , diseases ,farming, Police science, security , Music ,Art and design ,marketing, theology ,Gio informatics system to support survey , structural engineer, mechanical engineering, drawing and design ,plant operation, guidance and counseling, hair dressing and beauty therapy, security ,HIV, diseases and gender

A parent expressed the need for teaching of localized courses like tourism and catering

Parent: .Courses in Ukunda Polytechnic should be those courses of the needs of the local people in Kwale or Ukunda ... Kwale is a tourist place, so courses on tourism should be taught... The whole of Coast Province has no college on catering yet Coast depends on tourism. (PA FGD TTIP UKU KWA)

Emphatically, learners proposed the inclusion of dress making to be self-reliant

Student: I would expect to see if there was...at least somebody has something to do...maybe those polytechnics...they can offer dressmaking...so you can come up with your own business (CS – FGD – TTCPP- MAA - KAJ)

The respondents were of the opinion that skills like cattle rearing, pastoralism, ICT, nutrition, masonry, and entrepreneurship be taught.

KI: At TVET the learners should be taught skills like cattle rearing, pastoralism and entrepreneurship. (KI- TCD-GAR)

KI: The element of ICT has not been incorporated in TVET. If we could have ICT empowered students then they can be able to use ICT to look for new designs or marketing their work. **(KI-CEE-KWA)**

Students: I would like to be a nutritionist when I live school. **(STTI- TTIPRTI-UG)**

TVET students voiced the need to have CRE offered as a subject at the tertiary levels.

Student: I believe at this level, we are mature people and are not controlled to go to church. I think they should introduce C.R.E that will help ... grow spiritually. **(STTI –TTIP-EGE- NYAM)**

The students suggested that the curriculum offered at the TVET should the cover contemporary issues facing the country.

Student: I would say that currently, Kenya is facing a lot of challenges, at the tertiary level, I would advise the curriculum to be engaging at what is now facing the country, like the al shabaab who are attacking the country. **(STTI –TTIP-EGE -NYAM)**

The students mentioned that there was corruption in colleges and gave the opinion that corruption should be taught in TVET

Student: .We need to address corruption in schools. As we elect our student council, there is so much corruption that the results are flawed. **(CS – FGD – ISTP - NIST - NYA).**

A key informant expressed the need for inclusion of gender issues in TVET curriculum

KI: Gender must be mainstreamed... **(KI-FAWE-NAI)**

10.3.5 Resources

Resource refers to any inputs that are used in the learning environment to effectively achieve the desired outcomes. These could be human, infrastructure, realia or financial. Resources enhance learning and make it enjoyable .This study sought to find out the resources that are needed in TVET institutions. This information was sought from TVET students ,parents ,key informants and from the memoranda .The qualitative findings indicate that the respondents identified the following resources: Modern equipment such as computers, books, library technicians , balls, pens, exercise books, text books, uniform, internet connectivity, electricity, television, GIS instruments e.g. Geodetic – GPS to replace total station, instructors, boarding facilities, local testing kits ,information science instruments ,advanced reading materials, practical materials and equipment, funds ,libraries ,Wi-Fi, qualified teachers and instructors , radio, desks, libraries, sewing

machines , laboratories, laptop, modem ,balls for football and table tennis , polytechnics in all counties, machines and smart phones

SL: At least you should come up with a strategy, maybe if it is to employ the technicians who will be coming to inspect or perform some interview of our lecturers so that the lecturers should have a wider knowledge of their subjects (**SL TTIP BUM BUS**)

Students: I think through the ministries, ministry of education roads and health. Like the ministry of health knows the equipment needed for doctors learning so they should provide them in tertiary colleges. .. (**STTI- PRTI- UG**)

Students: I think the students taking civil engineering, they should be provided with machines and constructions materials... (**STTI –TTIPRTI- UG**)

The student suggested that the government needs to equip the students with modern technology tools and computers.

Student: Leaders to provide the institutions with the assistance they need... technologically... we need the government to equip the students with the modern technology. (**STTI –TTIPEGE- NYAM**)

Student: In colleges you do programming and packaging. All the levels should be provided with the adequate computers (**CS – FGD – ISTP - NIST - NYA**).

Student: Inadequate tools and worn out and need for computer practical (**CS – FGD – YPP - NAI - BUN**)

Students proposed that more qualified teachers should be employed in all TVET institutions to address teacher shortages

Student: I think as in our institution the overworking of teacher should be reduced. You see a teacher in one class then he will go to another in the next lesson. The government should increase the teachers (**CS – FGD – YPP - NAI- BUN**)

Student: The teacher who teaches maths in technical courses should be one who is experienced. It should not be given all other subject he should have experience and deals with one subject (**CS – FGD – ISTP - NIST - NYA**).

Student: What I can say first in terms of education in our technical institutions, there is a big challenge we face and what I can say for us to improve the education sector within our institutions, first thing is the matter of having more teachers and teachers who are more educated concerning the subject they are teaching yea (**CSL - TTIP - MAW - HOM**).

Student: That's why you find the people from Jua kali have more experience in terms of practical compared to us and for us to improve maybe to compare ourselves to South Africa or Malaysia we should be given more resources for us to achieve that goal so that if you are interviewed with them you can be somewhere (**CSL - TTIP - MAW - HOM**).

Student: Can bring some improvement also the environment where students learn also matters a lot. If the environment is so pathetic the students cannot perform (**CSL - TTIP - MAW - HOM**).

Student: The government should be improving resources such as labs, stationery, and furniture and adding of classes to facilitate more students and employ more teachers (CSL -TTIP - WOT - MAK).

Student: The government should be improving resources such as labs, stationery, and furniture and adding of classes to facilitate more students and employ more teachers (CSL -TTIP - WOT - MAK).

Student: Teachers- when the teachers leave, there should be addition of more teachers by the government thus the students cannot miss out. The government should also look into the issue of teachers strike and pay them (CSL -TTIP - WOT - MAK).

Students: I think each, every other place, every other maybe e.g. in ukambani, the education system must be the same as any other place out there. You know there is maybe in here Makueni. We are more equipment with each equipment's, more equipment's there is somewhere in Turkana, they don't have teachers, they don't learn actually, so I think the education they must consider other places to build more schools and teachers. (CSL -TTIP - WOT - MAK).

The key informants suggested the following resources as key in media, library, proper editing suites, video cameras, designing desktop and conducive learning environment isolated from noise pollution.

KI: You may need very good library, you need modern facility computers, for example if you are in media you need proper editing suites, you need ...studios, you know you need cameras you need eeheh...steel cameras, you need video cameras, and then you need ...Proper skills in terms of use of computers and designing desktop, kind of skills you know so that people can be able to do desktop publishing and all that and ... more importantly also you need some better environment for learning with ample space well aerated, clean space, isolated from the pubs, the markets, (KI-CEO-MCK-NAI)

10.3.5.1 Support

The study sought to find out the support that TVET institutions require for implementing the TVET curriculum. The information was sought from the students, parents and key informants. The findings are as follows:

The parents were of the view that TVET students could be supported by providing them with basic resources relevant to their needs such as shoes, balls and uniform.

Parent: We have footballers but you will find this footballer has no shoes, no uniform, such a person is demoralized but if balls are there, shoes are there, if the materials are there the player will be encouraged to practice more (PA FGD TTIP UKU KWA)

Parent: If you see a child interested in farming, you encourage him or her on farming by buying him or her equipment for farming, you send him/her to agricultural schools, to see how farmers do their work and the equipment for farming (PA FGD TTIP UKU KWA)

The TVET students suggested that the government can support them by providing them with loans which they can repay after employment.

Student: I would like to say that, the government should support the TTI trainee with loans to continue with their studies which they can pay back when they are employed. (STTI -TTIPEGE -NYAM)

Student: Yes. Even these scholarships that are given, you find that they are given to the best students who are going to university. Nobody has said that they are giving scholarships for people who are going to polytechnics. (CSL – TTCP – NAR - NAR)

The students expressed the desire for provision of qualified lectures that are trained in the course they teach

Student: There should be lecturers who are to teach in technical institutes maybe basically these students who have gone through the technical education. Because the lecturers from universities come to teach you, but the technical classes he does not just understand what he is telling you. .. He has to read while teaching so it's very difficult to understand things because he is also in the process of learning and teaching (SLTTIP BUM BUS)

The students pointed out that there is need for the government to construct TVET institutions in all counties to cater for all students who do not make it to the universities

Student: Maybe again generally on education. There are these middle-level colleges which normally train...like polytechnics. I think these polytechnics should be increased because of the learners who are not able to go to other colleges, or university, or maybe they are interested in other things like they want to learn those skills. I am not seeing the government supporting this so much. You normally find people talking about secondary education, university education; we are not informing people about these other polytechnics. When I tell people that I am in a polytechnic, they see you as a failure maybe. Those are things which can end (CSL – TTCP – NAR - NAR)

10.3.6 Pedagogical Issues

Pedagogy are instructional strategies and techniques of carrying out instruction in the delivery of curriculum content. Teachers need to use varied teaching approaches to enable the students understand easily .This study sought to find out the pedagogical approaches to be used in implementation of TVETcurriculum. This information was sought from students, parents and key informants. The findings indicate that the students suggested the following pedagogical approaches be utilized in TVET: Research, Participatory, practical and field trips

Student: If for example I take agriculture and all I see is subsistence farming. Then I will tend to think it is all about that. The curriculum should state that all students should go out and see those big farms. Link education with the career areas (CS – FGD – ISTP - NIST - NYA)

A key informant urged that learning should be interactive, lectures should not use lecture method a lot and that students should be exposed to practical work

KI: So there is need for strong interaction between the teacher and the students opposed to increased kind of lecture format of training and there must be a lot of practical work so that if for example, you are a journalist and you have been trained on feature writing the next thing that should happen is that you should be let out to go and write a feature several of them. (**KI-CEO-MCK-NAI**)

Student: In courses like electrical more practice should be given a lot of time and units that are not helpful being remove (**CS – FGD – ISTP - NIST - NYA**).

Student: What I can say under education it's important for the TTI's to have more facilities which can help them gain more experience when they are going outside they know what they are supposed to do rather than if you are in a college and most of the things you are doing are only theory with no practical it's very difficult for a student when they are going out there you force them to go for jua kali to gain experience rather than gaining it here (**CSL - TTIP - MAW - HOM**).

Student: in a college most of the things you are doing are only theory with no practical it's very difficult for a student when they are going out there you force them to go for jua kali to gain experience rather than gaining it here (**CSL - TTIP - MAW - HOM**).

The students also proposed the use of resource persons and role models in teaching TVET institutions

Student: The student should be given motivational talks. Role models should be called to talk to pupils (**CS– FGD – ISTP - NIST - NYA**).

A key informant pointed out that lectures should make use of group work, role play and discussions that can involve other institutions, in teaching

KI: people learn differently...lecturer method works up to a certain way... you actually need to let those children know whether it is to explore you.... there group work, role play, discussions, experience sharing...Methodology really needs to change and you know if that happens, then even the size of the classes need to change, the number of the teachers (**KI-KNHCR-NAI**)

Student :Another thing what I can say is about the students coming together from different technical institutions and sharing ideas what they are being taught in different institutions so that at least they can have more knowledge... So we want to encourage that leaders from different institutions can meet even once and share ideas from their institutions so that they gather more knowledge when they are coming to their students they teach them what they have learnt from their colleagues (**CSL - TTIP - MAW - HOM**).

10.3.7 Assessment Modes

Assessment is a means of measuring leaning outcomes. Assessment is an important component in the teaching and learning process, since it's the basis of evaluating the effectiveness of the implementation process of a curriculum. Teachers should use various modes of assessment to determine performance as well as identify gaps. This study sought to find out the mode of assessment that should be used in TVET.This information

was sought through focused group discussions with TVET students and parents and interviews with TVET student leaders and key informants from different sectors of the country. The qualitative findings indicate that the respondents identified the following assessment modes in TVET:

Practicals, school based or institution based assessment, monthly and end of term exams .Respondents said appropriate examinations should be developed to the level of the learner .The students and a key informant in addition proposed doing away with national exams, and replacing them with the CATs which should run across throughout the year, with the final marks contributing to final grade

KI: The suggestion is that we should do away with final exams as we know them. One examination or two cannot determine a person's capabilities. The curricula should not be examination oriented. Assessment should be done throughout the year or years. These should include tests, assignments, practical tasks and oral tests. The marks are tabulated to make the score or grade for the student. Another suggestion is that the tests, assignments, practical tasks and others can take 70% of the marks and a not so formal exam takes 30% of the marks. We can also introduce open book examinations at higher levels. (**JWM-IS**)

Student: CAT or the general exams to be consider what the colleges are learning so that exams don't give you a hard time and you may have the issue of mwakenya (**SL TTIP BUM BUS**)

Student: I think marking of KNEC exams should aim at only testing what is in course outline. Technical should not be assessed using exam papers only. The exams should also be to encourage not discourage (**CS – FGD – YPP - NAI- BUN**)

While most students preferred continuous assessment, some students were of view that national exams are the best way of assessing learners and must continue to be used.

Student: Another thing you see the national examination they persist; people do secure certificate to show that they have completed that level. And the same certificate, they can use to secure jobs. So if, the continuous assessment tests is introduced, will there be those certificates to be credited to the various students at various continuous assessment tests or it will be just doing continues assessment tests and then it persists?...So, I think to me, the national examinations will have to persist since it will secure the certificate and so on (**CS - FGD - TTIP - WOT - MAK**)

Student: The students should be given exams to assess on what they have studied thus seeing how far the student has understood (**CSL - TTIP - WOT - MAK**)

The students further voiced the need to do away with national examinations at TVET level and only have board examinations

Student: when we do the board exam there is no need for doing national exam again... so we should just do board exams. (**STTI- TTIPRTI -UG**)

Student: for me Kenya national examination council I don't see it's meaning because after finishing my revision here the certificate will not help me without getting the grade license, so for me I see no need for doing national examination. .. (**STTI- TTIPRTI -UG**)

The students urged that TVET exams should include exposure to practical examination and not only test theory work on a piece of paper

Student: I think marking of KNEC exams should aim at only testing what is in course outline. Technical should not be assessed using exam papers only. The exams should also be to encourage not discourage (CS – FGD – YPP - NAI- BUN)

The students emphasized that they should not pay for re- sitting the exams that they have failed and that incase of irregularities they should re-sit only the failed subject

Student: We should not pay for that exam those we have failed and we had paid for them at the first time. So it becomes hard and some drop out. It's as if they are looking for a way to push you out (CS – FGD – ISTP - NIST - NYA).

Student: You also lose all grades if there were some irregularities in one subject. Why lose say seven units because of only one? (CS – FGD – ISTP - NIST - NYA).

Student: After doing six courses and If I pass 2 I get referred if I fail 3, I am supposed to repeat everything. Why and I they should change that system and give the certificate for those I have passed. Because maybe I was sponsored (CS – FGD – ISTP - NIST - NYA).

Students propose the use of grade test mode of assessment at TVET since its good at this level.

Student: Trade Test is good (CS – FGD – YPP - NAI- BUN)

Student: Like Institutions, there should be “grade test exams”. Because there are those who are not good in KNEC Exams but are in singing, computer programmes and even building but not in exams. When it comes to exam papers he can't do anything (CS – FGD – YPP - NAI- BUN)

The students voiced the need for practical examinations to be introduced in the area of electrical engineering

Student: Examinations should remain but for something like electrical engineering we should add something like diploma because it has no practical, and out of this institution we have to work practically... (STTI- TTIPRTI -UG)

10.3.8 Contemporary and Cross cutting Issues

Cross-cutting issues are commonly defined as areas which, by their very nature, have a strong impact psychosocial behavior of learners. These are issues that touch a number of different aspects of the society and affect learners at all levels. This study sought to find out the cross cutting issues that should be covered in TVET curriculum. This information was sought through focused group discussions with TVET students and parents and

interviews with TVET student leaders and key informants from different sectors of the country. The qualitative findings are presented under the identified issues:

Gender

The students expressed the need for gender education in the curriculum as a guide in selection of the career to pursue

Student: when I first came to Bumbe I don't know what to do. Later I chose food and beverage ... I had that feeling that this course is for ladies. So something was telling me to quit but I went on and I made it. That belief was there when I went to attachment I realized it's not only for ladies. You just have to change your attitude (**SL TTIP BUM BUS**)

KI: Gender must be mainstreamed... (**KI-FAWE-NAI**)

Drug and Substance Abuse

The students pointed out that drug and substance abuse should be addressed in TVET curriculum through the use of guidance and counseling and suggested that it can be covered on weekends

Student: I think the person should be discouraged on taking drugs. The institution should take time like weekends to have a guidance and counseling session on drugs and other issues. And they bring many people from outside to talk about it (**CS – FGD – ISTP - NIST - NYA**).

Immoral Behavior

The respondents highlighted that theft, tribalism, corruption, chatting on phones and prostitution were issues in the society that can be included in TVET curriculum

Parent: Everybody is struggling to get a phone, and one has no money, he/she will use any means to get one this brings about theft, prostitution because they want the best but they cannot afford (**PA FGD TTI UKU KWA**).

Student: I think if you are a Lou and you are in Kalenjin School and you go to lecture, the lecturer starts talking their mother tongue so something should be done they should be talking either Kiswahili or English. (**ST-TTIP-RTI -UG**)

Student: I will talk of corruption; I think some people should go to Nyanza there and come up with any ideas how to eradicate corruption. (**STTI –TTIPRTI- UG**)

KI-when you listen to people talk it is like corruption has become like our culture and when you talk about culture, culture is like something that is practiced by all people in the whatever community you are talking about. ... So I think we included in another curriculum it is an area which needs to be tackled by any means. (**KI-REG-LAU**)

Student: In the history of Kenya, the politics is only destroying our life. Every day you undergo something that forces you to be corrupt. Us as students you want to do something to change this. You come to the institute and when you leave you can't get a job unless you corrupt. The thing is we have to stop this corruption. (**CS – FGD – ISTP - NIST - NYA**).

Student: Yes, I have something. So what I was emphasizing it is about corruption. So if corruption it is eradicated early in the society or in our communities, this will help us our children to grow, to grow upright, yaani they develop upright without thinking about corruption. So that should be emphasized. And the best thing is to start early campaign about the corruption and that will help the people not to stop the corruption so the other thing that we should emphasizes, it is the retirement (CS - FGD - TTIP - WOT - MAK).

Student: So to start learning about the corruption, the government should each look for people who have the knowledge now about conceding the corruption. Then they bring the task for authors who can bring the thing about corruption and how they can the things for our students for our pupils in primary school (CS - FGD - TTIP - WOT - MAK).

Student: Another thing concerning, concerning the same, you see there is that amount the CDF donates for bursaries and so on. So the government should consider. You see nowadays the distribution of the money is not fair... Some students do suffer, lacking school fees and so on. So, you find the distribution of the money is not fair. People are not considered as per their background some students do suffer... So, you find the distribution of the money goes around those people who are distribution the money instead of catering the needy.... So you find the needy child that the government have set that money to benefit the child... she has not benefited from the money (CS - FGD - TTIP - WOT - MAK).

Security

The students noted that insecurity was very high in the society which called for the need to have it included in TVET curriculum

Student: Security is the cancer right now, it's the most dangerous disease as per now (CSL TTIP SIN KAK)

Student: insecurity...we should have conducive environment to learn. (STTI- TTIPRTI -UG)

In addition the students stated that the best way of dealing with insecurity is by being role models and having police posts in learning institutions

Student: For securities I think there should police post in school with at least three policemen (CS – FGD – ISTP - NIST - NYA).

Student: We should be role models on our own. To defend our own, to safeguard the school. If we, if we leak the secret of the school, you see to the outsiders, those villagers and those Alshababs will troop into our school and attach if they know our secrets. If they know where the fence is not well tight, if (CS - FGD - TTIP - WOT - MAK).

Career Counseling

The students identified career counseling as an emerging issue in the society which called for the need to have it included in TVET curriculum

Student: advising students on career to take and counseling them...so that the students can know the career requirements by the time the reach form four...(STTI- TTIPRTI-UG)

Use of Technology

The students stated that there is lack of concentration in studies among the students due to use of mobile phones in pornography and students need to be guided on appropriate use of technology to avoid reading information that is harmful to them in TVET curriculum.

Student: The technology sometimes lowers dignity of people like mobile phones. When I go to internet I can be able to access everything worldwide. I am student but because I am accessing all these things I will be influenced to do what I am doing. They should prohibit those things to learners. We need to control internet (CS – FGD – ISTP - NIST - NYA).

Student: Technological there is lack of concentration in studies thus students should be taught on how to use the technology instead of using their phones to watch pornography (CSL -TTIP - WOT - MAK).

Parent: Everybody is struggling to get a phone, and one has no money, he/she will use any means to get one this brings about theft, prostitution because they want the best but they cannot afford (PA FGD TTI UKU KWA).

Environment

The students noted that some TVET institutions are located in noisy environment and expressed the view that noise pollution should be addressed in TVET curriculum.

Student: Environmentally, it is as results of noise pollution due to industries being built near schools which becomes a huge distracter (CSL -TTIP - WOT - MAK).

Student: Environmental issues like air pollution e.g. smoke, noise, dumping, cutting down of trees (CSL – TTIP-UKU-KWA)

10.3.9 TVET Summary

Learners pointed out that there is need in TVET institutions to address teacher absenteeism, drunkenness misappropriation of school funds as it hampers effective curriculum implementation.

Student: And still, I don't think, I don't know whether you can come up with aaah... nini of coming, mmm... of supervising some teachers. You find that teachers they don't come for some lessons. Simply because they have them after and months they will go for their salaries. So they don't mind if the syllabus is covered or not. Simply because, they will tell you, okay, I did my education, so struggle for yours. Or some teachers come to class while drunk. Simply, what will that teacher deliver to them? (CS - FGD - TTIP - WOT - MAK)

The key informants pointed that at technical level learners should have entrepreneurial, innovation; creativity and ICT skills which will enable them create jobs for themselves and others. They should also have positive attitude towards work.

KI: At technical level they need to be self-reliant by the time they complete their courses they need to be self-reliance or employability ...being able deliver and give, they should also positive attitudes towards work they should also have entrepreneur skills because most of them should not expect to be employed but walk out and be entrepreneur whereby they can earn and employ others. Again one other thing is innovation and creativity. **(KI-CBE-KIT)**

KI: The entrepreneurship component leaves a big gap. The element of ICT has not been incorporated in our TIVET. If we could have ICT empowered students then they can be able to use ICT to look for new designs or marketing their work **(KI-CEE KWA).**

The students identified the values such as, honesty, respect, patience, corruption, accountability and transparency for TVET curriculum

Students: We should be taught honesty, respect, patience, accountability transparency and Integrity ...how to respect our elders. **(STTI –TTIPMAC- MAC)**

Ways of nurturing talents identified by respondents were provision of facilities such as balls, playing grounds and referees and practice, Provision of finance, appreciation, exhibitions every term,exposing learners to activities where talents can be identified like talent shows, Set apart sports day, time for practice, mentors and introduction of clubs such as sports and farming and clubs

Parent: 4K clubs in schools where members do farming, they grow tomatoes, Sukuma wiki, so from there, the child goes out with skills to use at home, but these things are all gone. There were chicken bandas, others keeping cattle, so you see the 4K club is always there, others are selling milk, eggs, the child leaves the school with the talent, he/she goes to use it at homes, I am suggesting these activities must be revived at schools so that we sustain our children **(PA FGD TTIP UKU KWA).**

The respondents were of the opinion that skills like cattle rearing, pastoralism, ICT, nutrition, masonry, and entrepreneurship be taught.

KI: At TVET the learners should be taught skills like cattle rearing, pastoralism and entrepreneurship. **(KI-TCD-GAR)**

The responded indicated that indicated that learning should be interactive and that learners should be allowed to apply what they have learned.

KI: So there is there need for strong interaction between the teacher and the students opposed to increased kind of lecture format of training and there must be a lot of practical work so that if for example, you are a journalist and you have been trained on feature writing the next thing that should happen is that you should be let out to go and write a feature several of them. **(KI-CEO-MCK-NAI)**

The respondents identified the following assessment methods:

Practical, school based/ institution based assessment , monthly and end of term exams
Respondents said appropriate examinations should be developed to the level of the learner .The CATs should run across all years with the final marks contributing to final grade

SL: CAT or the general exams to be consider what the colleges are learning so that exams don't give you a hard time and you may have the issue of mwakenya (**SL TTIP BUM BUS**)

The students proposed crosscutting issues like drug and substance abuse, gender corruption, technology, sexuality and security be include in TVET curriculum

Student: Technological there is lack of concentration in studies thus students should be taught on how to use the technology instead of using their phones to watch pornography (**CSL - TTIP - WOT - MAK**).

CHAPTER ELEVEN:

QUALITATIVE DATA:

SPECIAL NEEDS EDUCATION

11.1 Introduction

This chapter provides a qualitative analysis of Special Needs Education (SNE) data collected from parents of learners with special needs, specialists in SNE, learners with special needs and regular learners. The findings include general curriculum needs in special needs education and needs that are specific to different categories of learners with special needs in education.

11.2 General Special Education Needs

11.2 1 *Needs for economic development*

Parents suggested that education should aim at developing independent individuals who are capable of being self-reliant despite the disability. They pointed out that there is need to carry out awareness campaigns to sensitize members of the community and the need to educate learners with special needs so that they can be self reliant and thus reduce dependency. Similarly learners with special needs expressed the view that education should enable them to get better jobs, in order to reduce poverty, create equity and equality among people, especially those who have experienced prejudice.

PA: Unajua sasa akiwa kama hapa, akitoka huko nje atakuwa amejua kujitegemea, hatakuwa anategemea wazazi. Atakuwa na hiyo akili ya kufanya a,b,c,d ya kujitegea yeye mwenyewe. Atakuwa ameongeza akili hakuwa nazo. (PA- FGD-JOY-SNE-KBU)

PA: So they can stop being dependent wholly, partly they can be dependent because there are those who cannot manage by themselves. But there are those who can do something little for themselves, so we can reduce the cost of taking care of them, and that can only be possible if we inform them; the guardians and everyone at home. Parents don't know that there is a way they can help their children to be productive and help in the society, so first we have to create awareness. (PA - FGD-LI- LAI)

S: It helps people to learn more and have better jobs, we can reduce poverty and increase equality, have a better future sometimes the deaf don't have equality, (S ST. BRE S-SNE BUS)

11.2.2 *Needs for Social development*

Parents suggested that education should be used to fight discrimination against person with disability especially in job provision. They felt that education should promote social cohesion among people from different ethnic communities and enhance cooperation in order to achieve common goals. In the same vein, learners felt that education should address social vices such as tribalism and corruption and emphasize on respect of law and order so that citizens can have social unity and live peacefully. They further suggested that education should aim at producing individuals who care for other people and respect them, empathize with people with disabilities and help the less fortunate in the society.

PA: Education can help us in a way for example if one is educated and they get into a company, you go and meet different tribes in the company, you are working on this project and another one is working on the other one, at the end of it you produce one good thing. (PA - FGD-LI- LAI)

PA: According to what I am thinking, if someone has been educated and he/she is a teacher, it's not a must you teach within your area where you are talking the same tongue, you should go somewhere else. When you go there....for instance let's say I go to western, the people from western should receive me as one of their own. And if I am at my home area and there are students who have come here from other places, I should not show them they are different from those of my tribe and those of other tribes. I should take them all as one people from one Kenya. (PA - FGD-LI- LAI)

PA-Persons with special needs should get jobs like other persons. They should not be discriminated upon. (PA-FGD-KAJ-SNE-KAJ)

So we need a country where there is no tribalism. Which is ready to serve everybody from every corner of the country. So we are saying if this issue of tribalism reduces even in hospitals, everywhere there is tribalism so please what we can urge the government to check on the issue of tribalism where they are giving posts let them be equally divided them to every tribe so that it can feel represented and it can feel part and parcel of our country which is Kenya. (KIT-S-FGD-AQUI-SNE-KIT)

P: Maintain peace, fight out corruption, maintain law and order, build good schools
Should love one another everyone must have knowledge (P-FGD-OLK-SNE-NYAH)

P: We can be people who are able to care for others and people who have respect (P-FGD-NYAB-SNE-HOM)

SL: build children's home, help disabled children, provides and wheel chairs. (SL-INT-KAJ-SNE-KAJI)

11.2.3 Need for political Development

Learners suggested that education should prepare learners with special needs to be good leaders who are development oriented and whose aim is to improve the lives of the citizens.

PA.... Become leaders despite disability, show people that people that you love your country, make people good, help people leave together and understand each other. (PA-FGD-KAJ -SNE-KAJ)

S: so my view is that we as Kenyans need good leaders .leaders in the government who are ready also to assist the citizens in terms of development. In terms of maybe try to make the citizens that they get what they need because they voted for them so the citizens need their votes to be seen in action. (S-FGD-AQUI-SNE-KIT)

11.2.4 Need for technological development

Learners expressed the need to be digital literate in order to achieve technological development and suggested that schools should to be equipped with technological equipment such as computers and laptops and learners taught how to use them. Similarly the parents expressed the view that learners with SNE need laptops and computers to help them widen their knowledge and improve their creativity. Learners also reiterated the importance of using ICT especially for learners with communication difficulties.

P: Government to teach children how to use Laptops (P-FGD-OLK-SNE-NYAH)

This one is very necessary. We find that like deaf, deaf child usually learns from seeing. Seeing the particular things is doing. So these things laptops, computers are introduced in schools like these. We will be giving them some wide knowledge of knowing what they need to cover and will be giving them some wide experience on how to use and interact with the media on different areas so introduction of this computers technologies is very necessary because they are some who are necessary because they are some who are very creative. This creativity given this laptop, computer plus their technology born with will widen up the knowledge of the child such that even if left alone to expand on a particular area , they find it very simple to communicate using this technological material are very essential and needed in school may be a school like these.[PA NYAN P HB]

11.2.5 Competencies

Abilities/skills

The respondents were of the view that learners with special needs should acquire competencies that will help them be adaptable in the society and be employable. They felt that there was need for learners to acquire skills in self care, communication, vocational, ICT, entrepreneurship, critical thinking, psycho-motor, problem solving, socialization and research skills. They also need to acquire literacy and numeracy skills.

Not to despise themselves. To be able to do small things for example wearing clothes and taking care of themselves, to understand sign language, to communicate and be able to think and solve their problems (PA-KIB- P – KIL)

PA: Hata kuinteract na kucheza na watoto wale wengine, because ni lazima alelewe kama yule mtoto mwingine wa kawaida pamoja na kusoma na kuandika na kusoma computer (PA-FGD-JOY-SNE-KBU)

Values and attitudes

Learners felt that education should strive to enhance self –esteem in learners with disabilities who in most cases experience low self esteem because of the unwarranted stigma associated with disability. Learners further suggested that education should emphasize values such as obedience, respect, discipline, humility, kindness, politeness, care and hard work. Learners should also be taught good morals and responsibility.

P: Lets learners get moral values in school, by having obedience and respect. Pupils to work hard and have discipline. (P-FGD-OLK-SNE-NYAH)

PA: Na kupata masomo kwake, kutapromote self-esteem hatakuwa anaijichukia na hata atakuwa example kwa hao wengine, eti huyo alipelekwa shule fulani alipata masomo, kwa hivyo disability is not inability. (PA-FGD-JOY-SNE-KBU)

PA:brought up in their morals and responsibilities despite their disabilities eg identifying when cattle are lost. (PA-FGD-KAJ-SNE-KAJI)

PA: They should be taught how to care for one another and respect others (PA - FGD-LI- LAI)

PA: Let's add politeness. There are children who can be rude and so it's good to teach a child to be polite. (PA - FGD-LI- LAI)

PA: There is also pride. It is good as parents we teach our children to be humble. Even if we may be well up, it is good to teach our children humility because pride and arrogance destroys a child so much because they know my family is well up. So that arrogance makes them be disrespected by other people. (PA - FGD-LI- LAI)

PA: My child should be taught good behaviour and good morals. (PA - FGD-LI- LAI)

11.2.6 Content /Learning Areas/Pathways

ECDE level

The respondents suggested that at ECDE level learners should be taught counting, greetings and alphabet, through songs, mimes , games and use of concrete objects. The main area of focus at this level should be stimulation of the residual sensory inputs. Learners should be guided to explore the environment with a lot of concrete materials for concept formation. Play should also constitute the greater portion of the time spent in the ECDE centres. Routine practices should be maintained for familiarity and confidence building. No meaningful academic work should be engaged, rather

all the prospected academic work should be introduced at the last level remotely in plays and songs.

Primary level

The respondents felt that depending on the different disabilities, there is need to introduce the learners to various skill areas such as Braille and sign language immediately they set to class one. This level should mark the point where these specialized skills are focused so that the learners become proficient in their communication abilities. They further indicated that this level should aim to support learners with special needs and disabilities attain communication, manipulative and analytical skills. Learners should be able to identify what they are good at and be supported to choose a career path as early as possible. Information Technology (IT) competencies should also be attained at this level. At the higher level in Primary education learners should be introduced to particular pre-vocational skills, as this would allow them to attain high level of specialization at subsequent levels.

The learner suggested that they should be taught reading, mathematics, Kenyan sign language, music and other creative areas, and in addition the learners also indicated that they need to be taught digging, slashing, cookery, tailoring, practice game, running, javelin, volley ball and net ball. They further suggested that they should learn computer skills.

When we talk about computer, teachers should bring them to class room o that students can see them and able to sit and have hands on be able to switch them on so that they learn bit by bit, learn how to type too. The teachers must explain to us how we should learn these computer skills. It should not just like playing with buttons all the time, but we want to learn so that in the future we have all this computer skills so that in the future we are computer literate. (PP KIB P KIL)

Learners suggested that they should be taught subjects such as science and geography to prepare for career such as medicine, teaching and astronomy. They should also learn CRE to acquire moral values and computer studies to acquire digital literacy. In addition they should learn home science, art, craft and continue learning the traditional subjects such as Kiswahili and English.

P: Learn about earth, planet, technology computers, moral values and know science. (P-FGD-OLK-SNE-NYAH)

P: We can be surgeons, gynecologist and teach students. . (P-FGD-OLK-SNE-NYAH)

P: It is good to learn home science, CRE, art and craft and do English and Kiswahili. (P- FGD-YAMB-SNE-HOM)

The parents underscored the need to introduce ICT early to learners with disability so that they do not lag behind in technology. They also emphasized the need to teach foreign languages such as German and be given career guidance.

PA: Hii mambo ya computer, we need to introduce because u find some of these children probably they rely on computers and we need to introduce it early in primary at kama serikali inasema iko na hiyo mpango, but they should put more emphasis and start with this special children because sasa ukiangalia, utakuta wakiwa kwa nyumba ,kucheza na gadgets they know very well, vitu kama remote, mobile phones so if introduce computers, they can actually easily adapt. (PA- FGD-JOY-SNE-KBU)

SL:computer , German, want to know more about other countries. How i will carry myself when i get a job and how i will manage my salary. (SL-INT-KAJ-SNE-KAJI)

Secondary Level

Learners suggested that at this level they should attain specialization in the areas earlier introduced at primary level. Technical subjects such as agriculture, music and home science should be emphasized, in addition to the traditional subjects such mathematics, biology and language. They further suggested that they should be trained to acquire skills in report writing, innovation, self motivation and critical thinking. The learners also pointed out that they should not only learn in the class room but also in the field in games and athletics. They expressed the need to be allowed to select subjects that are geared towards their anticipated careers rather than waste time learning subjects that are not related to careers of their choice.

S: Biology to become a doctor, Learning how to write, Agriculture, Music, mathematics, Learn more about education; learn about your future life, learning in order to get a job., English so that they can understand and express themselves well, Should learn about school rules, being obedient to boss and people around you, Learners should have focus, respect. (S MACHA S-SNE MACHA)

S:also on that line of that education I think sometimes maybe in our school and in other schools we think that this curriculum which you are intending to bring in our education system it is a curriculum that is going to benefit students in that maybe like no you find that from form one up to maybe form two you are taking maybe twelve subjects some of which you are not interested in chemistry what we can request the government as students if maybe I am interested in doing medicine I be let do subjects that will lead me into doing medicine than doing other things like you get to do history and maybe at some point it will never assist you in doing medicine. (S-FGD-AQUI-SNE-KIT)

Teacher education

The respondent expressed the view that teacher training should prepare teachers to teach both regular and learners with special needs. Basic sign language and Braille skills should be included

in the teacher training curricula at all levels of teacher education. Basic knowledge of adaptations should also be included in the curriculum. Respondents strongly advocated for inclusion of vocational skills in the SNE teacher training.

Vocational pathway

The parents suggested the establishment of vocational wing for teaching subject such as tailoring, computer, farming, cooking and cleaning especially for learners who may not pursue academic subjects. Such skills would enable learners to survive in life after school. They also emphasized the importance of learning practical skills such as art and craft, home science, carpentry, tailoring and agriculture which would enable individuals with disability get self employment and earn a living. Parents further expressed the need to re-introduce technical institution, establish vocational centres for learners with special needs who may not proceed to secondary school and build talent schools for those who talents.

PA: They are some few that being handicapped may not enable them to study may be so fast academically and they may be involved in such areas of interest. To me I may request the government to support these people by creating a school like these with vocational department such as that if a child is not fit academically to continue my involve in vocational skills such that if he leaves a place like this with a profession at least this may involve tailoring, computer work {PA NYAN PHB}

PA: vocational skills should be given a lot of emphasis as means of nurturing talents and empowering learners who may not be gifted academically (PA ST.ANT P BUN)

PA: Second respondent: Kwa mfano haya masomo tulikuwa tunasoma ya home science, wajua mtu akiwa amesoma home science class four, five, six, seven, eight ata akiwa na shida fulani..ata ile ingine ya art and craft, they used to give us skills juu kama wengine wanasoma class four to eight, badala ya kuenda form one anaanza kujitegemea yeye mwenyewe. Amepata hizo skills unapata wengine ni carpenters, masons hizo alizitumia akiwa primary wengine wamekuwa musicians. (PA- FGD-JOY-SNE-KBU)

PA: I would wish them to be taught anything that involves use of hands. Sometimes children fear work that involves use of hands. You can start with a child when they are still very young. This should be done jointly by the staff in school and parents at home. We should teach them cookery, farming, cleaning. These will make them leave school when they are used to such activities {PA NYAN P HB}

PA: vocational skills should be given a lot of emphasis as means of nurturing talents and empowering learners who may not be gifted academically (PA ST.ANT P BUN)

They are some few that being handicapped may not enable them to study may be so fast academically and they may be involved in such areas of interest. To me I may request the government to support these people by creating a school like these with vocational department such as that if a child is not fit academically to continue my involve in vocational skills such that if he leaves a place like this with a profession at least this may involve tailoring, computer work {PA NYAN PHB}

PA: Technical secondary schools should be re-introduced and vocational centre for learners with mental handicapped. Institutions that nurture talents should be established and children to be placed according to their talents and potentials(PA - FGD-NGARI- LAI)

11.2.7 Talents

How to identify talents

Parents suggested that learners possess talents in dancing, singing, playing musical instruments, and reciting poems which can be identified during competitions and choir practice. Similarly learners pointed out that they possessed talents in singing, drumming, riding, racing, art, sports athletics and dancing which are identified by their teachers during practice and when carrying out various activities.

PA: There are those who can sing and dance also who know how to talk and when you give them poems, they are very good in reciting, so it is good also to note such kind of children so that we can give them support. And others in acting, you find that he/ she is very good in acting, even if they are unable to speak, they can act it out using signs. (PA - FGD-LI- LAI)

P: Teacher tell us to do drumming, riding, racing, singing, making arts dancing. (P-FGD-OLK-SNE-NYAH)

How to nurture talents

Parents pointed out that learners with special needs were talented in different ways and their talents could be identified and nurtured by teachers who are specially trained. They suggested the need to train teachers in talent development and have talent lessons put in the timetable to be learned like other subjects. They noted that talents can also be identified and nurtured in carrier subjects such as physical education, creative arts, performing arts and also through talent search and by participating in music and drama. They were of the opinion that the government should introduce a department for talent search.

Learners on the other hand felt that the government should grant them opportunities to go to other countries in order to develop their talents. They also indicated that role models should be used to train and motivate those talented in different fields. they suggested that talents can be nurtured by availing enough time to practice and rewarding those who do well to motivate them.

PA: The first thing is releasing the child to play with the rest because when the child is alone by him/herself, you cannot notice the talents. But when they are together with the rest in the field, you can notice that your child has some interest in playing with the ball and when you discover that the child has that talent, then you can look for help such a child and especially those who are in the institute, it is easy to note and develop the

talent in them because the teachers are there to help them by like taking them for games and you find that the child will shine more on the area of is talent(PA - FGD-LI- LAI)

Informant: ways of identifying talents include through primary school-teachers; parents to look out for talents in children; churches; talent searches and events such as music and drama. The Ministry of Education should create a department to search for talented children and other individuals. (JWM-IS)

S: If you have skills in football, government should pick you and take you to other countries. (S MACHA S-SNE MACHA)

The society should also be involved in the education process, the government can get role models to visit schools and inspire students. For example singers can inspire those talented in singing hence helping them to further their talents. Tell them what they are supposed to do. (S-FGD-AQUI-SNE-KIT)

P: When students are being given gifts they can also be given gifts to be appreciated or rewarded (P- FGD-YAMB-SNE-HOM)

PA: Prepare teachers at teaching training colleges how to identify these talents and develop them. Also talent to be taken like a subject therefore it will be put in the timetable (PA-FGD-OLK-SNE-NYAH)

11.2.8 Resources

Tools and equipment, materials and facilities

Learners felt that the government needs to equip schools with enough text books, library books and other learning tools. They expressed the need to provide enough laptops and computers to help them acquire digital literacy. In addition learners should be provided with workshop materials to enable them learner vocational skills practically.

P: Government to give schools library books and more text books and tools to learn better (P-FGD-OLK-SNE-NYAH)

Interviewer: what are the materials/ resources do you require for technology
P: computers and laptops (P-FGD-OLK-SNE-NYAH)

P: want shoes, socks, sewing machine for making clothes and sweater (P-FGD-ESA-SNE-NYAM)

Parents suggested that learners should be provided with materials, tools and machines for tailoring, carpentry and animal rearing to enable them gain practical skills in these areas. They should also be provided with games and sports materials and equipment and indoor games facilities so that those who have severe disabilities can have an opportunity to participate in games. They also suggested that the government should provide assistive devices such as wheelchairs to learners with disabilities.

PA: Like those who know tailoring, they should be helped with a tailoring machine, those who know things like making furniture, they should be provided with machines for doing carpentry, those who can rear animals, they should be assisted in getting animals to rear such as a cow, goat or chickens so that they can support themselves. (PA - FGD-LI- LAI)

PA: They should be provided with games and sports, materials and equipment (FGD-NGARI- LAI)

PA: others are adapted games that is in door games some are good since they can be played indoors for children with challenges to move (PA-FGD-OLK-SNE-NYAH)

PA: Government to offered facilities like wheel chairs (PA-FGD-OLK-SNE-NYAH)

Infrastructure

Parents emphasized the need for building more special schools to cater for many children with special needs still waiting to be admitted in the few existing schools. They also suggested that the government should expand the existing special school so that they may admit more learners. They also pointed out that there is need to build special secondary schools to accommodate learners who complete primary education and miss positions in regular schools.

PA: Let's say for example, some parents who were saying they would like to take their children to school, but when they come, they are told there are no vacancies for their children, so infrastructure also should be put in place such that there should be enough dormitories and enough classes as well as enough caregivers (PA - FGD-LI- LAI)

PA: Ministry to provide secondary schools for special students to adapt well. This will enable them to continue with secondary education after primary. (PA-FGD-OLK-SNE-NYAH)

The respondents expressed the need to establish physical infrastructures that are friendly to learners with special needs such as classrooms, laboratories, computer labs, studios and workshops. The government should also invest in digital resources. Special schools should be fully funded by the government.

The learners on the other hand indicated that they should be provided with resources such as Books, Stationery, Library books, and Magazines. They also require better facilities and equipment to enable them learn better and stay in school with some level of comfort.

Translator: give them computers teachers in profession to help us on how to plait, giving us books rubbers stationeries in short geometrical sets books textbooks, story books, school uniform, shoes, sweater, bags, water, food, sleeping facilities, big net to sleep on so that they don't get bitten by mosquitoes and blankets to

sleep on and feel comfortable and happy and they don't feel cold and roofs that don't leak, good chair in class good tables, good windows, get money to get lockable cardboards, (PP KWA P KWA)

Human resource

Assessment officers

Parents expressed the need to employ more assessment personnel and establish more assessment centres to enable parents access assessment services easily and reduce cost.

PA: Poverty is also another big issue because some other if you ask them to come all the way from Narumoru or even past Narumoru, to come seek for assessment, maybe they can come and find that the officers are out in the field and there is no officer in the office, they are forced to go back home yet they can't manage to come back again, so also the poverty also deters them from doing so. (PA - FGD-LI- LAI)

SNE teachers

Parents suggested that there is need to train and employ special needs education teacher to work in special schools and inclusive programmes. They noted that SNE teachers should be posted in regular schools to promote inclusion of learners with special needs in the mainstream. Learners also shared the same views.

Parent: the government employ professionals for special needs children and counselors (**PA-FGD-MALIK-S-BUN**)

PA: Also walimu wengine hawana that knowledge ya special education so mko supposed kuinclude, every school ikuwe na walimu wamesomea special education. Kama huyu nlimtoa private school juu wanaona ako na celebral palsy, hawezi andika, yeye anaelewa lakini wakiona hawezi andika sasa wanaona ni kama hawezi soma. Unajua wanamuachilia tu anaenda shule tu ivo wanamuacha na yeye anatake advantage, yeye hasomi juu wanaona yeye hawezi soma. So mko supposed at least kwa every school ikuwe na walimu wamesomea special education. Another thing, hizi shule za public kunakuwanga na zingine zina special class lakini ni tu za mentally challenged, hakuna deafs, blind, also those classes za physically disabled are not friendly. So mko supposed kuangalia ata kama mmesema disability ikuwe integrated, haiwezi juu facilities hakuna, hakuna classes za deafs, hakuna materials so mko supposed kuangalia hiyo. (PA- FGD-JOY-SNE-KBU)

PA: I think if they can give school enough teachers (PA-FGD-OLK-SNE-NYAH)

P: The government to give us things and teachers who will help us learn (P-FGD-ESA-SNE-NYAM)
The respondents expressed the need to train in vocational skills in order for them to have the capacity to train the learners in vocational areas. They underscored the need to equip support staff with the relevant skills for dealing with learners with special needs

The teachers need also to be trained on the skills for vocational training such as carpentry, welding etc. this is necessary because the teachers are trained on how to teach and handle special needs learners but lack these vocational skills which could be of great help (PA KAB-SNE BAR)

Learning environment

Learners suggested that the school environment should be made friendly for learners with physical disabilities. They expressed the need to adapt the physical environment by providing ramps for those on wheelchairs and adapting toilets.

Majority of our children do not have potential to cope up with environment due to their disabilities. I suggest government should create environment where they can cope well and excel. (P-FGD-OLK-SNE-NYAH)

PA: Because you find like in a school like this one, you can hardly have enough schools of this nature to sustain the number of children with disability so these children some end up because like when we came here we did an interview so there are those who are never taken, they maybe end in other ordinary schools, and those schools may not have the facilities. How do you ensure those other schools, ordinary schools like where my daughter was, that they are made to comply with certain basic expectations of a special child. Things like toilets, do they have special toilets, do they have a ramp or they only have staircases. So that when you have a child with disability, at least the basic needs are not interfered with, they are not feeling completely out of place because of the environment they are in. Because the environment can make that child affected because anaona hawa wengine kwa mfano wanaeza panda yeye hawezi panda. So when you are coming up with these standards, I think there is also need to include because there is what is probably basic that really is required in school even in our public and even private. (PA- FGD-JOY-SNE-KBU)

Provision of bursary

Parents suggested that learners with special needs should be given bursaries just like their colleagues without disabilities. They reiterated the need to fund learners with special needs to be able to start small business enterprises and earn a living

PA: There is also this one more thing. Bursaries should also be given to the children. The same way they give to other regular schools, even for the disabled, they should also be given. (PA - FGD-LI- LAI)

PA: think it is good for the government to look into the future of this child also because the same way out there they are taking care of the youth like starting up youth groups and they fund them, so even in the sector of the disabled, it is also good they start up groups and fund them so that every individual who leaves school, they can be funded to start even if its business instead of leaving them to loiter aimlessly without doing anything. (PA - FGD-LI- LAI)

Time

Teaching time

The learners wanted the lesson time increased; they recommend remedial classes and repetitions of what they have been taught.

Translator: remedial teaching, maybe the teacher should repeat what has been taught (PP KWA P KWA)

Interview what else do you need to learn better?

Assistive devices

The respondents expressed the need to provide assistive devices that lessen the severity of disability with regard to accessing education. These include low vision devices for the visually impaired; hearing aid for the hearing impaired; crutches and wheel chairs as well as making the learning and school environment accessible to all through provision of ramps; wider bathroom and classroom doors for wheel chair users. Parents pointed out that learners needed to be provided with assistive technology to enable them acquire digital literacy.

PA: These children need assistive devices such as hearing aids and wheel chairs (FGD-NGARI- LAI)

11.2.9 Pedagogical Approaches

The respondents expressed the view that Learner centred approaches should be emphasized. Learning should be practical oriented with only 30% of theoretical learning. ICT should be included in learning at all levels.

R: Learner centred approaches should be adopted with practical skills 70% and theory 30%. Inclusion of ICTs in learning across the board is crucial. (JWM-IS)

Adapted instructions

The respondents expressed the need to adapt instructional methods to suit different learners with disability. They underscored the use of assistive technology by learners with special needs to enhance digital literacy.

11.2.9 Assessment Modes

Functional assessment in SNE

The respondents advocated for comprehensive functional assessment in both health and educational assessments at an early stage so as to ascertain type and severity of disability for proper placement and intervention. To this end, Educational Assessment and Resource Centres (EARCs) are crucial if education for all is to be achieved. They suggested that assessment should be done by a multi-disciplinary team and the officers involved should be trained in special needs education.

Respondent: Suggestion matrix for addressing adaptation of the curriculum for learners with special needs and modes of assessment suitable for various categories of learners with special needs with regard to Special

Needs Education in the curriculum reforms. (LCD-EO). See appendix: LCD-EO....Notes: adapt a compatible matrix from the ref.21

R: On assessment, EARCs should improve on the following; teachers posted there should be fully trained; there should be necessary facilities; multidisciplinary team needs to be practically facilitated. (MA-IS)

R: There should be regular, accurate and comprehensive assessments of students with ASD since it is the foundation for effective programs services and professional development. (MA-IS)

Formative assessment

Parents suggested that learners should be assessed continuously during the learning process and records kept to constitute the final grade instead of using summative evaluation. Vocational skills should also be assessed through project work. They were strongly opposed to KCPE being the sole determinant of promotion of learners to secondary schools. They suggested that continuous assessment marks should constitute the biggest percentage of the marks attained at the end of every level.

PA: The internal examinations which include attendance, participation, CATS should contribute to 50% and 50% be left for final national examinations. (PA ST, ANT P BUN)

PA: In terms of evaluation, when we are evaluating, probably it is upto the method. Evaluation through examination is okay but probably the difference is how it is done because you see now its like you know ukiingia standard one, you will do an exam in standard eight. It is like that is what is deetermining kuenda form one, you will find that there is a lot of pressure that is put on and geared towards examination thats why there is a lot of cheating because it is like if you failed that one, it is like you have lost in life because the way we assess, we normally put a limit tunasema tunaevaluate october. Suppose it is put in a way that evaluation is a kind of continuous or regular such that you are able to monitor the child through out. Because unaeza kuwa number one through out but ikikuja final exam, imagine ukigonjeka because you can get sick, you imagine you are been assessed for only that one week, kama ni standard eight ni siku tatu. The eight years you have been in school has been reduced to only three days and those three days you can be feeling not very well then you are condemned. Na ungechukua uone vile huyu mtoto alipata kutoka standard one, two,three uone vile evaluation yote, that is a child unaeza sema aingie form one straight ata bila kufanya huo mtihani because you have already assesed the child. Probably we need to see how we look at it tujue kama tutaanza na kuassess either wakiwa standard six upto eight ama seven to eight, yaani we need a bigger period to really assess and say this child amaa ni A student ama ni B student. (P-FGD-OLK-SNE-NYAH)

Adaptation of assessment

The respondents suggested that assessment should be adapted to suit the needs of learners with special needs. There is also need to develop different ways of assessing those who are gifted and talented.

PA: To prepare special examinations for special students since even these children are special since they cannot do normal work. Mainly concerning daily living. (PA-FGD-OLK-SNE-NYAH)

Examination time

The learners expressed the view that they needed more time during examinations because some of the concepts in subjects like science were difficult.

More time for exams so that: Some words in science are hard to understand (PP ST.ANT P BUN)

More time allocated (extra time) because some people write slowly those with PH may spend a lot of time trying to sit upright. (PA-KAJB-SNE-KAJ)

Assessment by observation

The parents suggested that learners with special needs can be assessed through observation of behavior especially on the way they interact with others and their reaction in the class room

From, we give them, there are times we collect them in halls and we see how a child interact with others at a moment he or she has stayed in school and we compare the period child came from home. We see if there is different position of a child, for a child who has stayed in school I think this one is different. Like a child within the school if compare the child from outside that gap is very big. When you take a child from here now with little knowledge he or she got from here. Let say a student here usually participate in music festival, in drama and such like things. When you sit and see this kind of a child participating in such activity you may not believe such a child. Classwork can be assessed like the way you are here now. You go sit with them in a class the teacher is there and just see reaction of child and a teacher. This will show these students understand the teachers or not [PA NYAN PHB]

Summative assessment

Parents were strongly opposed to KCPE being the sole determinant of promotion of learners to secondary schools. They noted that KCPE put a lot of pressure on the learners which results to examination cheating. Learners also indicated that they feared KCPE.

PA: In terms of evaluation, when we are evaluating, probably it is upto the method. Evaluation through examination is okay but probably the difference is how it is done because you see now its like you know ukiingia standard one, you will do an exam in standard eight. It is like that is what is deetermining kuenda form one, you will find that there is a lot of pressure that is put on and geared towards examination thats why there is a lot of cheating because it is like if you failed that one, it is like you have lost in life because the way we assess, we normally put a limit tunasema tunaevaluate october. Suppose it is put in a way that evaluation is a kind of continuous or regular such that you are able to monitor the child through out. Because unaeza kuwa number one through out but ikikuja final exam, imagine ukigonjeka because you can get sick, you imagine you are been assessed for only that one week, kama ni standard eight ni siku tatu. The eight years you have been in school has been reduced to only three days and those three days you can be feeling not very well then you are condemned. Na ungechukua uone vile huyu mtoto alipata kutoka standard one, two,three uone vile evaluation yote, that is a child unaeza sema aingie form one straight ata bila kufanya huo mthani because you have already assesed the child. Probably we need to see how we look at it tujue kama tutaanza na kuassess either wakiwa standard six upto eight ama seven to eight, yaani we need a bigger period to really assess and say this child amaa ni A student ama ni B student. (P-FGD-OLK-SNE-NYAH)

11.2.10 Contemporary and Emerging Issues

Pollution

Parents expressed the need to teach learner on the importance of living in a clean environment and the dangers of environmental pollution.

PA: Even like dirt and dust, they should not go throwing dirt everywhere, if it something like a dustbin, they be taught how to use it. (PA-FGD-LIK-LAI)

Environmental conservation

Parents suggested the need to train learners on environmental conservation by planting trees and flowers.

PA: Like taking care of where they live, like for instance, if there are flowers they should be taught not to pick them. They should continue planting and taking care of trees. (PA-FGD-LIK-LAI)

PA: Children should be taught nature study and environment protection (PA-FGD-NGARI- LAI)

Security

Parents suggested that there is need to address the issue of terrorism and train learners on disaster management, safety and security. They indicated that learners with special needs lacked skills to avoid risk situations and therefore they need to be taught such skills

PA: Learners should be taught about terrorism and more about disaster management, to have safety and security (PA-FGD-NGARI- LAI)

The challenges of insecurity affect the SNE learners most because they don't learn from the environment and they not trained with skills of identifying risks.(PA ST,ANT P BUN)

Use of technology

Parents expressed their concern on the use of technology inappropriately among learners and suggested that there is need to teach them how to select useful technology and use it in moderation. The learners expressed concern of the negative use of electronic media especially students accessing pornographic materials

PA: I think we first should teach them how to choose that which will help them. For example if we talk about something like a phone, it has a lot of things. They should be taught on how to select something that can help them, and that which does not help.....like a phone has a lot of things that can help you. So I think the first step is to know what is helpful and what is not. And also priorities, at this time, what is helpful to me, what must i need for now and what may I wait. (PA-FGD-LIK-LAI)

HIV and AIDS

Parents felt that there is need to teach learners about HIV and AIDS and other emerging diseases

Creating awareness about disability.

Parents expressed the need to carry out awareness campaigns to change the attitude of the parents who hide their children with disabilities and discriminate against them by not taking them to school. They reiterated the need to sensitize members of the community on the need to educate learners with special needs so that they can be self reliant and thus reduce dependence.

PA: There should also be a campaign because you know there are those who believe that because the child is disabled, they should not spend on them. So they should be taught to change the attitude and know that even the disabled are human beings. The same way they are taking the other children to school, those things that they give to the other children, even this disabled deserves the same. The disabled should also be taken to school and be given their rights just like the rest of the children because there are those who think they are wasting their resources catering for the disabled and hence decide to lock them up. They have such kind of mentality and hence its good for such kind of a parent to be educated on that, maybe that parent can even be brought to place like this institution so they can be shown that there are such kind of children like theirs and they will be helped very much so they stop locking up those children and denying them their social interaction making their brain to be disturbed because their work mainly is to sleep and maybe wake up to eat then sleep again, but you see when they are here, they will be jubilant and happy. So the parents should have that awareness that this child is also a human being and they deserve their own right also like the rest of the children. (PA - FGD-LI- LAI)

PA: So they can stop being dependent wholly, partly they can be dependent because there are those who cannot manage by themselves. But there are those who can do something little for themselves, so we can reduce the cost of taking care of them, and that can only be possible if we inform them; the guardians and everyone at home. Parents don't know that there is a way they can help their children to be productive and help in the society, so first we have to create awareness. (PA - FGD-LI- LAI)

Sexuality

Parents felt that learners need to be taught sexuality education to enlighten them on changes that occur to their bodies during different stages of development and how to avoid immorality during adolescence and sexual harassment such as rape. Parents also expressed the need for education to address the issue of hygiene during menstruation. They emphasized the need to teach learners with special needs on how to relate with the opposite sex and how to manage their sexual feeling. Parents also felt that one of things that need to be addressed is sexual abuse by other people especially close family members.

PA: There is this issue to do with morality, like for instance when we talk about sex, we find that the children get to adolescence and there are changes that will occur in their bodies, and these children need to be educated on how to handle the changes. (PA - FGD-LI- LAI)

PA: The big boys and girls should be taught about rape

First –Sexuality challenges are a calamity and they need to be addressed urgently. The content on sexuality education should be incorporated in all subjects and all teachers take responsibility in teaching.

It is important for sexuality information to be taught from standard 4 to eliminate early pregnancy, School dropout and sexual abuse on social media.(PA ST,ANT P BUN)

Issues of sex and sexuality, these learners experience desires to those of opposite sex, some of the learners get stimulated and sometimes have problems concentrating. The male children sometimes have to be stopped by the teachers from going overboard. When they are sexually stimulated they tell us their desires to explore their surrounding e.g. the way cows behave when they are on heat. These learners have to be guided and constantly supervised to ensure they conform to acceptable behaviors (PA KAB-SNE BAR)

Disability mainstreaming

The parents suggested that issues of disability mainstreaming should be included in the curriculum. The learners also indicted the need for all people to learn about disability matters because they felt oppressed by parents who did not understand them. They were also being abused by other people who infected them with STIs and the girls got pregnant:

Parent: Some of their parents oppress them when they realize they are not understanding. Their parents do not understand sing language. There is discrimination as their parents take others to school before they think about them. Some girls are used for sex and then they are given the sickness Some boys abuse them and they become pregnant. Some are cheated with money. (PP ST. ANT P BUN)

Poverty

The learners expressed the view that most of their parents are poor and therefore they need to be support to learn and become useful people in future who are able to support others.

Because we shall have learnt because some of the parents are poor and these children will be helped to qualify and move to become good people in the future and help others too so that we start learning year after year until we are able to become positive people and support the government (PP KIB P KIL)

Social problems

Parents suggested that social challenges such drunkenness, lack of parental love and care, loss of parents, early pregnancy, drug abuse, discrimination of persons with disability, Lack of basic needs and FGM are some of the contemporary social problems affecting learners in school.

Lack of food, orphans made to leave school, some parents discriminate the disabled children, circumcision of girls and early marriages. (PA-KAJB-SNE-KAJ)

Use of Electronic media

The learners expressed concern of the negative use of electronic media especially students accessing pornographic materials

S: The mode of communication is sending sms and internet and some are getting pornography (S ST. BREG S-SNE BUS)

Peer pressure

Students felt that peer pressure usually interfered greatly with their education and expressed the need to address it in the curriculum.

I want to add more, I think peer pressure t is a great challenge to most students in Kenyans, so I think if the government can find a mechanism of minimizing that peer pressure in schools can actually produce good men and women. (S-FGD-AQUI-SNE-KIT)

11.3 Needs for Learners with Hearing Impairment

11.3.1 Competencies

Abilities

Parents underscored the use of computers by learners with hearing impairment to make communication easier. They indicated the need for pupils to acquire skills in farming, rearing animals and carpentry for survival even if they don't continue with education. Learners who are deaf also need to learn sign language so that they can communicate well and be equipped with self care skills so that they can take care of themselves.

Parents: The use of computers can enable deaf learners to communicate through typing besides hastening learning process since deaf learners understand what they see faster. It is good they learn practical skills like farming and capenter. (PA ST.ANT P BUN)
Not to despise themselves. To be able to do small things for example wearing clothes and taking care of themselves, to understand sigh language, to communicate (PA KIB P KIL)

11.3.2 Content /learning areas/pathways

Vocational pathway

The parents suggested establishment of vocational wing for teaching subject like tailoring, computer, farming, cooking and cleaning especially for learners who may not pursue academic subjects. Such skills would lead to economic empowerment and self reliance.

PA: They are some few that being handicapped may not enable them to study may be so fast academically and they may be involved in such areas of interest. To me I may request the government to support these people by creating a school like these with vocational department such as that if a child is not fit academically to continue my involve in vocational skills such that if he leaves a place like this with a profession at least this may involve tailoring, computer work {PA NYAN PHB}

PA: vocational skills should be given a lot of emphasis as means of nurturing talents and empowering learners who may not be gifted academically (PA ST.ANT P BUN)

11.3.3 Learning Areas

The parents suggested that learners who are deaf should be taught practical skills such as cookery, farming, cleaning and other subjects that involve use of hands. In addition, the parents suggested that learners should be taught Kenyan sign language and that Kiswahili should be adapted into Kenyan sign language because it is understood by most parents. Parents also noted that learners who are deaf find Kiswahili very difficult to understand.

PA: I would wish them to be taught anything that involves use of hands. Sometimes children fear work that involves use of hands. You can start with a child when they are still very young. This should be done jointly by the staff in school and parents at home. We should teach them cookery, farming, cleaning. These will make them leave school when they are used to such activities {PA NYAN P HB}

PA: Kiswahili can also be adapted to Kenya Sign Language just like English; this is because Kiswahili is a user friendly language even to illiterate parents.

Children who are deaf do not understand Kiswahili hence communication breakdown outside schools and the learners themselves are limited yet Kiswahili is an international language.(PA ST.ANT P BUN)

The learners suggested that they should be taught reading, mathematics, Kenyan sign language, music and other creative areas, and in addition the learners also indicated that they need to be taught digging, slashing, cookery, tailoring, psych motor activities such as athletics, games and sports. They further suggested that they should learn computer skills.

When we talk about computer, teachers should bring them to class room so that students can see them and able to sit and have hands on be able to switch them on so that they learn bit by bit, learn how to type too. The teachers must explain to us how we should learn these computer skills. It should not just like playing with buttons all the time, but we want to learn so that in the future we have all this computer skills so that in the future we are computer literate. (PP KIB P KIL)

11.3.4 Educational Resources

Curriculum support materials

The parents suggested that there is need for the government to provide enough funds to develop sign language books and other learning materials in schools because most learners come from poor families and some are not accepted by their own family members. They also felt that laptops, computers and books should have sign language caption to facilitate communication for learners who are deaf

The learners on the other hand indicated that they should be provided with resources such as Books, Stationery, Library books, and Magazines . They also require better facilities and equipment to enable them learn well and stay in school with some level of comfort

PA: TV/Laptops/computers can be fitted with sign language information to boost acceptance by SNE students. Most books do not contain Sign language but it is necessary that books should have adaptive language. (PA ST,ANT P BUN)

Translator: give them computers teachers in profession to help us on how to plait, giving us books rubbers stationeries in short geometrical sets books textbooks, story books, school uniform, shoes, sweater, bags, water, food, sleeping facilities, big net to sleep on so that they don't get bitten by mosquitoes and blankets to sleep on and feel comfortable and happy and they don't feel cold and roofs that don't leak, good chair in class good tables, good windows, get money to get lockable cardboards, (PP KWA P KWA)

Human resource

Learners highly recommended that sign language be included in teacher training curriculum. They suggested that ECDE teachers should be trained in SNE and specifically learn sign language to necessitate inclusion of deaf learners at an early stage.

S: Need for Sign language being taught in other schools especially teachers training colleges to ease communication among learners...Computer literacy be taught in rural public special schools (S MUMI S-SNE KAK)

P: or that new comers who are young nursery wanted to give an expert ECDE teacher who are trained in special needs because some there do not know.(P- NYAN-SNE-HB)

The learners also indicated that there should be enough teachers who are trained in sign language in order to remove the communication barrier that exist today between the learners who are deaf and some of the teachers. The pupils further suggested that the government should employ trained teachers in SNE for ECDE level because the current ones do not understand the young children who are deaf

Pupil: or that new comers who are young nursery wanted to give an expert ECDE teacher who are trained in special needs because some there do not know.(P- NYAN-SNE-HB)

At secondary level students expressed the view that all secondary school teachers should be trained in sign language to facilitate effective communication with students and delivery of delivery of subject matter.

S: Need for Sign language being taught in other schools especially teachers training colleges to ease communication among learners...Computer literacy be taught in rural public special schools (S MUMI S-SNE KAK)

Infrastructure

Parents suggested that there is need to establish more vocational centres in order to allow for smooth transition of learners from primary level especially those who excel in practical subjects. They should also be provided with vocational skills facilities and materials.

We expected the learners to progress to the next level but we lack facilities to train the learners in various vocational skills. We have institutions that train and help learners in vocational skills. There are vocational centers such as mumias, aluor, sikri and others. Mumias specializes in tailoring. Jacaranda it caters for the mentally handicapped We wanted the same replicated here so that we do not have to transfer them to other places but train and mentor them within the same institution because over time, we have been able to gain their confidence and also understand their strengths and weakness (PA KAB-SNE BAR)

The learners need vocational training which require materials and other resources for these learners. (PA KAB-SNE BAR)

Inclusion

Learners expressed the view that learners with hearing impairment at primary level indicated that they would not wish to be educated in the same schools with their hearing peers because of communication barriers which brings negativity.

P: language will be barrier because they use sign language and facial and they use speaking language will be barrier hence bringing negativity.(PP NYAN HB)

At the secondary level however, students suggested that they would wish to learn together with regular learners so that they may be motivated through competitions and interactions. They also stated that education should enable learners to socialize and promote togetherness and positive attitude towards learners with special needs,

S: Be mixed with other normal children (S MACHA S-SNE MACHA),

S: Integrated so that they are able to work harder(S ST. BREG S-SNE BUS)

11.4 Needs for Learners who are Mentally Handicapped

11.4.1 Competencies

Abilities/skills

Parents suggested that learners with mental handicap need to acquire practical skills such as washing clothes, feeding chickens and self care. In addition they need to learn communication skills.

PA: Yes, I can say, if you know you can tell him/her to wash clothes, clean self or even feed the chicken and give them water, feed and milk cows he/she can be able to do so. (PA - FGD-LI- LAI)

Mine I would like to learn communication skills. (PA - FGD-LI- LAI)

Values and attitudes

Parents suggested that education should emphasize values such as respect, care, politeness and religious values.

PA: They should be taught how to care for one another and respect others (PA - FGD-LI- LAI)

PA: Let's add politeness. There are children who can be rude and so it's good to teach a child to be polite. (PA - FGD-LI- LAI)

Parents underscored the need to instill in learners the values of humility and kindness despite their social economic background. They wanted learners to be taught good behaviours and good morals

PA: There is also pride. It is good as parents we teach our children to be humble. Even if we may be well up, it is good to teach our children humility because pride and arrogance destroys a child so much because they know my family is well up. So that arrogance makes them be disrespected by other people. (PA - FGD-LI- LAI)

PA: My child should be taught good behaviour and good morals. (PA - FGD-LI- LAI)

11.4.2 Content/learning areas/pathways

Parents suggested that learners with mental handicap should learn practical subjects such as tailoring, carpentry, knitting, beadwork, agriculture, building, cookery and laundry.

PA: There is something like agriculture because there are children who are good in farming, others you will like to keep things like rabbits, chicken.....so if they are taught a subject like agriculture, in a practical way, they can be independent. (PA - FGD-LI- LAI)

PA: Catering. They can also be taught how to cook because even if they will be just staying in the house, when you go out, you are very sure you will find food being prepared. (PA - FGD-LI- LAI)

Parents also felt that learners needed to be taught skills that would lead to self employment such as hairdressing, beauty therapy and how to prepare tree nurseries. They emphasized the need to teach vocational skills for independent living. They cited subject such as home science, craft, drawing, religious education as key subjects in the education of learners with mental handicap. They emphasized the need to teach entrepreneurship to be impact business skills.

PA: Things to do with salon and beauty therapy and hair dressing. They can also be taught carpentry, to prepare tree nurseries. They should be taught how to collect the seed and how to care for the seedlings and sell them. (PA - FGD-LI- LAI)

PA: Those who can be able to do things with their hands should be given vocational skills so that they can live independently. (PA - FGD-NGARI- SNE- LAI)

P: To know how to sew bangles, sweater, to be able to sent to shops (P-FGD-WAITH-SNE-NAI)

Parents also strongly felt that learners with mental handicap needed to be trained in adaptive skills such as self care , appropriate behavior and practical skills. They needed to learner religious education to acquire good morals, respect God and other people.

PA: My child is very big but still behaves like a small child and I would like her to be taught to behave well and do things that are of her age for example, doing things such as cooking and washing clothes. (PA - FGD-NGARI- LAI)

My child should be taught religious education so that she can know and respect God and people. PA - FGD-NGARI- LAI)

Parents suggested that learners should be taught self care skills such as feeding, toileting, socialization and communication skills

PA: Feeding themselves by helping them hold a spoon so they can feed themselves including taking them to the toilet and showing them how to do it by themselves. (PA - FGD-LI- LAI)

They also noted that Learners should be taught social skills so that they can be able to select good friends and avoid bad peer influence which may deter them from achieving their goals

PA: I will add onto that of friends. They should be taught on how to select their friends. They should choose a friend who is directing them into achieving your vision. Don't have just friends who will take you away from like education or your plans. You should have friends who are helping you in your plans. And also the society, they should be taught on how to treat the disabled nicely so that they can know they are also human beings and it's not by choice that they are like that. (PA - FGD-LI- LAI)

Pathways

Parents expressed the need to re-introduce technical institution, establish vocational centres for learners with mental handicap, and establish talents academies.

PA: Technical secondary schools should be re-introduced and vocational centre for learners with mental handicapped. Institutions that nurture talents should be established and children to be placed according to their talents and potentials(PA - FGD-NGARI- LAI)

11.4.3 Resources

Tools and equipment, materials and facilities

Parents suggested that learners needed to be provided with materials, tools and machines for tailoring, carpentry and animal rearing to enable them gain practical skills in these areas. They should also be provided with games and sports materials and equipment.

PA: Like those who know tailoring, they should be helped with a tailoring machine, those who know things like making furniture, they should be provided with machines for doing carpentry, those who can rear

animals, they should be assisted in getting animals to rear such as a cow, goat or chickens so that they can support themselves. (PA - FGD-LI- LAI)

PA: They should be provided with games and sports, materials and equipment (FGD-NGARI- LAI)

Infrastructure

Parents advocated for establishment of vocational centres for learners with mental handicap. They also expressed the needs to build special schools for learners who are mentally handicapped to cater for their unique needs which are ignored in the mainstream. They noted that learners in the mainstream schools ridicule them and this leads to low self –esteem.

PA: And if possible, they should also have their own schools separate because sometimes like for instance my child, I had taken him to a regular school and in class you find that the things that were asked in the class and he doesn't know, he would shy off and lack the morale to go to school. (PA - FGD-LI- LAI)

PA: And also in class other children laugh at him because they say there is nothing he knows and that there is nothing he can do for himself. (PA - FGD-LI- LAI)

In the same vein parents emphasized the need for building more special schools to cater for many children who are mentally handicapped still waiting to be admitted in the few existing schools. They also suggested that the government should expand the existing special school so as to admit more learners. They were of the opinion that schools for learners with mental handicap should have boarding facilities and workshops elected for vocational training.

PA: Let's say for example, some parents who were saying they would like to take their children to school, but when they come, they are told there are no vacancies for their children, so infrastructure also should be put in place such that there should be enough dormitories and enough classes as well as enough caregivers (PA - FGD-LI- LAI)

PA: Children who are mentally handicapped require boarding facilities and vocational workshops should be built and equipped fully (FGD-NGARI- LAI)

Human resource

Parents suggested the need to provide specialized teachers who are specifically trained to teach learners with mental handicap. There is also need to employ trained care givers for both girls and boys.

PA: These children need to be taken care of and taught by specialized personnel and big girls and boys should be assisted by men and women respectively to take care of gender (FGD-NGARI- LAI)

11.4.4 Assessment Modes

Formative assessment

Parents suggested that there is need for learners to be guided through practical assessment as they perform tasks at each stage of project work. They should be assessed on what they have taught

PA: Maybe taking a few hours in a day to do the job with the child. Whatever the child is doing, you be part of it. If it's that one of like planting trees, at least you take some minutes and observe while doing it together. (PA-FGD-LIK-LAI)

PA: Children should be assessed as they undertake a project. Every step of a project should be assessed continuously (FGD-NGARI- LAI)

Summative assessment

Parents felt that learners who are mentally handicapped should not be subjected to KCPE but should be assessed through project work.

PA: These children should not be subjected to summative evaluation (FGD-NGARI- LAI)

11.4.5 Contemporary and Emerging Issues

Alcohol and drugs

Parents noted that children with mental handicap are lured into abusing alcohol and drugs by their non-handicapped peers and suggested that they need to be sensitized about drugs and alcohol abuse.

PA: The children should be taught about drugs and alcohol because they are cheated to take alcohol and drugs by their non-handicapped peers (PA-FGD-NGARI- LAI)

11.5 Learners for Learners with Physical Handicap

11.5.1 Competencies

Abilities/skills

Learners suggested that there is need to provide skills that will help them lead successful life. they also felt that they needed knowledge about their country and information on how to choose careers.

P: Schools can give you knowledge to live a successful life. (P-FGD-OLK-SNE-NYAH)

Parents suggested that learners should acquire skills for self-reliance such as knitting and painting.

PA: Teach them self-reliance skills like cutting, knitting, painting should carry on (PA-FGD-OLK-SNE-NYAH)

Values and attitudes

Learners suggested that education should emphasize values such as obedience, respect, discipline and hard work. They felt that education should strive to promote learners' self –esteem especially those with disabilities who in most cases experience low self esteem due to being physically different. Learners should also be taught good morals and responsibility.

P: Lets learners get moral values in school, by having obedience and respect. Learner work hard and have discipline. (P-FGD-OLK-SNE-NYAH)

PA: Na kupata masomo kwake, kutapromote self-esteem hatakuwa anaijichukia na hata atakuwa example kwa hao wengine, eti huyo alipelekwa shule fulani alipata masomo, kwa hivo disability is not inability. (PA- FGD-JOY-SNE-KBU)

PA:brought up in their morals and responsibilities despite their disabilities eg identifying when cattle are lost. (PA-FGD-KAJ-SNE-KAJI)

11.5.2 Content/learning areas/pathways

Primary

Learners suggested that they should be taught subjects such as science and geography to prepare for career such as medicine, teaching and astronomy. They should also learn CRE to acquire moral values and computer studies to acquire digital literacy. In addition they should learn home science, art, craft , Kiswahili and English.

P: Learn about earth, planet, technology computers, moral values and know science. (P-FGD-OLK-SNE-NYAH)

P: We can be surgeons, gynecologist and teach students. . (P-FGD-OLK-SNE-NYAH)

P: It is good to learn homescience, CRE, art and craft and do English and Kiswahili. (P- FGD-YAMB-SNE-HOM)

Parents suggested that learners who do not perform well should go to vocational centres. They emphasized the importance of learning practical skills such as art and craft, home science, carpentry, tailoring and agriculture which would enable individuals with disability get self employment and earn a living.

PA: For example those who cannot perform very well, they should attend something like carpentry, tailoring and other things in vocational training centres. (PA- FGD-YAMB-SNE-HOM)

PA: Second respondent: Kwa mfano haya masomo tulikuwa tunasoma ya home science, wajua mtu akiwa amesoma home science class four, five, six, seven, eight ata akiwa na shida fulani..ata ile ingine ya art and craft, they used to give us skills juu kama wengine wanasoma class four to eight, badala ya kuenda form one anaanza kujitegemea yeye mwenyewe. Amepata hizo skills unapata wengine ni carpenters, masons hizo alizitumia akiwa primary wengine wamekuwa musicians. (PA- FGD-JOY-SNE-KBU)

Parents were of the opinion that learners with severe disabilities should be taught self-care skills such as toileting, bathing, and feeding to be adaptable to the school environment.

PA: Wanatakiwa wawe lazima wajue the basic things, kama hajui kujipa chakula kwa sababu kuna wale hawawezi kujipa chakula na kijiko because anastruggle,inatakiwa wafundishwe those basic needs, hizi zote

wanatakiwa wajue, wajue kujipeleka kama ni toilet kama hawajui, vitu kama hizo basic kwa sababu tuko ile level ya primary, nursery-preschool kwa sababu sasa akienda mbele hizo vitu hazitakuwa hinamsumbua. (PA- FGD-JOY-SNE-KBU)

The parents underscored the need to introduce ICT early to learners with disabilities so that they do not lag behind in technology. They also emphasized the need to teach foreign languages such as German and be given career guidance.

PA: Hii mambo ya computer, we need to introduce because u find some of these children probably they rely on computers and we need to introduce it early in primary ata kama serikali inasema iko na hiyo mpango, but they should put more emphasis and start with this special children because sasa ukiangalia, utakuta wakiwa kwa nyumba ,kucheza na gadgets they know very well,vitu kama remote, mobile phones so if introduce computers, they can actually easily adapt. (PA- FGD-JOY-SNE-KBU)

SL:computer , German, want to know more about other countries. How i will carry myself when i get a job and how i will manage my salary. (SL-INT-KAJ-SNE-KAJI)

11.5.2 Resources

Parents suggested that learners should be facilitated with indoor games facilities so that those who have severe physical disabilities can have an opportunity to participate in games. They also suggested that the government should provide assistive devices such as wheelchairs and crutches to learners with physical disabilities.

PA: others are adapted games that is in door games some are good since they can be played indoors for children with challenges to move (PA-FGD-OLK-SNE-NYAH)

PA: Government to offered facilities like wheel chairs (PA-FGD-OLK-SNE-NYAH)

PA: Clutches provided but which has to be fitted now and again as the child grow(PA-FGD-KAJ-SNE-KAJI)

Learning environment

Learners suggested that the school environment should be made friendly for learners with physical disabilities. They expressed the need to adapt the physical environment by providing ramps for those on wheelchairs and adapting school toilets.

Majority of our children do not have potential to cope up with environment due to their disabilities. I suggest government should create environment where they can cope well and excel. (P-FGD-OLK-SNE-NYAH)

PA: Because you find like in a school like this one, you can hardly have enough schools of this nature to sustain the number of children with disability so these children some end up because like when we came here we did an interview so there are those who are never taken, they maybe end in other ordinary schools, and those schools may not have the facilities. How do you ensure those other schools, ordinary schools like where my daughter was, that they are made to comply with certain basic expectations of a special child. Things like toilets, do they have special toilets, do they have a ramp or they only have staircases. So that when you have a child with disability, at least the basic needs are not interfered with, they are not feeling completely out of place because of the environment they are in. Because the environment can make that child affected because anaona hawa wengine kwa mfano wanaeza panda yeye hawezi panda. So when you are coming up with these standards, I think there is also need to include because there is what is probably basic that really is required in school even in our public and even private. (PA- FGD-JOY-SNE-KBU)

11.5.3 Assessment Modes

Formative assessment

Parents were strongly opposed to KCPE being the sole determinant of promotion of learners to secondary schools. They suggested that continuous assessment marks should constitute the biggest percentage of the marks attained at the end of every level.

PA: In terms of evaluation, when we are evaluating, probably it is up to the method. Evaluation through examination is okay but probably the difference is how it is done because you see now it's like you know ukiingia standard one, you will do an exam in standard eight. It is like that is what is determining kuenda from one, you will find that there is a lot of pressure that is put on and geared towards examination that's why there is a lot of cheating because it is like if you failed that one, it is like you have lost in life because the way we assess, we normally put a limit tunasema tunaevaluate october. Suppose it is put in a way that evaluation is a kind of continuous or regular such that you are able to monitor the child through out. Because unaeza kuwa number one through out but ikikuja final exam, imagine ukigonjeka because you can get sick, you imagine you are been assessed for only that one week, kama ni standard eight ni siku tatu. The eight years you have been in school has been reduced to only three days and those three days you can be

feeling not very well then you are condemned. Na ungechukua uone vile huyu mtoto alipata kutoka standard one, two, three uone vile evaluation yote, that is a child unaeza sema aingie form one straight ata bila kufanya huo mtihani because you have already assessed the child. Probably we need to see how we look at it tujue kama tutaanza na kuassess either wakiwa standard six upto eight ama seven to eight, yaani we need a bigger period to really assess and say this child amaa ni A student ama ni B student. (P-FGD-OLK-SNE-NYAH)

Adaptation of assessment

Parents expressed the need to develop special examinations and tests for learners with physical disabilities in order to cater for their needs.

PA: To prepare special examinations for special students since even these children are special since they cannot do normal work. Mainly concerning daily living. (PA-FGD-OLK-SNE-NYAH)

Summative assessment

Learners felt that KCPE should be used to assess learners at the end of class eight and noted that it was not difficult to handle.

Interviewer: Why do you like KCPE? Are there other pupils who do not like it?

P: It is not complicated like other examinations (P-FGD-OLK-SNE-NYAH)

11.5.3 Inclusivity

Parents held the opinion that learners with physical disabilities should learn in integrated programmes so that the society can understand and accept them.

PA: Best thing to have learners with disabilities educated in integrated programmes like here the society will understand them and not fear them. (PA-FGD-KAJ-SNE-KAJI)

11.6 Needs for Learners with Visual Impairment

11.6.1 Curriculum adaptations

The respondents suggested that there is need for curriculum adaptations for learners who have low vision. In addition teaching methodologies should be adapted to suit learners with visual

impairment and provide adapted software such as JAWS to help the blind use computers independently.

There is need to put into consideration learners with low vision especially in secondary schools. Currently they are forced either to do adapted curriculum for the Blind or the regular curriculum for the fully sighted. (MA-IS)

I did indicate that adaptation should focus on methodology and content. I maintain the stand with the following suggestions for computer studies adaptation in this field which should focus on audio output software with the jaws programme leading the pack. (ON-2-IS)

Adaptations of curriculum support materials

The respondents suggested that the government should explore means of providing adapted curriculum support materials in tactile form to support learners with visual impairment. They noted that it is currently very expensive to produce these materials and thus, the need to explore cheaper ways.

Tactile books and tactile learning materials are a big concern. We all appreciate the value of diagrams to all learners, those with sight as well as those who may have lost sight. The machine being used to draw tactile diagrams is imported and costs approximately kshs. 400 000.00. The special paper is also imported. There are simpler ways of doing the same, developed by Kenyans. (ON-1-IS)

11.7 Needs for Learners who are Deafblind

11.7.1 Competences

Applied skills

The parents indicated that education for learners who are deaf blind should enable them develop positive attitude towards work

PA: Will base comments and education where we hope to prepare a learner with a positive attitude to the world of work? These learners should be exposed to skills like growing crops and rearing rabbits. (PA KAB-SNE BAR)

Values

The parents suggested that learners who are deafblind should acquire values such as respect and socialization with others

We also teach values such as moral uprightness, respect of others, to value others and at the same time socialize positively with others in the institution. (PA KAB-SNE BAR)

11.7.2 Content /learning areas/pathways

Vocational pathway

The parents suggested that the learners needed vocational training which require materials

The learners need vocational training which require materials and other resources for these learners. (PA KAB-SNE BAR)

11.7.3 Resources

Teaching learning material and facilities

The parents expressed the concern that schools lacked adequate teaching and learning materials, assistive devices, trained human resource and also lack health facilities.

We lack many resources such as assistive devices like hearing aids, walking canes healthy facilities with trained personnel

We have a dispensary being run by school nurse but most of the times we lack drugs (PA KAB-SNE BAR)

Infrastructure

The parents indicated the need for establishment of more institutions for learners who are deafblind in order to reduce the burden of learners who are deafblind to institutions that are very far from home.

The government should be encouraged to establish more institutions and units should be established in every county to avoid situation where parents travel from far counties like homa bay and others to cater for varied disabilities (PA KAB-SNE BAR)

The parents pointed out that there are limited vocational centres for the learners who are deafblind to transit to.

We expected the learners to progress to the next level but we lack facilities to train the learners in various vocational skills. We have institutions that train and help learners in vocational skills. There are vocational centers such as mumias, aluor, sikri and others. Mumias specializes in tailoring. Jacaranda it caters for the mentally handicapped We wanted the same replicated here so that we do not have to transfer them to other places but train and mentor them within the same institution because over time, we have been able to gain their confidence and also understand their strengths and weakness (PA KAB-SNE BAR)

Human resource

The parents suggested that teachers should be trained in vocational skills in order for them to have the capacity to train the learners in vocational areas

The teachers need also to be trained on the skills for vocational training such as carpentry, welding etc. this is necessary because the teachers are trained on how to teach and handle special needs learners but lack these vocational skills which could be of great help (PA KAB-SNE BAR)

11.7.4 Assessment Modes

Continuous assessment tests

The parents felt that the learners should be continuously assessed on what they are able to do on a daily basis and they should not be assessed through KCPE and KCSE

We assess these learners every day and make a report of what the learners can do

We recommend that these learners should not be assessed using KCPE or KCSE because they are different and rate of learning is much slower than the normal children. (PA KAB-SNE BAR)

A programme of assessment be put in place to enable the learner acquire a recognized certificate in area of vocational training to be used for placement in the job market (PA KAB-SNE BAR)

11.7.4 Contemporary and emerging issues

Sexuality education

The parents expressed the need to provide sexuality education to the learners so that they know how to relate with the opposite sex and how to manage their sexual feeling. The parents also felt that one of things that need to be addressed is sexual abuse by other people especially close family members.

Issues of sex and sexuality, these learners experience desires to those of opposite sex, some of the learners get stimulated and sometimes have problems concentrating. The male children sometimes have to be stopped by the teachers from going overboard. When they are sexually stimulated they tell us their desires to explore their surrounding e.g. the way cows behave when they are on heat. These learners have to be guided and constantly supervised to ensure they conform to acceptable behaviors (PA KAB-SNE BAR)

CHAPTER 12

ECDE LEVEL NEEDS

12.3.1 INTRODUCTION

Early Childhood Development Education (ECDE) in Kenya has been recognized as a fundamental stage that lays foundation for a child's holistic and integrated education that meets the cognitive, social, moral, spiritual, emotional, physical and developmental needs. The concept of Early Childhood Education (ECDE) in Kenya has been described in various forms. The Early Childhood Development Service Standard Guidelines for Kenya defines an ECD child as a human being from conception to eight years. Basic Education Act No 14 of 2013 refers to this level of education as pre-primary. The Act, defines ECDE as the education offered to a child of four to five years before joining class one in a primary school. Sessional paper No.1 of 2005 on Policy Framework for Education, Training and Research terms ECDE as the education that covers early care for 0-3 old children and pre-primary for 4-5 year olds. Sessional Paper No. 14 of 2012 refers to the holistic development of children in the range of 0-5years of age. Against this legal framework, the Ministry of Education Science and Technology focuses on the 4-5 year old children with a view to providing a holistic and integrated programme that meets the child's cognitive, social, moral, spiritual, emotional and physical needs.

In this chapter, need assessment findings on ECDE have been discussed under the following headings: needs in the school curriculum, competencies, content/learning areas, talent identification and nurturing, pedagogical approaches, teaching and learning resources, assessment and contemporary issues.

12.3.2 NEEDS IN THE SCHOOL CURRICULUM

Needs for social development

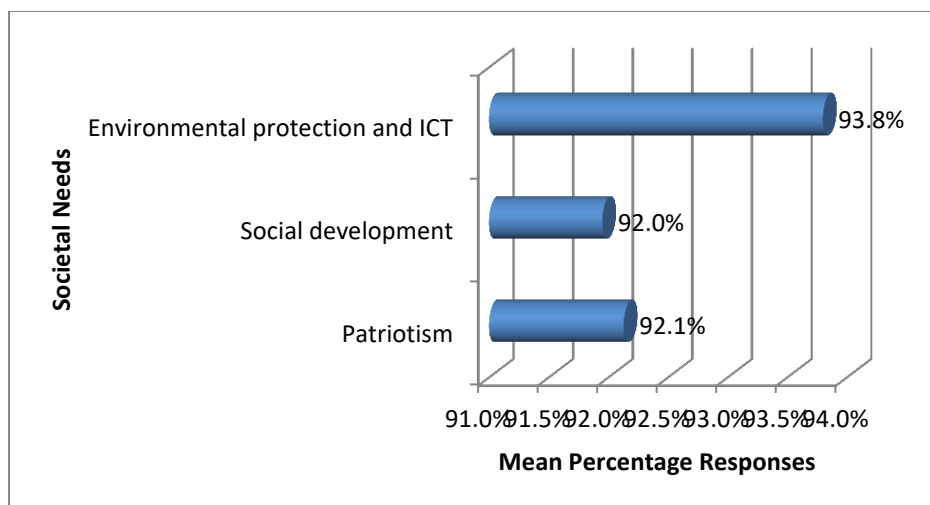
Societal needs are considered to be what the people who constitute the population of a country need for their lives to be productive and happy in the local context. As the curriculum is a major factor determining the knowledge and skills that future citizens will possess, and hence their capacity to contribute productively to their society and governments in many countries arguably, the greatest importance of education lies in its link with well-being and prosperity, as it is

claimed that it is virtually impossible to attain high levels of economic development and have a productive economy and a high standard of living without a knowledgeable and skilled workforce.

Societal considerations both suggest that the quality and appropriateness, of schooling which is very important in guiding the way content of curricula should be designed to inspire and enrich people's lives with the knowledge, skills and attitudes most helpful to them and their country. Empirical evidence has it that value education is essential for sustained social and economic development and the realization of human potential. Value education is a powerful force in shaping human beings in any society and plays a vital role in giving the youth, the training necessary to pursue their dreams and aspirations. The dreams of youth in a society can only be actualized if the curriculum is guided by the philosophical ideals of a societal aspects like nationalism, patriotism, national unity, economic and industrial development, technological development, social development, international consciousness, respect for all cultures, self-fulfillment, social equality, social responsibility, sound morals, good health, information, communication and technology and environmental protection are given due consideration. It is in reference to the aforementioned that the study sought the views of the stakeholders in reforming the countries curriculum. The findings with regard to the extent to which various aspects of societal needs should be emphasized are as follows;

Teachers from ECDE were required to give their responses in regards to the extent to which societal needs should be emphasized in the curriculum. They were asked to indicate the extent to which the identified societal needs should be emphasized in the school curriculum using a five-pointer Likert Scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=Some extent' and 'G= Great extent'. The responses were weighted out of 5 and percentage mean ratings derived. Their responses are presented in Figure 12.1.

Figure 12.1: ECDE teachers' responses on the extent to which societal needs should be emphasized in the ECDE level curriculum



Based on the findings it can be concluded that ECDE teachers would prefer environmental protection, patriotism and social development to be fully embedded into the curriculum from the foundation level among other societal needs. Environmental protection, patriotism and Social development should thus be considered for inclusion in the envisaged curriculum.

In terms of needs for social development, respondents suggested that education should enable learners to make informed decisions, and respect human life. Education should further address democracy, equality, self-reliance, patriotism, social, environmental conservation and individual development. The proposed curriculum should address the professional requirements for a functional society. In addition it should reflect on religious values, technological changes, conservation and moral values. Moral values should address issues such as corruption, radicalization, anti-ethnic discrimination, religious tolerance, non-violence in conveying demands, tolerance, anti-criminal culture, anti-corruption culture, ethical practices, servant leadership, transparency, communications, etiquette and decorum, accountability, good governance in one-self, family, group as well as in the corporate. Education should prepare one to fit in the global village.

ME: Environmental conservation with use of real life examples and the consequences of environmental pollution when teaching mathematics and science subjects. Life skills and their survival value such as self – awareness and make informed decisions. Respect for human life through learning experiences that expose learners to appreciate life. Values (rationality, sacrifice, individuality, democracy, equality, self-reliance, and patriotism). Key competences determined by market demands and social needs. (CEMASTE).

The curriculum should incorporate the need for the society to sustain peace, develop law abiding citizens, independent thinkers, creative problem solvers, ability to use ICT, solve problems, create wealth and deliver service and serve to instill learners with humanity. It should also instill knowledge, attitudes, and skills in patriotism and anti-radicalization,

The curriculum should be; Holistic in nature, ...Respects, reflects, and conforms to the Kenya constitutional affirmation that ours is a God-fearing nation;....., encourages reflection, critical thinking, problem-solving, innovation and creativity in their life situation; (KCCB-RI).

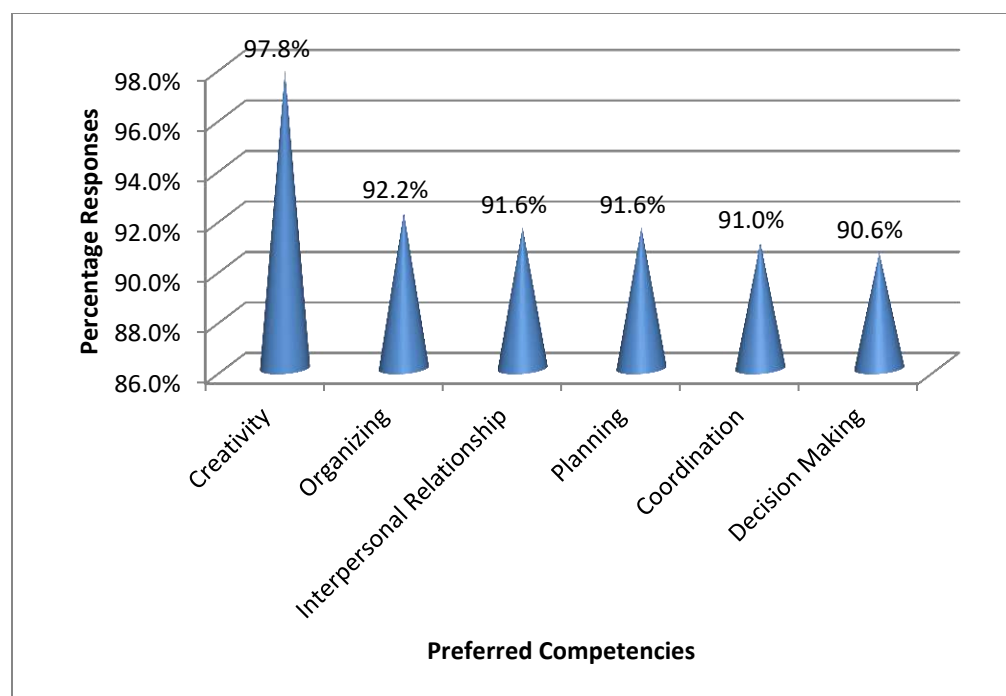
ME: let's not be prejudiced by the multi-ethnicity of Kenya but how we can fit in the global village. (NM-IS).

12.3.3 COMPETENCIES

Aligning the curriculum to address the aspirations of the Constitution, Vision 2030 and the East African Community treaty should be prioritized. It has been proposed that the content for basic education should be designed with a view of equipping the learners with relevant knowledge that emphasizes on technology, innovation and entrepreneurship (Vision 2030), the development of their full capacities, living and working in dignity, enhancing the quality of their lives, making informed decisions and continuing with learning as a lifelong engagement.

This was re-emphasized by Task Force which recommended major reforms of the curriculum to align it with the Constitution and to ensure that the aspirations of Vision 2030; Structure the curriculum within a skills and competences framework that identifies the knowledge, skills and competences all learners will acquire, at the same time provide both vertical and horizontal coherence. The ECDE preferred competencies are summarized in Figure 12.2.

Figure 12.2: ECDE Teachers preferred competencies N=156



The ECDE teachers preferred creativity, organizing, interpersonal relationships, planning, coordination and decision making.

Respondents proposed that education should produce people who have hands on skills, rather than the current status where education seems to have focused more on the knowledge and cognitive development. It was also recommended that skills of critical and creative thinking, innovation, problem solving, questioning and analysis, knowledge, manipulation and application, research, communication and cooperation, entrepreneurial and financial literacy should be emphasized in the curriculum.

Respondent:, , Decision making, soft skills (empathy, emotional intelligence), critical thinking, writing skills, public speaking. skills to harness local resources for livelihood. This may be brought out through exposure of the learner to the existing environment. (ED-AC)

Respondent; Civic education and citizenship have suffered at the expense of theory or intellectual development. (KCCB-RI).

12.3.3.1 Values and Attitudes

The respondents recommended that teachers shift focus from examinations and concentrate on inculcating values and this can only be made possible if teachers are able to put in more time on subjects that are not externally examined. At ECDE, respondents expressed the need for children to acquire discipline, social skills, taking care of the environment and knowing God. The respondents explained that at the ECD level children need to express themselves freely. They further said that children at this level should have the following social values such as respect, justice, love for one another, sharing, justice, honesty, diligence, caring, compassion, patriotism, morals, harmonious coexistence and interpersonal relations.

KI: ECDE should now have values of sharing, justice, coexistence and love neighbours. (**KI – FBO - BUN**)

KI: When you look at an ECD child I would like to see a socialised child, the social part of the child. The child is able to interact with the others. It should be more of knowing how to live with the other children other than being able to do a lot of mathematics and such (**KI-MCDE-NYA**).

Respondent...so they must be taught when you want to assist somebody just assist up to the last minute, (**WEL-INF-NAR**).

Respondent: Values are eroded in our contemporary society. There is need for a curriculum that emphasizes on reviving values like honesty, kindness, love, unity, trustworthy in young children. Such values will uproot corruption which is the cancer of the nation. (**DBK-IS**)

The respondents expressed the need for the curriculum to include the national values as enshrined in the constitution, and the 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, logical thinking, innovativeness computer and digital literacy.

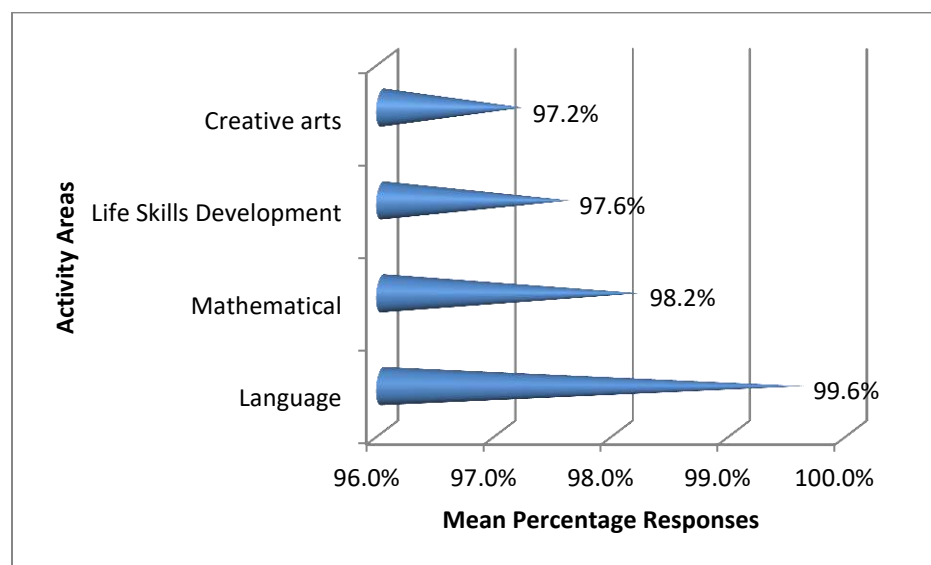
Respondent: The curricula at different levels should aim to enhance Accountability, Integrity, Responsibility, Peace, Commitment to work, Negotiation, Acceptance and environmental preservation. This can be achieved by involving learners in community service at all levels during holidays hence inculcating Nationhood in learners. (**OCO-IS**).

Respondent 1: Soft skills; 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness, and Teacher professionalization programmes through mentorship. (**CEMASTE**A).

12.3.3.1 Activity Areas that should be included in the School Curriculum

The study sought to establish the extent to which activity areas identified should be emphasized in the ECDE school curriculum. Responses were obtained from the ECDE teachers. The respondents were asked to indicate the extent to which the identified learning areas should be emphasized in the school curriculum using a five-pointer Likert Scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=Some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. Teachers responses based on percentage mean ratings are presented in Figure 12.3.

Figure 12.3: ECDE Teachers Responses on the Extent to which Activity Areas should be Emphasized in the School Curriculum (N=153)



The findings shows that ECDE teachers would prefer language, mathematical, life skills and creative arts learning areas to be fully embedded into the curriculum from the foundational level among other societal needs.

Owing to their importance and contribution to development, languages, mathematics, life skills, creative arts activity areas should be highly considered for inclusion in the envisaged curriculum at the foundational stages.

The respondents suggested areas for inclusion in the ECDE curriculum such as; communication skills, numeracy, creativity and manipulation; social and life skills, environmental awareness; respect for and sanctity of life; nutrition and health (knowledge and practice); religion and ethics; language (including mother tongue); values related to hard work, truthfulness and integrity. Other areas suggested were; national values, life skills, personal safety (security), knowledge and practice; values associated with the common good, communal responsibility and respect for other people's property; technology; emotional awareness, empathy, self-regulation and conflict resolution; respect for the rule of law, appreciation for democracy; creative arts and expression; literacy and communication; cooperation and innovation; critical thinking, reasoning and problem solving; number sense and operations. In addition the respondents suggested inclusion of sense and geometry, patterns and classifications, measurement and comparison; awareness of the natural and the physical world, inquiry skills; public speaking, writing; physical education, drawing, simple mathematical concepts, good manners e.g. throwing litter, washing hands, using courteous language; vernacular; basic communication skills such as reading and writing; counting, mannerisms, knowing the environment, socialization and religious values.

Respondent: ...should be able to respect... value of respect and obedience. If she leaves ECD she should be able to have those. (CARW-INF-UG)

Respondent: ...they should be able to differentiate between good and bad habits, and stand out for good habits. Also let them be able to socialize normally with peers; (BUS.MAN-INF-NAI)

Teach Vernacular Languages at ECD and Lower primary levels (up to class4) to ensure we don't lose/erode our culture/ heritage/ traditions as has already in most young urban families. This is to deepen our African/ Kenyan roots (NK-IS)

Agriculture was proposed to be compulsory in basic education for food security in the country. In addition integration of nutrition education and food production were proposed.

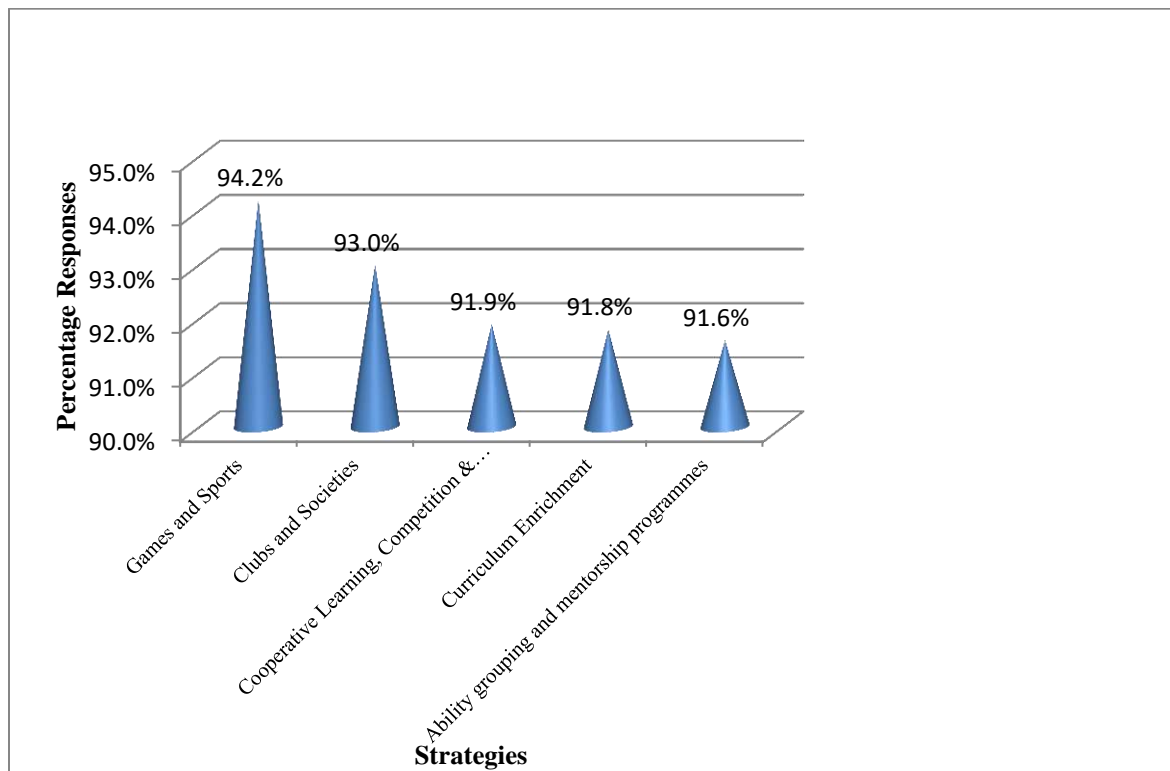
Respondent: Include physical education in the curriculum. Physical activity has tremendous health promoting and disease preventing benefits and define to a large extent people's health, growth and development. (NDU-AC).

12.3.4 NURTURING TALENTS

12.3.4.1 Identification of Talents

Every child has potential, what really matters is the child's ability to turn potential into real, tangible and measurable performance. The reality is that there are multiple intelligences and infinite potential that each person possesses. Thus, every child is 'intelligent' in his/her own way. It is for this reason that nurturing potential and talent should be a major area of focus in the intended new curriculum. The new curriculum and by extension schools will have to embed within them strategies that will enable every learner to harness their potential through well-developed learning activities that will lead to the identification and subsequent development of these areas of potential and talent. ECDE teachers were asked to rate the extent to which different strategies can be used to nurture the potential and talents of learners. Their findings are presented in Figure 12.4.

**Figure 12.4: ECDE Teachers Responses on Strategies of Nurturing the Potential and Talents of Learners
N = 150**



The findings indicate that ECDE teachers highly preferred games and sports at 94.2%, clubs and societies at 93.0%, cooperative learning, competition among schools and holding of academic

conferences at 91.9%, curriculum enrichment at 91.8%, ability grouping and mentorship programs at 91.6% as the best strategies for nurturing the potential and talents of learners. This implies that games and sports, clubs and societies, cooperative learning, competition among schools and holding of academic conferences, curriculum enrichment, ability grouping and mentorship programs should be embraced as the best strategies for nurturing the potential and talents of learners in the envisaged ECDE curriculum.

Respondents pointed out the need to identify and nurture talents from the earliest age alongside the core curriculum

Respondent: on the issue of talents we need to identify talents from when the child is as young as five years. If you look at a five year old child you may be able to know what he or she might do in life... a very young age and nurture them for that person to become what he or she wants to be in life (**MECH-INF-MUR**)

Respondent; we identify them early; we develop them early so that by the time they leave class eight they will have creativity.... (**MEC –INFO-NAR**)

The identification of talents was reported to be a responsibility of the parents and teachers. The parents should monitor their children and be able to identify what they are good in from the time they are very young in early childhood.

Respondent; As a mother, when do you know that your child has a talent? As a mother I will know there is a talent when the child starts playing the ball, starts singing, modeling.... (**MEC –INFO-NAR**)

(When you are at home, it is possible to identify the kind of talent any of your children may be having.) (**HOT-INF-NAR**)

Respondent:Nawaalimupiawanaweza-identify huyumtoto, talent yake n..atoto. . (**HOT-INF-NAR**).

Other platforms for identifying talents to include: Annual science congress, annual term games, arts, annual drama and music festival, use of mentors, teacher/staff nomination, peer nomination, parental information, using community resources and exposure to various activities. It was further noted that talents can be identified in different settings which include the school, in the religious institutions and at home where the family members can identify unusual abilities in children.

Other methods of identifying talents include: Provision of a variety of opportunities for the children to exploit their talents, encouraging teachers to have personal interest in learners lives, continuous assessment, talent scouts to identify learners with talents, training talent assessors and trainers, development of talents identification center, development of talents identification tools.

It was also noted that the learners should be provided with opportunities to nurture their talents. It was further reported that currently, talent opportunities are limited to drama, music and sports. These alone do not cover the full range of talents that can be developed and exploited in school. It was suggested that the curriculum broaden or create more opportunities for talents to be showcased and developed.

Respondent:...giving children opportunities to practice different things in school,-----teachers have clubs in sports, athletics and run them well. (META -INF-BUS)

Respondent:...Expose them to many things by practical exposure or thru wide reading habits (QUAR-INF-MAC)

Other respondents proposed that a repository of ideas and innovations be built which should be a collection of learners' ideas while expressing their creativity in areas such as science and arts. This repository should serve as a pool for interested actors (such as private sector, foundations etc) to pick from and help students develop/nurture innovations.

It was also proposed that co-curricular activities be mainstreamed in the daily learning experience. Other activities which could be relegated to clubs should be incorporated into the main school timetable. Music, art and programming should not just be club activities but should be taught as part of the curriculum.

In teacher training, the respondents suggested teacher trainees be imparted with skills in talent nurturing and development. They should also be taught how to appraise and evaluate students' talent development.

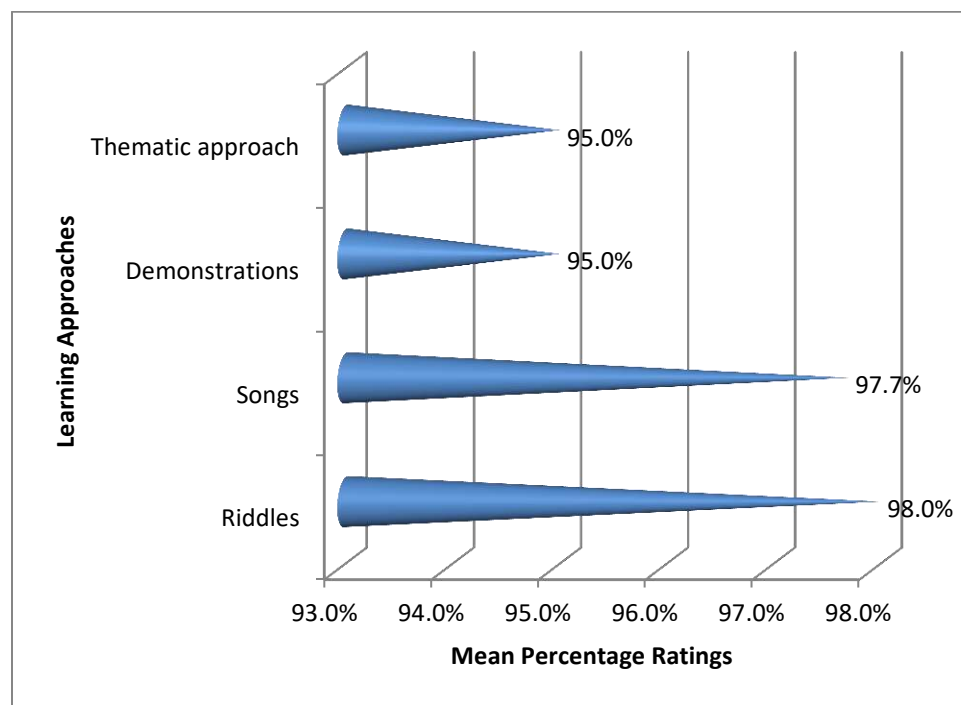
Education should create a demand for talents and skills. Initiatives such as talent focused institutions and academies, talent scholarships and media focus on talent achievements could be used to motivate learners to explore and develop their talents. It was further proposed that counties create education strategies that take advantage of their regional strengths to attract talent in their areas and create opportunities to develop them. Some of the talents identified to be nurtured include visual and performing arts, culinary arts, sports, pottery, fine arts, music, drama among others. Other suggestions on nurturing talents include; establishment of talent academies, provision of adequate resources, create incubation centres for innovations, schools exhibitions in areas like science, handcrafts, IT, sports, games, music and drama. equipping teachers with

competence to identify and nurture talents, realigning teacher education to produce teachers in all the potential pathways of academic, technical and vocational, sports, creative arts among others, Establishing pathways early enough to nurture sports, music, performing and creative arts and crafts.

12.3.5 PEDAGOGICAL APPROACHES

Different teaching methods are used during the learning process. The ECDE teachers' were asked to rate the extent to which various practical-based methods of instruction should be used in delivering the ECDE curriculum. The findings are as shown in Table 12.5.

Table 12.5: ECDE teachers responses on the extent to which they would want to use different methods of teaching (N=144)



The ECDE teachers highly preferred riddles (98.0%), songs (97.7%), demonstrations and thematic approaches (95%) as methods of teaching. Riddles, songs, demonstrations and thematic approaches should be emphasized as methods of teaching in the envisaged ECDE curriculum.

Apart from the ECDE teachers, other respondents were required to suggest methods of curriculum delivery and it was noted that practical and learner centered methods should be emphasized. Use of technology was also suggested.

Respondent: ... giving them more practical lessons, apart from theory ...and also if they improve technology so that those children...technology I think will also help them develop their talent in more efficient (CARW-INF-UG).

Respondent: (If those days we had done practicals, it would have been good since it would have helped a learner as the skills would have been learnt very well.) (BUT-INF-KAL)

The respondents proposed diversified ways of learning such as peer learning, modelling, use of pictures, role play, demonstrations, debates, projects, field work and practical system be strengthened in schools as some of pedagogical approaches to be used at this level

Industrialist...more of a practical kind of environment for learning and a diversified way of learning is needed... that's what is lacking currently... identify who is interested in what at an early stage and then help them further thus helping us to explore the potential of the learners in that particular direction. (MAN-IND-KAK)

The respondents expressed the need for teachers to be more professional and upto date with current information and make learning fun and learner centered.

KI... Lets talk about classroom environment, the teacher is supposed to enter in classroom..... children enquiring from the teacher, than the teacher enquiring but how does the child enquire if you don't give them the task, and you just talk (,KI-UNESCO-NAI)

KI: Encourage creativity and activities that they perform. Allow them to participate where they want to. The moment creativity is encouraged in children am telling you they would come with different ideas that you didn't imagine they have at the back of their mind. (KI-CEB-MIG).

It was suggested that group activities performed at school can help a teacher to group or regroup children according to their talents. This however happens in a conducive environment where the teacher is cordial to them. A hostile environment inhibits children and this makes it difficult for the teacher to know what they really are good at.

Other methods proposed include; participatory learningExploratory/Discovery Methods, field Studies,

KI: making the children do something and taking them out for field studies and all that, going to this place calledduring science lesson .. I can tell them look at insects...t an insect and a child is getting what insect is they can say this is a grasshopper, it has wings, it has six legs. Children look seeing, when they see they remember (KI-HET-NAI).

The respondent proposed that learner centred methods such as role plays, songs, dance and recitals should be used especially with young children in delivery of the curriculum.

KI-The children in their early stages of life should use role plays, songs dance and recitals. **(Ki-NCC-NAI)**

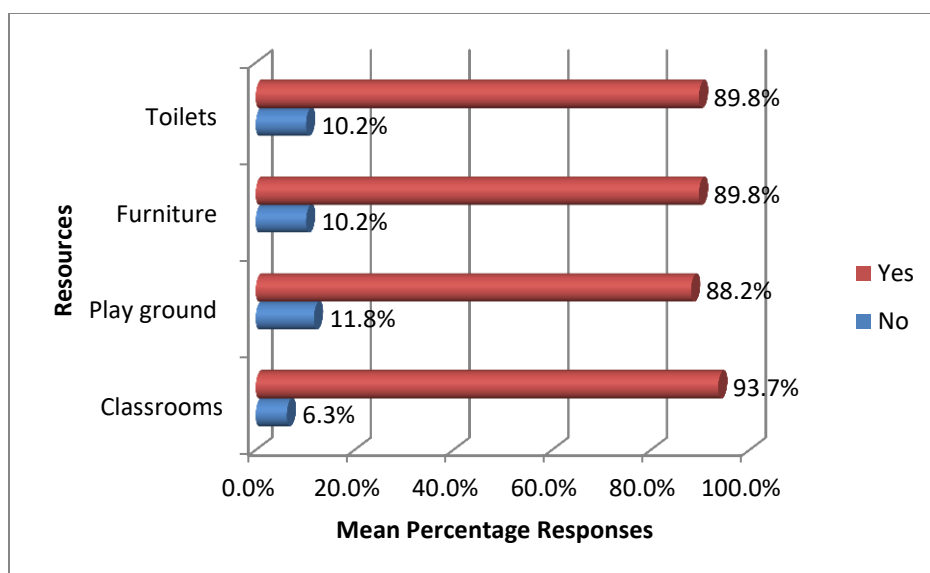
They said pedagogical approaches should differ according to levels. However, at ECDE the approaches should be child friendly, considering that it is the formative stage of the child that requires more play and humour, to get them interested in school. It was also noted that teachers should be competent in the use of information technology. They should also be well versed with the legal and regulatory frameworks in education.

12.3.6 RESOURCES

Resources are important in the learning process and the respondents were required to suggest learning and teaching resources in order for the education to be successful. The resources are geared towards enhancing learning, teaching and content delivery. Educational resources are the teaching and learning items, structure materials and human resources that assist the teacher to effectively and efficiently deliver content. The survey sort to establish the availability of resources which are important in implementing and actualizing a competency based curriculum. Information was sort by researchers observing the available resources in the ECDE centres. The findings on the most and least available resources are presented in Figure 4.7 and Table 4.8.

The most available ECDE resources are presented in in Figure 12.6.

Figure 12.6: Most Available ECDE Resources N=127



The findings show that, the most available resources were classrooms as indicated by the high mean rating of 93.7% followed by syllabus (90.6%), furniture and toilets (89.8%); and play ground (88.2%).

The least available ECDE resources are presented in Table 12.1.

Table 12.1: Least Available ECDE Resources N=120

Resources	No (%)	Yes (%)
IPads	99.2	0.8
IPods	97.5	2.5
Recording studio	98.3	1.7
Storage devices	86.7	13.3
Computers	86.7	13.3
Radio	84.2	15.8
Mobile phones	85.8	14.2
Cleaning tools and equipment	78.3	21.7
Cooling tools and equipment	97.5	2.5
Weaving tools equipment	97.5	2.5
Safety tools equipment	95.0	5.0
Laundering tools equipment	98.3	1.7
Sewing tools equipment	99.2	0.8
Garden tools equipment	92.4	7.6
Musical tools equipment	85.7	14.3
Science corner and kit	79.8	20.2
Weather station	93.3	6.7
Demonstration plots	89.9	10.1

The least available resources were iPads (99.2%), iPods (97.5%), recording studio (98.3%), storage devices (86.7%), computers (86.7%), radio (84.2%) and mobile phones (85.8%)

The respondents expressed the need to provide enough learning resources which included human resources. It was further noted that it is critical to provide well trained teachers and ensure that they receive continuous and regular in-service

Industrialist...Elimu inaharibika kwa sababu ya ukosefu wa walimu. Mimi ninge sema badala ya hii free education, ile pesa kidogo wananchi walikuwa wanalipa, afadhali walipe wapewe wailimu wakutosha (**CEO-IND-GAR**)

Industrialist...tuwe na watu ambao wao wanaweza kuwa fundisha...ambao wana ujuzi wakufundisha... (**CEO-IND-GAR**)

Industrialist...Inservice. Hiyo inservice iangaliwe... Kila term kila mwaka hiyo training iwe inaendelea...(**CEO-IND-GAR**)

The respondent explained the importance of teaching and learning materials in ECDE and suggested that the community members be involved in the development of the materials

KI... teaching aids local materials like I went to a certain world vision office down country they have developed local materials reading materials for the children and the community itself ..So I think that local materials should be developed at the ECD at that level. (**KI – WV - SAMB**)

The respondent emphasized the use of play materials especially for the ECDE learners to nurture talents and a conducive learning environment. They indicated that some of the resources required to implement a competency based curriculum include laboratories both for sciences and languages, print materials, quality teachers and ICT and workshops, enough classrooms and play fields. The institutions should be provided with a very wide and diverse resource based on available means, locally relevant and without and the issue of shortage of teachers be addressed. The learners should also be provided with play materials

The respondents suggested the need for financial resources, establishment of sub-county libraries, and revival of teacher's advisory centres to help equip teachers with skill.

12.3.7 ASSESSMENT MODES

ECDE teachers from both public and private schools from the entire country were randomly sampled and given questionnaires to respond to with regard to the extent to which various forms of assessment contribute to effective measurement of learners' achievements at the ECDE level. Their responses were collected using a five-point likert scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=Some extent' and 'G= Great extent'. The different forms of assessment were clustered into formative and summative. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings and composite means were further derived. Their findings are presented in Table 12.2:

Table 12.2: ECDE teachers Responses on the extent to which various forms of assessment contribute to effective measurement of learners' achievements at the ECDE level (N=150)

Formative Assessment	% Rating	Summative Assessment	% Rating
Progress assessment	96.0%	End of term examination	82.8%
Observation Checklist	92.2%	End of year examination	83.6%
Continuous assessment	88.2%		
Composite mean	92.1%	Composite mean	83.2%

Findings from ECDE teachers show that formative assessment was highly preferred with a rating of 92.1% compared to summative assessment at 83.2%. In the formative assessment, progress assessment was rated highest at 96.0% compared to observation checklist at 92.2 % and continuous assessment at 88.2%. In the summative assessment, end of term examination was rated at 82.8% and end of year examination at 83.6% showing an insignificant difference between the two forms of assessment.

From the findings, formative assessment should be more emphasized than summative assessment in the envisaged ECDE curriculum.

Parents suggested that learners in ECD should be assessed entirely by observation method,

Parent: through observation in ECD chenyeamefanya(**PA-FGD-S-KAJ**)

The respondents pointed out that assessment of learners was important in order to know how much the learners understood what was taught. The assessment was viewed as one of the ways of identifying different potentials of learners.

Respondents ... the performance of children at different levels of competition is very important because along the same line you may realize this child can stand to represent Kenya in different levels ... (**CAP-INF-LAM**)

One of the respondents said that children in nursery should be given home work. Another respondent was of the opinion that as children transit to class 1 from nursery school, they should be tested by their nursery school teacher.

Respondent: If they come from nursery, they should be tested for placement. ...It (*test*) should be given by their nursery teacher. (**SHOP-INF-NYE**).

The respondents are in support of continuous assessment tests, observation, projects, internship and National exams. They argue that individual learners learn at different pace and in different ways.

Industrialist...the best kind of assessment would be the progressive assessment... The final exam normally captures some kind of a drill program. It focuses on the final lap but the one capturing step by step would be better provided its more inclusive of content. (**MAN-IND-KAK**)

Industrialist...Put continuous assessment tests in classes 3, 4, 5 and 6 before going to 7 for final exam. (**EMP-IND-BUS**)

Some respondents are of the opinion that using CATS will enhance comprehension of the content taught and help avoid rote learning just for the purposes of passing the examinations.

Respondents indicated that learners at ECDE level should not be subjected to examinations rather they should be offered a conducive learning environment with relevant resources where they can be observed by teachers

KI.. .. and there should be no exam from ECD to class 1, akiingia, there is a good environment, nature corner, the garden, environmental corner, which our teachers have neglected, wanasema, unfortunately, the environment might not be conducive,.. (KI-CDE-MAK)

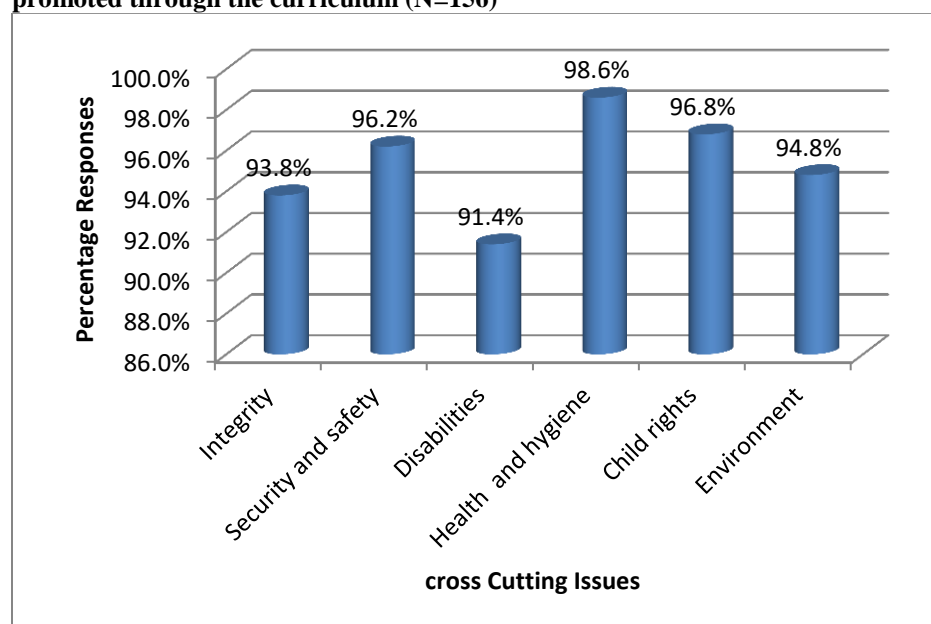
12.3.8 CONTEMPORARY AND CROSS-CUTTING ISSUES

Cross cutting issues are matters that touch on a number of different aspects of the society, on general principles such as democracy, human rights, good governance, children's rights, gender equality, population and family life education, poverty alleviation, environment and development, to mention but a few. Cross-cutting issues are commonly defined as topics which, by their very nature, have a strong impact on all operations in a given field and, therefore, must

receive special attention hence their inclusion in the intended new curriculum. These issues cut across all the levels of education. Hence they need a lot emphasizes in the future curriculum.

To address cross cutting issues and also to make learning meaningful, hence to enable learners develop deep understanding of what they learn, teachers need to use participatory and cooperative teaching methods. Participatory and cooperative teaching methods help learners develop critical thinking, reflect on their own situations and get insights of their own situations. The survey sort to establish the extent to which various cross cutting issues should be addressed by the future curriculum from the ECDE teachers. The findings are summarized in Figure 12.7.

Figure 12.7: ECDE teachers' responses on extent to which various Cross Cutting Issues should be promoted through the curriculum (N=156)



ECDE teachers preferred health and hygiene at 98.6%, followed by child rights at 97%, environment which includes climate change at 94.8%, security and safety at 96.2% to be included in envisaged curriculum. This implies that hygiene, child rights, environment, security and safety should be embedded in the envisaged ECDE curriculum.

The respondents pointed out that drug and substance abuse, HIV and AIDs, religion, corruption, early marriages, citizenship and patriotism, cyber- crime, pornography, conflicts, leadership, general apathy among the youth, unemployment, work ethics and sex education should be

addressed in the school curriculum.

KI: So we cannot hide sex education from these children, they are really much exposed as they are watching, magazines as they are reading so we cannot hide but again we cannot just teach them when we are not well prepared we need to be well tailored the way it is taught in class one it's not the way it should be taught in class eight (KI-HET- NAI)

The respondents further identified conflict (peace building), environment, religion, HIV and AIDS, social cultural norms, cybercrimes and insecurity as issues that should be addressed by the curriculum. They further noted that globalization is one of the emerging issue that should also be addressed in the curriculum. Due to globalization there is a lot of connectivity which exposes learners to a lot of information.

The Constitution of Kenya, pollution, communicable diseases, lifestyle diseases, terrorism, alcoholism and regional integration are some of the pertinent issues in society that should be given serious consideration by the curriculum. Further, the respondent pointed out that gender issues`, early marriages, violence at family level and sexual orientation affect our society and yet nobody talks about them.

KI: ...issues arising from politics, religion, social disorders which should be addressed in the curriculum. If people go to church or mosque why do we have rape cases every day, robbery and yet we are a religious country. There is national cohesion, teachers need to be told what national goals are, subject objectives and objectives of education. We have problems of drugs abuse, we have rape, ethnic cleansing, in vehicles where the young cannot give way for the aged. The freedom of human rights should have limits (KI-CEB-KAK)

12.4. Primary Level Needs

12.4.1 Societal Needs

The respondents from primary schools were required to give their responses in regard to the extent to which societal needs should be emphasized in the curriculum. The responses show that primary school teachers 91.16% and head teachers 92.50% were in agreement that there is a need for certain issues in the primary school curriculum.

Table 12.4.1.1.: Primary School Teachers’ and Head Teachers’ on Societal Needs

	%	%
Societal Needs aspects	rating	rating

	Teachers	Head teachers
Patriotism	95.13	95.80
Economic and industrial development	87.00	89.00
Technological development	88.40	91.30
Social development	92.05	92.80
Environmental protection	93.20	93.60
Average percentage	91.16	92.50

Table: **12.4.1.1** shows that the teachers and head teachers rated patriotism highest, followed by environmental protection, social development, Technological development, and economic and Industrial development. Other pertinent findings related to patriotism were the disunity among political leaders.

Pupil: the politics of the country is declining because the candidates opposition and incumbent leader are always arguing now and then we need peace in our country. **(P-FGD-KATP-MAK)**

Learners stated that the leaders contribute to nationwide instances of disunity among citizens, who were their followers. Learners were of the view that politicians should work together, not engage in hate speech, tribalism, favoritism to avoid post election violence and other related political issues.

Pupil: They should also work together, do team work because as they talk they don't remove that hate speech because that is what brought 2007 post-election violence leading peoples misplacement from their homes and it brought enmity to everyone. They should work on tribalism because the country will not be together

It was further noted that politicians impacted heavily on national development. The parents were of the view that politicians should reduce politicking and concentrate on development work.

Parents: ... on the political side, the politicians should reduce politicking and concentrate on developmental work **(PA-NYA-NY)**

Similarly, findings from learners suggested that they need education that will bring about unity, working together and helping one another. Learners also expressed the desire to interact with others peacefully.

Pupil: We can do a lot like trying to live together like people of one country and helping one another **(PL- KARP-MU)**

Pupil: I would like to have good interaction so that I can socialize with people out there. **(PL-TEMP-**

NY)

The protection of the environment ranked second among teachers and head teachers, at 93.2% and 93.6% respectively.

The learners were of the view that environmental education should include how to conserve the environment including forests, mountains, and all the physical features in the surrounding.

Pupil: Yes I think it should on how to conserve the environment coz we have the issue of global warming. We should be taught on how to control the environment around us and conserve it. (PL-TEMP-NY)

Pupil: “We have been taught how to keep the environment clean but up to now I never understand why we keep throwing wrappers of food stuff everywhere” (SL-SOSP-UG).

Another highlight for needs in the primary school curriculum was social needs. This was stated by 92.05% of the teachers and 92.8% of the head teachers. Among pupil leaders, the negative impact of corruption was cited as a drawback to social development.. The pupil leaders called for concerted efforts to stem the vice in the country. They further encouraged the use of legal mechanisms to ensure that the perpetrators of corruption faced the necessary legal action.

Pupil: We need to stop corruption. Corruption is really hitting us so it requires a stun action taken on the perpetrators’. (PL- FGDP- KIP-UG)

Learners and parents underscored the need for the curriculum to address tribalism. They cited the vice as the cause of unnecessary conflicts, killings, discrimination and as impacting learning negatively in certain areas. The parents stated the need for education to help learners to live together. They observed that education should promote unity and peace by encouraging learners to attend school away from their local environment.

Parent: Education should promote unity and make our nation peaceful. However the current education system which allows quota system has confined learners and teachers to their local environments undermining interaction and cohesiveness unlike in the past. People used to fear hurting others because the society and schools had people from different communities. (PA-FGD-NMWP-BUNG)

Parents in areas prone to insecurity called for an education that would improve social stability. They expected their children to make good choices with regards to joining terror groups.

Parents: You know when we educate our children we have expectations. We want our children to help us as parents and also to help our country with issues of security, we want them to get the knowledge and

tactics on how to help our country. But first we have to educate them. We also want them to be able to protect us as you know you can't employ a security person who is not educated on security measures We want education that will help our children to be the future leaders and stay far away from groups like al shabaab. They will be making wise choices and believing that education is the start of their good life. And us as parent we will witness their success by seen the fruits of our children in education. **(PA-FGD-MAR-BAR)**

Other factors mentioned included specific cultural practices that are still go on in some communities. Pupils identified harmful cultural practices as factors that are disruptive to the well being of the society.

Pupil: If people are educated they leave the bad cultural practices and so, many girls will finish school **(PL-LOGP-MAR)**

Responses given by teachers and head teachers on the technological needs at the primary school level were rated at 88.4% and 91.3% , respectively .The parents and pupils also expressed a need to introduce technology in schools. Early initiatives and in the use of technology in schools were found particularly advantageous for technological development.

Pupil: We should introduce computers in at least every school especially to young children as young as about 10yrs or even 8yrs. **(PL- FGD- KIP-UG)**

According to parents, the use of technology can improve education by giving pupils an opportunity to do their own learning by carrying out their research.

Parent: teach pupils in computer because if they teach them how to use the computers may be they could enable them for example to research more about the education they get like subjects they learn more about them **(PA-FGD-BOOKPP-KAK)**

Economic and Industrial Development

The responses on primary level needs to fulfill economic and industrial development were still high among teachers, at 87% and head teachers at 89%. Owing to the challenge of the ever growing population, amidst limited job opportunities, parents acknowledged a skills based education that can lead to job creation and make Kenyans economically independent.

Parent: Earlier you could survive without education but nowadays the country is overpopulated so we are trying to educate our children to be skilled, able as well as possess some attributes which will enable them in this tough life **(PA-FGD-MARP-BAR)**

To support economic development further, the parents added that education in Kenya should focus on self-employment and creating employment rather than creating job seekers.

Parents: I think Kenya needs a curriculum that does not address issues of white collar jobs alone. Issues

that affect our people down to the rurals, for example we don't need to train our pupils or students in order to compete for a certain job but we need to train them for them to earn their living even when they do not have employment. We train this person in order to create employment for others but not to be employed..... (PA-FGD-MARP-NY)

At the personal level, there was also need for an education that leads individuals to contribute to overall economic growth of Kenya.

Parents: It should help the people to apply knowledge to develop themselves individually, to become innovative, start business and develop their own societies. (PA-FGD-NYA-NY)

12.4.2. Competencies

The respondents identified varied competences, which in their view would contribute to a learner who is all round.

12.4.2.1. Skills

It can be deduced that there was consensus among the respondents on inclusion much needed 21st century skills and knowledge into the curriculum, among others. Views from key respondents were in agreement with the focus on 21st Century skills.

KI: Soft skills; 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness, and Teacher professionalization programmes through mentorship (KI-CEM-NAI).

Top in the ranking is communication skills.

Table. 12.4.2.1.1 Findings of Respondents on Communication Skills

<i>Competencies</i>	<i>N=808</i>	<i>N=166</i>
	<i>Pri.Trs(%)</i>	<i>Pri.H/Trs (%)</i>
Communication	96.2	96.6
Management	90.80	92.4
Leadership	94.00	95.8

Based on the distribution on findings in **Table 12.4.2.1.1** out of a total of 1,761, respondents 1538 significantly emphasized that communication should be incorporated into the curriculum.

Table 12.4.1.2.: Shows a range of responses on Competencies classified under Creativity, by the primary Head teachers and teachers from Public and Private schools

<i>Competencies</i>	<i>N=808</i> Pri.Trs(%)	<i>N=166</i> Pri.H/Trs(%)
Creativity	95.6	96.8
Innovation	90.6	93.6
Entrepreneurship	85	89.2
Analysis	91.2	88.6
Research	85.4	88
Problem Solving	95.00	95.6
%	90.5	91.1

Self Reliance

The concept of self reliance was considered quite an important outcome of the competencies that education should inculcate. For the learners in primary school, parents were therefore of the opinion that children at this level should start from basic literacy skills and gain practical skills.

Parent: A child who is able to read and write, be able to interact with others and be self- reliant even if they terminate their learning at this level they can carry on with life... if it is farming, the child will use those skills in farming and also other aspects of personal growth. The child will now how to plant various crops such as vines cabbage (**PA-FGD-KIARP-MUR**)

Parent: I think we should at least introduce ways in which they could be taught ways in which they can be a bit practical, so that they can be able to do something for themselves, because, a child who has finished class eight, should be able to do things practically, but now they can do nothing they have a lot of book knowledge, that cannot help him (**PA-FGD--MUTG-S-KIT**)

It was also pointed out by respondents in the informal sector that skills that are needed in job market should be focused on at all levels of education, including primary schools.

Respondent...Education should ensure that learners who leave school at different levels all the way from Primary school to University have interest in skills at those levels that are required and now missing in various industries and which they can easily learn. This will lead to quality output at all levels in industrial work, and inject some certainty in the prospects of improved and regular incomes for all workers who attain some skills. This can be achieved if a thorough research is done on skills required in various industries at all levels (**ME -INF-NAI**)

Practical Life and Survival Skills

Secondary school students on their part reiterated that at primary level, Home science, Art & Craft, Music should be learnt so that learners can be able to use the skills learnt in life, earn a

living from the arts and also to nurture their talents early enough.

Student: So, I would propose that Home Science and Art and Craft be introduced. The latter helps learners to be able to make things ...because these drawings, once completing primary school and the child continues with that subject, finally, he/she will become a person who is making those things that can be sold, bringing in good money. (S-FGD-NYAMS-NYAM)

Parent: ...Some may not have the opportunity to further their education so they should be all round so that they can survive. The knowledge they get and what they learnt from the syllabus from the school should make them be responsible when they leave school(PA-FGD-LAKP-HOM)

This according to parents, should manifest in the creative ability to make real things that are used in day to day activities.

Parent: this is where they should be able to make real thing like baskets, ropes, mwiko. Today people with these skills are scarce. (PA-UNOAP –MAK)

INF: I can only begin by saying that they should be creative ...Just like 8.4.4, in our time when you got to class six we had practicals of making funny things such as mats and it was depending on how creative you were. That time you find that children are motivated by what is being done. (MEM-INF-UG)

A respondent in the informal sector was of the opinion that apart from learning academic knowledge, learners in primary schools should be exposed to other practical skills such as feeding animals at home and also skills on how to interact with other members of the society.

ME: They are learning too much academic, and forgetting to associate with the normal life. They should be involved, exposed to practical life integration such as feeding animals at home and farming. Within the locality they belong to, they should do what is done there...Socially, they should be taught how to interact with others without regardless of their differences, learn to appreciate individual differences. That way, they will fit in whatever society they integrate in. but some just learn mathematics and English which may be absent within the social environment they will live in. (ME- INF-NYE).

Parent: They should go learning these practical skills through primary, secondary and even in university level. The higher they go, they seem not to be in touch with what is going on , like if you leave them at a certain level. My daughter is in second year, infact if I leave her alone she might die because she doesn't know what to do, she will struggle to do some of this things , this basic things... so you have to sympathise with them, because they are taught to read and write and they don't go to learn on survival skills....(PA-StJPP-LK)

Table 12.4.3.1. Findings on Social Skills

<i>Competencies</i>	<i>N=808</i> Pri. Trs(%)	<i>N=166</i> Pry. H/ Trs(%)
Collaboration	90.2	93.8

Interpersonal relationship	91.6	94.8
Coordination	91.4	93
Planning	92.2	93.8
Organizing	91.2	92.8
Negotiation	87.4	89.6
Coaching	85	84
Mentoring	93.2	93.6
Networking	91.4	91.4
%	90.2	91.8

Among the learners, social interaction skills were considered paramount for their ability to live with others. They required an education that would enable them to live in their communities peacefully in their communities as well as behave appropriately.

Pupil:.. teach us how to behave and live with people (**P-FGD- St.ANNPP-MIG**)

Pupil: I need to be told how to stay, how to behave with others, how i need to show others good behavior (**P-FGD-SENP-NYM**)

Decision Making

Parent: If I add to what my colleagues has said, a child who is responsible and who has developed interest in a particular thing that he would like to do in the future. You can choose to be mechanic and you start developing interest when you are still in primary school. When tomorrow you go out you can decide to be in jua kali or to be carpenter. (**PA-FGD-LAKP-HOM**)

Technological Skills

Parents expressed the need for learners to acquire technological skills. The idea of digital literacy was viewed as a means of enhancing communication and cooperation.

ME: Digital literacy should be achieved at 10 years of age. This includes understanding communication principles, how to operate computers, internet usage skills and understanding of the basic principles of digital technologies and issues surrounding use of digital use (security and privacy, digital citizenship). (**ME-ED-AC**)

The parents identified the need for ICT related education

Parents: I would say people should be taught technology related education such as ICT. It should start

from class one (PA- NYA-NY)

12.4.2.2. Values

Respondents expressed a general view that the society had lost most of its values. They proposed that curriculum should revive the values of the society which includes honesty, diligence, caring, compassion, patriotism and morals.

ME: Values are eroded in our contemporary society. There is need for a curriculum that emphasises on reviving values like honesty, kindness, love, unity, trustworth in young children. Such values will uproot corruption which is the cancer of the nation. (ME-DBK-IS)

The respondents expressed the need for the curriculum to include the national values as enshrined in the constitution, and further, that civic responsibilities should be emphasized.

ME: The curricula at different levels should aim to enhance Accountability, Integrity, Responsibility, Peace, Commitment to work, Negotiation, Acceptance and environmental preservation. This can be achieved by involving learners in community service at all levels during holidays hence inculcating Nationhood in learners. (ME-OCO-IS).

Similarly, learners and parents emphasized the need for both teachers and parents to act as role models since learners would likely look up to them to model behaviour. Values identified include: discipline, organisation, cleanliness, respect, patriotism, obedience, respect of other people's opinions. Parents in a rejoinder indicated that the transmission of values would only be successful if practically demonstrated. Since children could only emulate, what they saw, it was the responsibility of teachers and parents to model good values all the time so that children would best learn through observation.

Pupil: the person who you look up to should be a suitable person who teaches you, look at the values you've acquired discipline is the key to everything..... (SL- SOSP-UG)

Parent: Teachers to be united this will help the children to take them as their role models. Also the parents at home should refrain from bad behaviors which can lure the children. The parents should set a perfect example to their children. Knowing that child will emulate what the parents do (PA-FGD-MARP-BAR)

Pupil: First of all you're supposed to be respectful for the young and old; you have to be generous and compassionate

Pupil: we would like to be taught good behaviours, how when we are outside, when we are with visitors, how to talk with them (P-FGD-SENP-NYM)

Learners identified values like humility, kindness, respect, hard work, patience, love, peace, responsibility, honesty, obedience, kindness, truthfulness, good morals and integrity that would lead to good behaviour as a result of discerning right from wrong.

Pupil: ..To have respect and love each other as well as have peace...(P-FGD-StANNPP-MIG)

Pupil: About respect, we have to be humble, kind and have a good behavior (P-FGD-KUJP-MIG)

Pupil:...When you are learned you will be able to do the right thing at the right time, and this will improve the *nation*.(P-FGD-BUNP-LK)

Pupil:...to have patience....(P-FGD-NANP-LK)

Pupil: should acquire honesty and not doing corruption (PL-BUNP-LK)

Pupil ..they should learn being obedient, kind, truthful and morals (PL-BUNP-LK)

Pupil ...I would like to acquire positive attitude about the future that I hold before me. Even if it's not a good future you'd still want to acquire a positive attitude so that you can continue on with your life well (PL-BUNP-LK)

Pupil: I would like to have the value of discernment so that I can be able to tell what is good and what is wrong and not be influenced by others blindly. (PL-BUNP-LK)

Parent: ... Corruption is finishing this nation. I don't know where we shall get leaders of integrity. The courts are corrupt. Law breakers are taken to corrupt court. Judges are corrupt. Where is integrity? Those who set exams are teachers and are the same people who disclose the questions. Very high integrity is needed in this area. (PA UnoaP –Mak)

The parents indicated that values should be taught from an early age since they form the learners' character and cited some of the values to be included in the curriculum like discipline, respect, politeness and hard work.

Parent : At the lower level is also where behavior begins. The way you teach a child is the way he/she will become. If you see a child needs correction, this is when you should correct the child. If you want the child to go to church, then take him/her to church and he will learn that he should attend church. The child should also learn to respect his/her elders, their teachers as well as those who follow him/her. The child should also be taught what is bad and that is how we will get rid of rudeness amongst our children. A major contributor towards spoiling our children is the way we pamper our children. We pamper our children so much to the point where when they go to upper classes and the teachers address them harshly, some end up committing suicide. We as parents need to take the responsibility of instilling good behavior in our children alongside the teachers.(PA-FGD-SENP-NYM)

Parent : I would like to say that if a child has finished form one to four, the period when they are waiting for their results, if the child was bright and of good character, he/she should be assisted in teaching other children at a lower level like primary or even ECD. If he/she knows more on education, he/she should help others advising them on what to do and what to avoid. After getting the results, he/she will be able to go to university and he/she will be beneficial to the society..(PA-FGD-SENP-NYM)

The respondents also felt that the concept of self-control and the importance of family as a social unit should be emphasized in the curriculum.

Pupils: To acquire good values such as self control, discipline, self respect, being faithful, kindness, loving one another, obedience and virtues. (LFG- Kap-BUNG).

Parents: discipline is the key factor, if they come from school with it ,it should also be supported from home.(PA KAM NY)

The learners expressed the need to have acquired values of sharing and good relationship by the

time they leave primary school. Parents suggested that learners should also learn religious and national values in order to equip them for the world of work.

Parent: So religious values to be taught, national values should also be taught for example the president was talking about 'No corruption' from 'Zero tolerance to corruption'. **(PA-COMP-MIG)**

Parents also wanted their children taught discipline, obedience, dedication in order to be better people in life. They were of the views that if guidance and counseling was strengthened, values such as obedience, honesty, cooperation, dedication and responsibility could be acquired by learners. They however regretted the removal of the cane as a way of instilling moral values in children.

Response: The removal of corporal punishment and human rights requirements, have made it difficult for teachers and parents to instill expected values. However, if guidance and counseling is strengthened values such as obedience, honesty, cooperation and dedication to responsibilities should be emphasized to a great extent. **(PFG-St.JOSE-BUNG)**

The respondents expressed the need to deal with corruption, good morals, self-awareness, knowing one-self, uphold peace, honesty, patience, responsibility, and co-existence, selflessness, respect, faithfulness, wise use of the time, hard work, obedience, self-control, humility, prudence, diligence, integrity, trustworthiness, helping parents, helping the needy confidence and positive values, punctuality, reconciliation.

12.4.2.3. Attitudes

The import of education as a transformative tool was articulated by industrialist who suggested that education should first of all develop the person. According to them, change of mind set was a key factor in giving knowledge that what they learnt in school should alter their thinking and enable them to create jobs, not just rely on white collar jobs. There is need for education that will change people's mindset and help them realize that the knowledge acquired in school can be used in various ways, not just in white collar jobs

Industrialist...change the mind set and get a different mentality ...because why we end up all looking for white collar jobs.. .that has caused so much unemployment... there is more to education rather than you getting a job.... passing exams is not the only thing in life ...you can live...happy life not necessarily through cheating your way into the system and having all the shortcuts that people are taking...Let people learn patience, to value honesty and above all to know that they should be accountable for whatever action that they do ...later on they will pay for them dearly . **(MAN-IND-BAR)**

Pupils suggested that it was necessary for people to develop positive attitudes towards certain subjects that do not necessarily interest them, teachers and life in general. In addition pupils should be confident and cultivate a sense of independence.

Pupil: ...the blame can also be put on us because we have negative attitude towards the subjects and also towards the teachers when we don't understand... I would like to be a singer but if the teachers will not show us an example of how singers do we will be afraid and say I can't do this because if the teachers can't do even me I can't do... The teachers should not be abusing us because, let's say you've not done the work the teachers has given. Now when you go apologize to the teacher the teacher tells you, "So. You go move away from me." You will feel fear from the teachers in class and you will not understand **(P-FGD-BJMP –MUR)**

Pupil: ...being hopeful, passion, confidence optimistic about education and life in general. **(PL-SPAP – BUS)**

Pupil: We should have positive attitude, we should know that we are able to do this and we should believe in ourselves **(PL- OUTPP-UG)**

Pupil: you should have an attitude that even though even you did not do well you should know that this is not the end and that there is always a second chance. **(PL-KIAP-KIA)**

Parent: ... should have positive attitude hata kama tuseme for example something is hard you should have positive attitude(PA OUT-UG)

Pupil: You should have respect because you know most of the pupils when they reach class eight they tend to change their behavior, so in order for you to see that you are almost the same with your teacher you should have respect. **(PL-KIAP-KIA)**

They also suggested that education should help learners to develop positive attitudes for application in their future, including helping others. Such an attitude should be directed to both self and others. They also pointed out the need for attitudes that foster unity, cohesion and nationalism.

Pupil: In our syllabus we can put about positive and negative attitude, how they affect our future and how they will make our future not to be bright **(PL-BUNP-LK)**

Pupil: I would like to have values like honesty, love for people, intelligent, trustful... I would like to be able to help others who are in difficult situations and help them get solutions to their problems **(PL-BUNP-LK)**

Pupil: You are supposed to have positive thoughts, For example you are supposed to act well in with people after you leave school you will meet people out there and people out there have different character, not all people who wish you the nice life, you are supposed to cope with them , have the spirit of coping up with them and showing to get along with them and show how to cope with them that you don't bring disagreement.**(PL-UNOP-MAK)**

Pupil: Advise you friends positively, you should accept corrections **(P-FGD- HVAPP-KIL)**

Pupil:we want to be taught when we reach the age of 16 and 17, there's a stage called adolescence. To the secondary you find that if you don't control it you may do bad things so im saying they teach us how to behave well **(P-FGD-SENP-NYM)**

Respondents indicated that pupils should be encouraged to appreciate one another despite their varied backgrounds since some live in the slums. Further, respondents suggested that orphans and

most vulnerable children should be cared for and accorded equal opportunities.

Pupil; we should be taught on how to live with orphans despite our different family backgrounds.” (SL-SOSP-UG)

12.4.3. Content/Learning Areas/Pathways

The head teachers, teachers and were asked to indicate to what extent the provided learning areas should be relevant in the curriculum. The findings are presented in Table12.4.4.1.

Table 12.4.4.1.: Head teachers’, Teachers’ and Curriculum Support Officers’ Responses on extent to which learning areas should be emphasized in the School Curriculum

NO	Learning Areas	Headteachers (N=176) (%)	Teachers (N=842) (%)	Curriculum Support Officers (N=33) %	Average %
1.	Art and Design	88.5	85.3	86.6	86.8
2.	Agriculture	91.2	90.8	95.8	92.6
3.	Technology	95.2	92.0	93.2	93.4
4.	Technical and Vocational	87.4	85.4	88.8	87.2
5.	Physical Education	94.6	92.8	88.4	91.3
6.	Mathematics	97.8	96.8	93.2	96.2
7.	Languages	98.2	97.6	92.2	96
8.	Sciences	97.4	96.0	97.0	96.8
9.	Humanities	94.6	94.2	88.4	92.4
10.	Climate change	99.8	89.8	92.2	93.9
11.	Environment	97.4	93.2	93.2	94.6
12.	Hygiene and sanitation	98.8	96.6	95.8	97.0
13.	Entrepreneurship	89.0	84.8	84.8	86.2
14.	Home Science	95.8	96.5	96.9	96.4
15.	Health and Nutrition	98.0	97.2	97.6	97.6

The findings in the table show that according to head teachers, teachers and Curriculum Support Officers areas related to Science and Health scored the highest mean percentage

ratings. These include Health and Nutrition 97.6%, Hygiene and Sanitation 97% and Home Science 96.4%, Sciences 96.8%, Agriculture 92.6%.

Parents, learners, the industry, informal sector and key informants in focus group discussions and interviews indicated the benefits of Mathematics and Sciences in relation with provision of employment, innovation, food security and prevention of diseases.

Technical and vocational areas rated by head teachers, teachers and Curriculum Support Officers at 87.2% were equally emphasised by learners, parents, the informal sector as well as the industry. Practical and technical subjects the respondents identified are Agriculture, livestock rearing, Home Science, Creative Arts, Music, among others. Vocational courses such as engineering, carpentry, masonry, handcraft, wood work, motor vehicle mechanics, needle work, cookery, knitting, tailoring were mentioned as laying a foundation for long life learning. Agriculture was credited for its role in food security and self employment.

Student:... **Home Science**, was a good subject for the learners. A child even when still young should be taught how to clean one's body, taking care of self and the kind of foodstuffs to eat. Also, this will help him/her as he/she grows. Things like **cookery** used to be there. Mostly, you find children completing primary or secondary school, not knowing how to cook. So, I would propose that **Home Science and Art and Craft** be introduced. The latter helps learners to be able to make things (not audible) because these drawings, once completing primary school and the child continues with that subject, finally, he/she will become a person who is making those things that can be sold, bringing in good money. And **music**, in most cases, it is taken from form one. But I would like that the subject is taken from either class one at primary level, so that a good foundation is laid for that subject, and continuing with it, there will be no much difficulties to be faced. That is why you see music is very essential for our children and anywhere else. Therefore we would like our children to be taught music skills. **(S-FGD- NYAM)**

Areas of environment and climate change rated by teachers and head teachers 94.6% and 93.9% respectively were also identified by learners, parents and other stakeholders as emerging issues. Other emerging issues they identified include: environmental conservation, effects of internet use, alcoholism, prostitution, HIV and AIDS, girl-boy relationships, corruption, safety, current affairs, safety, homosexuality, drug and substance abuse and the effects on individual and society at large.

Technology rated at 93.4% by teachers and field officers was equally underscored by other stakeholders, who proposed the need for providing laptops to upper primary learners as opposed to lower primary ones. In addition, parents suggested teaching of ICT alongside

communication skills as well as aligning the learners to the digital era.

Pupil:i think we should develop computer classes that we can get lessons because development in technology

The teachers, headteachers and Curriculum officers rated languages at 96%. The other respondents indicated the importance of languages in communication. They were of the opinion that language should lay emphasis on comprehension, written expression, writing, oral and reading fluency. Languages identified include: Kiswahili, English, Mother Tongue and foreign languages (German, French, Arabic, Hindi, Russian and Chinese). They suggested that Fasihi ya Kiswahili and Literature in English and indigenous languages should be introduced in middle classes and later offered as optional in upper classes.

Pupil: We should learn foreign languages like German, French, Chinese, Russian, Arabic, india ... so that we can be able to communicate with foreigners **(P-FGD-HVAPP-KIL)**

Parent: Kiswahili, hata kiingereza because those are the languages that we use in Kenya to express themselves even in bad situations. Maybe mambo ya Creative Arts. **(PA-FGD- MARP-NY)**

The findings also show the rating of Physical Education at 91.3%. The rating resonates with the call by learners for the importance of inclusion of the subject in the school curriculum in cognisant of its central role in identification and nurturing of talents.

Pupil: Pupils should go for P.E....they should have more sports in the school time table which will help in the improvement of, the people who love the art of soccer they get more time to play. **(PL-TEMP-NY)**

Entrepreneurship was rated at 86,2%. Learners advocated for Financial Literacy to enable the learners to acquire skills to save, spend wisely and invest. Equally, the respondents underscored the role of entrepreneurship in spurring economic growth and industrial development.

Pupil: ...what about the person who scored D? Where do they go? If you are taught how to become an entrepreneur they obviously will have an idea of making ends [meet; that](#) is starting small and then growing big.” **(SL-SOSP-UG).**

Pupil: ...if we can finish class 8 we would want to at least earn some money for going to a secondary school. So we can be taught how to bake cakes, do other things so that when you are at home you can do them by yourself and earn your pocket money **(PL-BUNP-LK)**

Pupil... Also our syllabus we should be taught about things that can help us before our results we can at least help our parents by providing more money for our needs**(PL-BUNP-LK)**

Humanities rated at 92.4% by teachers were equally emphasized by parents and other

stakeholders. They identified subjects and learning areas like Social Studies, Geography, Life Skills and Culture. The respondents observed the general neglect of African culture and the tendency by the youth to take to Western culture, consequently introduction of content in this area would secure the culture. Social and Life Skills such as critical thinking, self awareness, in order to facilitate the learners deal with day to day challenges

Parent:.....long time age kama ni husband and wife they seriously loved each other but when they were walking one is three steps away from the other, that is our African culture. Then western culture is deteriorating our culture, can we have a subject called African culture. **(PA-FGD MARP –NYM)**

Respondent: They are learning too much academic, and forgetting to associate with the normal life. They should be involved, exposed to practical life integration such as feeding animals at home and farming. Within the locality they belong to, they should do what is done there...Socially, they should be taught how to interact with others without regardless of their differences, learn to appreciate individual differences. That way, they will fit in whatever society they integrate in. but some just learn mathematics and English which may be absent within the social environment they will live in. **(ME- INF-NYE).**

Subject areas that render themselves to values like HRE, CRE and IRE were considered as guardians of values and morality. The respondents also recommended that CRE should be a compulsory subject. They also recommended that CRE be handled as a standalone subject as opposed to the current practice where it is integrated with Social Studies

Respondent: CRE be a compulsory subject in ECDE, primary, secondary and teacher training colleges....to promote sound moral and religious values among learners. ..guidance and counseling to enhanced and offered in a recognized office in all schools at all levels...the church to be involved in identifying and recommending teachers who are assigned these subjects (CRE, Social Ethics, PPI and Guidance and Counselling. **(GA-RI).**

Respondent: There needs to be a new subject to cover these three values where the various cultures will be studied for the purpose of understanding how they can be moulded into nationhood. This subject should replace religious education at primary level, which can be best taught as an optional pastoral studies. **(ME-RI).**

The need to introduce content on national unity, cohesion and patriotism was reiterated by the respondents.

12.4.4. Talent Identification and Nurturing

The need for curriculum to provide for talent-nurturing was seen by parents and learners as

accruing benefits that improve livelihoods of both the individual and the larger society.

Parent 1: we can nurture the talents of students who are not good at class work but they could perform very well in other fields, if we could change the syllabus such that it can accommodate his kind of students, our society could be better off, such that if the student don't continue with his studies he could have something to do for earning after class eight. (PA-FGD-MFGP-LAM)

identification of talents should be a three-pronged approach involving the parents, teachers and the community. Talents identified by the respondents include those in visual and performing arts, games and sports. Modes of identifying these talents include: use of co-curricular activities such as Kenya Music Festival, Drama Festivals, Science Fairs, games and sports competitions. They recommended also that talents should be identified as early as possible.

Parents: Talent identification is a process involving certain parties, I will start at the beginning, and the first person to identify child's talent is the parent, then through sports in the schools and the way the child performs in the sports the teacher will identify this talent. The afterwards the teachers and the parents will meet and help the child get the right education as well as helping them nurture their talents, through getting them the right materials and resources. (PA-FGD-MARP-BAR)

Parent: Some talents can be identified as early as STD 1. Through exposure to various activities where they show interest or capability (PA-FGD-KIARP-MUR)

Table 12.4.4.1.

Findings on Nurturing the Potential and Talents of Learners Primary School Teachers

Strategies	H/T	Teachers	Average
Games and sports	96.0	94.9	95.4
Curriculum enrichment	93.4	96.0	94.7
Clubs and societies	91.6	90.9	91.2
Cooperative learning, and academic conferences			
Competition among schools	89.7	-	
Ability grouping and mentorship Programmes	89.4	90.8	90.1
Special schools for G&T	89.2	94.3	91.7
Special needs classes	88.2	90.2	89.2
Accelerated learning and advanced placement	78.2	81.4	79.8
Early admissions to school	67.8	74.9	71.3

The responses from teachers at primary level on the strategies to be used to nurture potential

and talent in learners indicated that games and sports was the most preferred strategy at a percent rating of 95.4%, followed closely by curriculum enrichment at 94.7%. Clubs and societies were also highly rated at 91.2%.

This scenario was replicated amongst learners, parents and other stakeholders. In order to nurture talent respondents called for rationalization of content and creation of a pathway that nurtures talents. They proposed inclusion of subjects that nurture talents like Music, Art and Craft, Physical Education, drama and acting, among others. The respondents identified co-curricular activities, competitions, establishment of clubs, talent academies, innovation and incubation centres as opportunities to nurture talents.

Parent: ECD and Primary school level students should be exposed to various talents, then government should think of coming up with talent academies .Probably in secondary school level where various talents are developed and if we had talent academiesI may propose drama in subject level; the most talented person is not the best actor of drama you may find someone who is not talented is best in the theory of drama. So I suggest we have talent academies in future. (PA-FGDPP-MOI-UG)

Parents: ...kids in std one and onwards need to be given time to discover their talent...so that by std 8 the know their talent..that i can sing...i can do homescience and so on. so we have seen that children can be profiled by engaging them in varied activities .yes but also I can also say even exposure..the teacher can help the learners to do a variety of things like take them where people are doing things like making music....making pots.or they can have a place in the compound...a small shade where they can go and paint...or even paint, drama...we need to widen it.(PA-FGD-StJPP-LK)

Also featured prominently as strategies for nurturing learners' potential and talents by teachers and learners were; special schools for gifted and talented (91.7%), ability grouping and mentorship programs (90.1%). Head teachers returned a rating of 89.7 %) in relation to cooperative learning and competition among schools and academic conferences while special needs classes as a strategy was at 89.2%. The lowest ranked strategies were accelerated learning and advanced placement (79.8%) and early admission to schools (71.3%).

A key issue raised by pupils as playing a critical role was provision of facilities, infrastructure and capacity building of teachers.

other	<p>Pupil: If they can construct or build a talent show it would be good and will have support from people and parents.....(P-FGD-MASP-NAR)</p>
and	<p>Pupil: ... introduction of them in school. provision of materials availability of talent clubs... practice..... encouragement. competition with other schools....availability of big playing field facilities.....be given hope.</p>

12.4.5. Teaching and Learning Resources

Teaching and learning resources play a fundamental function in facilitating the teaching and learning process. Findings from the study findings show that the resources that were most frequently highlighted by respondents were text books. Despite the importance of having the resources in school, respondents indicated that sometimes, they were not adequate in schools. In such instances, children would be sent out of school to buy them. This led to fewer contact hours associated with children who could not afford to buy books.

Pupils: There are few textbooks and revision books. We are told to buy them whereas they are very expensive and poor students can't afford them. When we are sent home sometimes we miss very important topics that are very crucial and come in the main exams. (P- FGD-GZEP -KIF)

In addition to absenteeism which came about as a result of children being sent home to buy textbooks, household poverty levels further compounded the challenge of inadequate resources.

Parent : they are not enough, parents are poor they can't support the schools well, due to low income, so to solve this all counties should be given equal support by the government concerning education. It should be affirmative(PA-FGD-MFGP-LAM)

Parents decried the expectation on them to buy curriculum support materials, which in their opinion change often and therefore costly.

Parent: ... the government should reduce the number of books to be used in school. There should only be at least two or three books recommended to be used in school... recommended books should be in use for a longer a time not to be changed almost every term or year... the literature books, these books are many and therefore should stay for a longer period before they are changed not after every two years, parents have no money to buy these books...government should go back to the old books, they have better knowledge and education than the new books which follow the European education and culture . (PA-WAAP -KWA)

Apart from text books, respondents also mentioned inadequate teachers in schools. Pupils expressed the need for the government to employ more teachers.

Pupils: Employing more teachers .Publishing more books for us to read and understand.(P-BUNP-LK)

Infrastructure and learning environment were considered by respondents as playing a key role in attaining optimum teaching and learning in primary schools. The parents indicated that learners needed adequate resources like science laboratories, libraries, science equipment, computers, laptops uniform, internet connectivity, electricity, television sets, radios, desks, halls, music rooms, musical instruments, language rooms, Home Science rooms, sewing machines, toilets, tap water, mattresses and beds. Comfortable rooms for purposes of study,

classrooms fitted with adequate desks, good windows and roofs.

Parent: they also need science labs, libraries, science equipments, such as those showing parts of the body, computer. **(PA-NYAP-NY)**

12.4.6. Pedagogical Approaches

This part presents an overview on the summary of the findings from the Head teachers, teachers, FGDs from parents and learners and key Informants from Industry, informal sector among others with regard to Pedagogical approaches.

Table 12.4.7.1: Primary school head teachers and teachers Responses on Practical Methods of teaching.

Approach	H/T	Teachers	CSO	Av.%
	N=176	N=837	N=36	
Demonstrations	95.00	96.00	94.00	95.00
Experiments	96.67	93.33	89.00	93
Projects	85.00	79.67	80.70	81.78
Field Excursions	82.67	75.00	76.60	78.09

Table 12.4.5.1 shows the distribution responses from head teachers and teachers that were ranked as: follows experiments 93, demonstrations 95, projects, 81..78 % and field Excursion respectively. These responses concur with views drawn from key informants as stipulated in the findings below;

KI:We would like child centred approaches, you would want where the child learns by doing themselves the discovery efforts, the investigatory efforts more than the lecture approaches” **(KI-HQUASO PWANI UNIV)**

A respondent observed that it is through practical teaching and learning experiences that a competency based curriculum can replace rote learning and realize its goals.

KI: In competency based education we have to develop critical thinking. So that the learners are taught to internalize, think about issues, evaluate and be able to... those are some of the methods that the teacher trainees in this curriculum they can prepare teachers to deliver the curriculum the way it is intended to be.**(KI-TSC-NAI)**

KI: making the children do something and taking them out for field studies and all that, going to this place called arboretum during science lesson I take my kids to arboretum I can tell them look at insects so that when I come to class instead of talking about an insect and a child is getting what insect is they can say this is a grasshopper, it has wings, it has six legs. Children look seeing, when they see they remember **(KI-HET-NAI).**

The respondents however acknowledged that the proposed competency based curriculum takes cognizance of individual differences. It is within this background that the respondents suggested an array of pedagogical approaches, to take care of the changing landscape during teaching and learning, the varied categories of learners and their interests.

Table 12.4.5.2: Head Teachers, Teachers and CSO officers ‘responses on learner activity-based strategies.

Approach	H/T N=176	Teachers N=836	CSO N=36	Av. %
Debate	87.50	89.33	81.70	81.2
Reciting	72.70	87.33	81.70	80.6
Dramatization	82.70	83.00	73.40	79.7
Songs	75.30	86.33	80.70	80.8
Riddles	72.70	79.67	77.60	76.6
Dances	71.70	79.00	77.60	76.1

Table 12.4.5.2: Shows responses from head teacher, teachers and CSO officers the overall percentage mean ratings were as follows from the highest to the least; Debate 81.2%, Songs 80.8%, Reciting 80.6%, Dramatization 79.7%, Riddles 76.6% and dances 76.1%.

KI: people learn differently.....lecturer method works up to a certain way... you actually need to let those children know whether it is to explore you.... there group work, role play, discussions, experience sharing... ..methodology really needs to change and you know if that happens, then even the size of the classes need to change, the number of the teachers (**KI-KNHCR-NAI**).

sustainability of the competency based approach is largely dependent on how
s exploit opportunities around them to access locally available resources to
learners to activities that develop their competencies. The respondent stated
rners need to manipulate items from the local environment such as wires, parts
cles, old automobiles. This will help to identify their abilities and sustain the
ment of the competence.

Table 12.4.5.3: Presents a summary of Head teachers, Teachers and CSO responses on Experiential learning strategies

Approach	H/T N=176	Teachers N=837	CSO N=36	AV. %
Experiential Learning	91.00	91.00	88.00	90
Drills	71.33	67.33	75.00	71.00
Storytelling	84.00	85.67	86.00	85.22
Nature walk	79.00	81.33	86.00	82.11

Role Play	87.67	87.33	74.60	83.2
Simulations	88.00	82.67	87.00	85.89

he results in **Table 12.4.5.3**, these findings show that experiential learning was highly regarded by all respondents among all approaches such as simulations (85.89%), role play (83.2%), storytelling (85.22%), nature walk (82.11%) and drills (71.00%) respectively. There was consensus among key informants and FDGs based on the responses discussed below.

KI: We need children to manipulate ...wires, parts of bicycles, old automobiles...from the local environment ...to sustain development of the competence. **(KI-CEE-BUS)**

KI: ...more on stimulation being innovative using local materials teaching using the local environment and identifying the abilities of children in various areas. **(KI-MCDE-BUS).**

Regarding the success of whichever pedagogical approach in use, the respondents pointed out that there must be rationalization of classes, so that the teacher can be able to provide individual attention and meet the diverse needs of the learners

KI: So I think to me we really need to rationalize, thus, the teacher is teaching a learner but not teaching multitudes and a teacher can evaluate learners and identify strategies of giving individual **attention (KI-SGKN NAI)**

In recent years there has been a shift among educationists from the traditional teacher-centered learning to student-centered learning. It has been established that effective instruction is more allied to active participation in the teaching learning process (as in laboratory work) than to passive participation (as during a lecture). This shift in pedagogy calls for use of different strategies to effectively engage learners to acquire requisite knowledge, skills and attitudes. To ensure learners become globally competitive for quality education, training and research for development will be achieved through adoption of pedagogy that emphasizes exploration, discussion, experimentation and brainstorming. These calls for the provision of relevant strategies of teaching and learning that promote these 21st century skills and competencies.

12.4.7. Assessment

The survey sought to establish responses input with regard to different modes of Assessment which were clustered into two; Formative and Summative assessment.

Table 12.4.7.1: Distribution of responses from Head Teachers', Teachers and CSO on Formative assessment modes.

Mode of Assessment	N=176	N=837	N=36	AV. %
Formative assessment	H/T	Teachers	CSO	
Continuous Assessment	97 %	95 %	98 %	96.7 %
Project	85.2 %	79 %	91 %	85.06 %
End of term examination	90.4 %	92 %	75 %	85.8 %

Table 12.4.7.1 based on the ratings of different respondents mentioned above, the most desired mode of assessment was formative whose percentage rating are indicated below continuous Assessment highly ranked a 96.7%, followed by end of term examinations, 85.8% and project 85.06% respectively.

These findings are in agreement with the key informants and FDGs from the parents and learners. Formative assessment was viewed as the best and fairest way of recognizing individual differences among learners.

Ind: the best way is to assess these students on what they have learnt, because students have different avenues of learning, there are some who are talented, they can memorize it in short time there are others who will take a lot of time and when they grab the information they are okay with it. What should happen is to assess progressively. For example if it is a subject that the student is doing there should be a test that the student does on the subject that they have been taught also they could put the practical aspect in that a teacher might have taught a certain lesson but he or she should be put in real life so that they try to solve the same problem in a different manner in such a way, a teacher will be able to gauge and assess if the student has got the concept or not. There should be a progressive way to test students. **(CEO-RIV-UG).**

In view of the challenges associated with summative examinations alone, it is apparent that respondents suggest a certain method of assessment that takes into account progressive tracking of learners' attainment and also providing a national comparison of learners' performance.

Ind:.. There is a need to marry the two because normally those continuous assessments will say what a student was some years back but it is important to know that there is development and the time they are

leaving the Institution the person have developed.(MAN-IND-KAK).

Table 12.4.7.2: Summary of responses from Head Teachers', Teachers and CSO on Summative Assessment Modes.

Mode of Assessment	N=176	N=837	N=36	AV.%
Summative assessment	H/T	Teacher	CSO	
End of year examination	88. %	89.2%	80%	85.73
National examination	85%	83.6%	70%	79.5
Project work	85.2%	79%	91%	85.06

In view of the captioned responses in **Table 12.4.7.2**, the headteachers, teachers and CSO ranked End of year's examinations at 85.73%, followed by 85.06% and national examination last at 79.5%. Comparatively formative assessment was highly desired than summative mode.

12.4.8. Assessment

The shortcomings related to final examinations have contributed to mixed reactions towards using final examinations as the only way of assessment and means of qualification to the next level. The sentiments also point out to the need for a more comprehensive and holistic understanding of a learner, across various dimensions.

Parent: In my view assessment should not be pegged on one final examination, more so, talents, attendance, behaviour can also be examined and this will encourage learners to work hard in all aspects. (PFG-St.JOSE-BUNG).

Among the most commonly cited disadvantage of final assessment is its seeming termination of the education of a child, and probable prospects for the future.

Parent: it can start from primary and secondary. But this testing should not be used to terminate the education of the child. Those who don't do well in the test don't mean they are stupid. They also have their potential... It would be better if we had people assessing those who are able to make baskets and allow them to pursue that line. (PA UNOAP –MAK)

The idea of assessment for learning came through when learners indicated that examinations are not all that there is in learning. After examinations, pupils from both public and private schools should equally be considered for secondary school places.

Pupil: Pupils should understand we are not coming to school to pass the examination. We are coming to school to learn and to gather skills and knowledge so that we may make our country develop. (P –FGD-BMJP –MUR)

College student: Give equal opportunity to private and public schools to join schools in secondary school. (CS-FGD-NTTC –NAR)

As a result of elimination from getting to the next level, pupils expressed their fears in the KCPE Examinations and preferred continuous assessment.

Pupil: ... We fear KCPE, let's do the CATs and proceed with learning (PL: LOGP Marsarbit)

Industrialists were in agreement that best results about the overall attainment of learners would be attained through formative assessment.

Ind...the best kind of assessment would be the progressive assessment... The final exam normally captures some kind of a drill program. It focuses on the final lap but the one capturing step by step would be better provided its more inclusive of content. (MAN-IND-KAK)

The issues related to integrity with regard to school based examinations especially in regard to the possibility of being manipulated through biasness, corruption and favoritism.

Parent: ...well the question of honesty may still make school based exams even worse! (PA-stJPP-LK)

Parent: one if we do it annually it may come back to the teachers who are teaching that school and my worry to the teachers teaching same school is that they tend to favor their own students and that is why they are even tempted to cheat for students so if you use that as a tool of assessing the students may be everybody will be any achiever, my suggestion would be this, assessment institutions that we have in this county especially KNEC should be given a proper mandate to conduct various forms of assessments, not just academic but they can do other different forms under that cycle and they make it official that this time we do particular assessment. (PA-FGDPP-MOI-UG).

12.4.9. Contemporary/Emerging Issues

Teachers and head teachers were asked to what extent provided emerging issues should be included in the curriculum.

Table: 12.4.9.1:Primary Teachers' and Head Teachers responses on extent to which various cross-cutting issues should be addressed in the primary school curriculum.

Cross cutting issues	Primary teacher	Primary Head teacher
	Percentage rating(N=842)	Percentage rating(N=176)
Integrity	95.8	97.6

Technology	92	95.2
Security and safety	94.3	96.2
Disabilities	92.0	92.0
Health hygiene	94.2	96.1
Gender issues	93.4	95.8
Financial literacy	87.4	91.0
Child rights	97.6	94.6
Environment	92.1	91.2
Drug and substance abuse	95.7	97.9
Average	93.45	94.76

On average 93.4% of primary teachers affirmed the need to have cross-cutting issues addressed by the curriculum. The respondents rated child right the highest at 97.6%, followed by life skills which includes guidance and drug abuse at 95.7%, integrity at 95.8%, security and safety at 94.3% , hygiene and hygiene at 94.2%, and the lowest was financial literacy at 87.4% .

These findings are in tandem with views presented from the FDGs of learners and parents randomly selected from 23 counties included in the study sample with regard to what is affecting learners in the contemporary society. This is expressed below:

12.4.9.1 Alcohol and Drug Abuse

Parents and learners indicated the serious negative effects both alcohol and substance abuse bear on both the individual and society

Pupil: Like in Kenya we have very many lawyers, doctors, lecturers..... who are down here because of the alcohol. They should ban totally”. (PL-SOSP-UG)

The challenge of alcohol abuse had also pervaded primary schools due to peer influence and proximity of bars to schools.

Pupil: Rafiki zake ,Wanamwambia aache shule akakunywe pombe.(P-FGD-KEBP- NYM)

Pupil: Friends, tell them to leave school to go and drink alcohol.(P-FGD-KEBP-NYM)

Parent: ... Children from school are finding their relatives, neighbors drinking near the school. If government wants to improve the schools, no bar should be close to any school. The environment of

school should be safe. (PA-FGD-UNOAP –MAK)

12.4.9.2 Technology

The negative impact of access and use of technology was noted among youth and teenagers who use it for pornography, to spread hate speech and develop bloggers.

Pupil: Technology things like when we were told laptops will be given to schools there should be discussions to see if learners will cooperate with them, and how to use them and not the bad things that go with them because the technology has those bad things like bad pictures. The learners should be told not to go to those things because they are too young for those things. (PL-MBI- MU)

The perennial teachers' strikes are also a source of concern among the learners in primary schools.

Pupil: I request the teachers to stop striking because if they strike in January and come back to school in march we will not be able to finish the syllabus and you go to the next class and you do not know anything because you did not finish the syllabus in the other class (P-FGD-SENP-NYM)

On average 94.8% of primary head teachers affirmed the need to have cross-cutting issues addressed by the curriculum .For individual cross cutting issues to be included in the curriculum, the responses were as follows; disabilities at 97.8% , drug and substance abuse at 97.9%, integrity at 97.6% , security and safety at 96.2% , technology at 96.1%, child rights at 94.6%, gender issues at 94.2%,health education which includes other aspects such as HIV/AIDS, sexuality education, hygiene at 94%, environment which includes climate change (91.2%), financial literacy at 91%

Significantly, all respondents were in agreements on contemporary and emerging issues which must be should be embedded into the curriculum; including financial literacy, security and safety, integrity, disabilities, environment among others.

These sentiments were raised by learners, informal sector, industry and key informants who cited that contemporary issues cut across the social, political, economic and technological dimensions. Against this background, concern on tribalism/ ethnicity/ nepotism, harmful cultural practices, sexual harassment among others as indicated in the respondents' views:

'2.4.9.3 Tribalism/ Ethnicity/ Nepotism

They cited it as the cause of unnecessary conflicts, killings, discrimination and as impacting

learning negatively in certain areas.

Pupil: To eliminate terrorism... people should stop killing each other because they are from different tribes. (PL-TEMP-NY)

Parents: There are communities around ...Some communities have tribal clashes and those tribal clashes affect the children going to school and they are not able to learn they feel that there is no security in the schools. (PA-FGD-BOKPP-KAK)

12.4.9.4 Harmful cultural practices

Harmful cultural practices like female genital mutilation and early marriages were cited in some communities. According to learners, these practices prohibit learners from continuing with their education and deny them a future.

Pupil: Female genital Mutilation should be eliminated so that girls can have chance to make their future and go to school.(P-FGD-HVAPP-KIL)

Pupils felt that the girl child's education is affected by forced marriages by parents while still young.

Pupil: Am a girl and through with my primary level education and I have passed and then my parents they don't want me to go to the next level there is a rich person, rich man who is old and am young and they want money, they want to have many.. livestock,,, many cattle. And I don't want to get married and they force me to get married. The government can change that. Young girls

12.4.9.5 Sexual Harassment

The learners expressed strongly the need for cases of sexual harassment to be dealt firmly.

Pupils: Most of the primary schools the government should strictly address the issue of sexual harassment in schools. (P-FGD-HVAPP-KIL)

Sexuality/Sex/Health Education

Learners and parents observed that prostitution was a social ill that was viewed as a means of earning a living.

Pupil:...we can teach children in school that prostitution is not a way of solving poverty also these children in our schools can go and teach others and show them that education is more important than money. (PL-BUNP-LK)

Pupil: ..some parents will tell you that education doesn't matter you can go and be a prostitute and you will still earn money they just tell us that we are going to waste their money and they can use it for other things. They should be educated and shown that education can help by solving their basic needs and we can help them in a great deal in their future....(PL-BUNP-LK).

The learners would like sex education to be taught in schools from standard 6 to 8 and advised

on how to prevent STDs, HIV, early pregnancies and abortion.

Pupil: We have the learning of sex in school. The children should be advised on how we can avoid contracting STDs and also HIV, early pregnancies or even how abortions or even infertility in future (**PL-TEMP-NY**)

12.4.9.5 Poverty

Many school going children are poor and cannot afford certain requirements in school.

Pupil: One thing is poverty. Poverty can really affect and so in order to do that like this, we know that there are children that their parents they pass on then after that they are left with to their guardians, so others see that they were depending on their parents, then now the source of income has gone so those children we need to support them because poverty it can be a great hindrance to education. . (**PL-KIAP-KIA**)

Parent: One of the issues affecting the learning is poverty. Besides having free primary education some pupils still are unable to attend school. The little money asked by school the parents are not able to raise. So poverty is a major problem. (**PT-MIRP-HB**)

12.4.9.5 Equality/Gender Issues/ Rights

The provision of education to learners was thought to be unequal across schools. The girl child also seems to be favored over the boy child.

Parent: I think we should have problems in equality, where some schools have others don't have and at the end of the year they give some results so the one which don't have really go under loose, secondly in some schools you find teachers are there but they don't teach the supervision is poor hence at the end of the year

Parent: Child rights can be beneficial or negative to the society.....the people are just about girl child while the boy child is being gradually forgotten

12.5 Secondary Level Needs

This section presents the consolidated key findings of secondary needs. The chapter is divided into different themes which include: competencies, content/learning areas, talent identification and nurturing, pedagogical approaches, teaching and learning resources and assessment.

12.5.1. Competencies

The study sought to find out the competencies that learners should acquire at secondary level.

Through questionnaires, the teachers and principals identified different competencies that were clustered into four 4Cs of the 21st century skills. These includes: communication, collaboration, critical thinking and creativity. The ratings of these skills are as shown in **Table 12.16**

Table 12.16: Teachers and Principals Responses on Desired Competencies

Competencies	Teachers responses' (%)	Principals responses' (%)
Communication	95.0	96.2
Creativity	95.4	95.6
Collaboration	95.0	91.0
Critical thinking	90.4	93.8
Average %	93.5	94.2

As shown in the findings, more than 90% of the teachers and principals were in favour of the 21st C skill with an average of 93.5% and 94.2% respectively.

These findings were echoed by the students, parents, key informant and other respondents who gave their views through the memoranda. Commenting on these skills, a respondent through memoranda said:

MEM: Soft skills; 21st century skills such as problem solving, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness, and Teacher professionalization programmes through mentorship (**MEM-CEMASTE-A-**)

The respondents also gave a lot of weight on entrepreneurship and financial literacy skills. On this, a student leader said:

Student leader: coming back to the economy you find that some of these countries that have developed... you find that entrepreneurs are highly encouraged... when you talk of like my society entrepreneurship is not known.. we leave school we start looking at the white collar jobs and that's exactly what teachers taught us for the education system in Kenya is such that we are taught to look for the white collar jobs and not the blue collar jobs (**SL-MBIT-S-HOM**)

The respondents pointed out other skills related to security, financial literacy, and psychomotor development. Pertaining psychomotor skills, a parent said:

Parent: I think psych-motor skills should be emphasized. For-instance, we have seen so many guys making a lot of money through running, so many guys are making a lot of money through soccer (**PA-FGD-MUTG-S-KIT**)

In addition to the skills, the respondents enumerated values and attitudes that should be inculcated in the learners. These include: patience, hard work, taking care of environment, community service, moral and spiritual values. Others include obedience, tolerance, love, humility, respect (including respect for property), good citizenship, discipline, diligence, loyalty, honesty, peace, social justice, unity and cooperation, integrity, the virtues of honor, courage,

industry, confidence, kindness and assertiveness, nationalism and patriotism, responsibility, courage and industry, accountability, socialization and environmental concerns, etiquette, appreciation, tolerance, caring and compassion. In relation to these values, a student observed:

Student: When someone leaves this school will have ability to work and develop the nation, so in education many school should engage in teaching their students about virtues honor, courage and industry, integrity, confidence, kindness and assertiveness not only about education because if we leave school having education but no virtues it makes no sense (S-FGD-MOIG-S-UG)

Commenting generally on the values, a key informant said:

KI: ... our education should develop values in our citizens, built citizens for this country...we keep on complaining in the social public about dirty cities, dirty things, about things that we don't like yet we don't solve those social issues in education, education should help us to solve these problems ... I feel pain when I see students have burnt a school, I say I have made this school, ... taught them to Form 4, they can burn and destroy a property then ...asking myself what values have we given these children,, values that we can use and values that we can enjoy and those should be solved by education. Education should be very key to develop character of our children....(KI-CEMASTEANAI)

On attitudes, learners stated that a good attitude towards subjects and the subject teachers should be cultivated by learners since attitude affects performance. A student suggested that education should give the right attitude like enabling them to appreciate various sources of livelihood including farming. They should have good attitude towards everyone and be able to relate with everyone.

Student...We hope to acquire... positive attitude toward others and high self esteem, create a country where there is peace and harmony... (S-FGD-StCNAM-S-BUS)

12.5.2. Talent Identification and Nurturing

The needs assessment survey sought to find out the strategies of nurturing the potential and talents of the learners at secondary education level. This information was gathered by administering questionnaires, interview schedules and Focus Group Discussion. Other respondents gave their views through memoranda.

Through the questionnaires, the teachers and principals of high schools rated the strategies of nurturing the potential and talents as shown in **Table 12.17**

Table 12.17: Teacher and principals Responses on talent identification strategies

Strategies	Principals N = 109	Teachers N = 543
	%	%
Games and sports	96.0	94.8

Curriculum enrichment	93.4	94.6
Clubs and societies	91.6	91.2
Cooperative learning, Competition among schools and academic conferences	89.7	90.4
Ability grouping and mentorship programs	89.4	90.0
Special schools for G&T	89.2	89.0
Special needs classes	88.2	88.0
Accelerated learning and advanced placement	78.2	87.8
Early admissions to school	67.8	74.6
Average percentage	87.1	88.9

The findings from the principals and teachers of secondary schools shows that, nurturing of learners potential and talents may be best enhanced through curriculum enrichment and games and sports at a per cent rating of 96.0% and 94 % and 93.4 and 94.6% respectively. Also featured prominently as strategies for nurturing learners potential and talents were; clubs and societies (91.6% and 91.2%), cooperative learning, competition among schools and academic conferences (89.7% and 90.4%), ability grouping and mentorship programs (89.4% and 90%), special schools for gifted and talented (89.2% and 89%), special needs classes (88.2% and 88%) and accelerated learning and advanced placement at 78.2% and 87.8% respectively. The lowest ranked strategy was early admission to schools (67.8% and 74.6%). These findings converged with the students, parents, key informant and other respondents who gave their views through the memoranda. Responding on the ways of nurturing the potential and talents of learners at secondary education level the respondents identified co- curricular activities like sports and creative arts, competition and reward system for gifted children, students mentoring; talents focused institutions, clubs as ways of identifying and nurturing the potential and talents of learners.

The respondents also identified other ways of nurturing talents such as the development of a wide curriculum with technical and vocational learning areas, performing and creative arts and field excursions, creation of incubation centres for innovations, teacher- parent collaboration, career talks and open days, student service and attachments, student councils, student contests, Non examinable courses in performing and fine arts, student magazines and debates.

In addition the respondents suggested that Ministry of Education should create a department to search for talented children and other individuals. Education should create a demand for talents

and skills. Initiatives such as , talent scholarships and media focus on talent achievements should motivate learners to explore and develop their talents and motivate education institutions and its leaders to create opportunities to nurture these talents. Counties should create education strategies that take advantage of their regional strengths to attract talent to their areas and create opportunities to develop them. Education should create a demand for talents and skills as well as Offering a market driven curriculum for example, Talent scouts to identify learners with talents, Schools exhibitions in areas like science (science congress), handcrafts, IT, music and drama, train talent assessors and trainers.

The learners suggested an innovative method of identifying talent whereby a questionnaire filled during admission to school would enable one to state the talent areas they feel inclined to.

They added that identification of talents can be done through participation in club activities.

Clubs help open up their minds. Talents can also be identified during talent shows.

Student: Before admission, they should like fill a questionnaire that... has a section for the talents for the students. Because we would have already been identified in the admission forms, the schools will start preparing (SFGD-MEKA-SP-KWA)

Student: You find in school there are talent night. We have games you will see somebody is playing well and also in music some sing well. The teacher should know there student who have talent. And they will employ a teacher for those talents (S-FGD-KIS-S-NYAN).

The respondents asserted that different stakeholders should be able to identify the talents. These included parents, teachers, and experts. Parents were of the opinion that they should be at the forefront in identifying talents in their children. This is done by children sharing with them and observing the children. The parents should monitor their children and be able to identify what they are good in from the time they are very young in early childhood. However, a respondent said that teachers have no capacity to identify talents in learners and how to nurture them. He further said that even if talents were identified, the question would still be whether we have time to nurture them since all the time is study time.

KI: Does the teacher have the time to observe these children? Do even the students have the time to do these things because even break time “kuna assignment yenye mwalimu amewapatia.” Lunch time has been reduced to 15mins and games time is revision. So we need to consciously know that part of the curriculum is talent, part of the curriculum is co-curricular activities and mainstream them. Actually this is one thing that I passionately would ask KICD to do to mainstream these things .You know we call them co-curricular but we still treat them there are schools which believe that they are not important (KI-CEB -NYAM)

On assessment of talents, respondents proposed fair evaluation and appraisal systems and parents emphasized on the need to encourage learners' involvement in the talent areas by ensuring that they are assessed.

Parent: The talent areas should be assessed and marks given to encourage the students since now they either take or not nobody bothers. . (S-FGD-KIS-S-NYA)

It was suggested by the learners that schools could consider issuing leaving certificates that articulate one's talent areas. This would serve to motivate learners.

Student: The school should also consider leaving certificates. So they can know on what they are good in. From the classification they will know where your talent is (S-FGD-KIS-S-NYAN).

12.5.3. Content / Learning Areas / Path ways

The teachers and principals were asked to indicate the extent to which different learning areas should be emphasized in the secondary school curriculum. Their responses are presented in **Table 12.18.**

Table 12.18 principals and teachers responses on learning areas

Learning Areas	% Principal (N=109)	% Teachers ((N=543)
Art& Design	80.9	82.5
Agriculture	93.0	91.0
Technology	93.6	95.0
Vocational and technical subjects	86.4	87.4
P.E.	89.8	89.2
Humanities	90.0	89.4
Climate Change	98.0	99.0
Environment	96.0	92.2
Hygiene and sanitation	97.0	95.6
Entrepreneurship	94.4	92.2
Business Studies	89.6	91.8
Mathematics	94.4	93.8
Languages	98.0	96.8
Sciences	95.8	89.6
Home management	93.6	86.6
Health and nutrition	95.4	93.4

As shown in the findings, high ratings were realized on all the enlisted learning areas that the respondents reacted to. Languages and climate change had the highest scores of more than 98% among the two categories of respondents while the least was Art and Design as indicated by

80.9% of teachers and 82.5% of principals. Entrepreneurship and climate change were relatively new areas that were suggested for the new curriculum.

The findings from the data gathered qualitatively support those of the teachers and the principals. In relation to climate change, the respondents suggested global warming and environmental awareness in the curriculum. On the entrepreneurship, a learner avers:

Pupil: at secondary level, I think we need to be taught on how to be entrepreneurs because not everyone that goes to secondary will get A's, you got an A and becomes a doctor, engineer teacher, lecture What about the person who scored D? Where do they go? If you are taught on how to become entrepreneur they obviously will have idea of making ends meets that is starting small and then growing big” (**PL-SOS-P-UG**)

In relation to languages, students said that in addition to English and Kiswahili, they should also be taught foreign languages like Chinese, French, and German in schools where they are not currently offered.

Just like teachers and principals, the respondents advocated for the teaching of technical subjects that will develop hands on skills such as electrical engineering, drawing and design, art and craft, carpentry, masonry, fashion design, computer studies, Business studies, Agriculture, woodwork, metal work, power mechanics, plumbing, welding, and construction.

Student...all technical and applied sciences must be introduced in schools so that students can learn subjects of their own opinion. You find someone is not able to perform in certain subject and he can perform well in a certain activity. So he should be given that chance to participate where he is comfortable (**S-FGD-BUT-S-BUS**).

Other areas identified by Key informants included citizenship, age Appropriate and value based sexuality. Commenting on the age appropriate sexuality, a key informant said:

KI: Again at the level of secondary school the issues of sex education should be made clear we can't leave them to experiment with the wrong information that should also be able to do all that is the curriculum. Students should be guided to be in serious and good relationships (**KI-PAS-NAI**).

The respondents also expressed the desire for learning areas like First Aid, Disaster Management, Financial literacy children's rights and computer studies.

Most of the subjects currently being taught were also suggested. These included teaching of Creative arts, Biology, Mathematics, Chemistry, Biology, Physics English, Kiswahili, agriculture, Life skills, History, woodwork, Geography, CRE, music, guidance and counseling, Science especially electricity.

In order to cope with psychosocial challenges, a student requested to be taught and psychology.

Student: Psychology – when you acquire psychological abilities you will be able to study the human behaviors you will be able to know this is a good person, this is a bad person or this intends, like for example if you have a psychological ability of suicide bomb you will be able to alert the people around or the official of the government there is a suicide bomb around and many of the lives of people will be saved (SFGD-MEKA-SP-KWA)

Parents suggested subjects that should be compulsory and those that should be optional. In their view, the teaching of practical subjects such as music, home science and agriculture and also Biology, Chemistry, Physics, Maths and CRE should be compulsory for all learners. Geography, History, Business Studies, Art and Design and others can be optional for those learners who would like to specialize in them.

Parent: Also, I would like to contribute by saying that the subjects the learners are taking at secondary level, they are just okay. A subject like Biology, Chemistry, Physics, Math and CRE, these are subjects that are supposed to be made compulsory for all learners. A subject like CRE would enable these children to acquire values. These other subjects that have remained like Geography, History, Business Studies, Art and Design and others; they can just be optional for those learners who would like to specialize. Let it not be that; the learners are going to take all the subjects (S-FGD-NYAM-S-NYAM)

Apart from the learning areas, the respondents gave their views on pathways. They called for establishment of polytechnics which would offer vocational courses to cater for learners who do not perform well in the academics. Respondents observed that vocational courses would benefit learners in the sense that they could get certification after going through trade tests and in turn would enable them to be self employed or to seek employment in the job market.

INF: kama umepeleka mtoto carpentry... . Sasa akifika mwisho atahitimu, atakuwa na trade test. Akiwa na trade test, anaweza kuanza biashara yake, ama aende kuajiriwa mahali. (If you take your child for a carpentry course, at the end they will get a trade test and be able to start their own business or be employed). (HOT-INF-NAR).

KI: If we can have... these people who go to village polytechnic, start with village polytechnics they go to technical universities, I think the idea of coming up with technical university is like took the university of Mombasa, that is noble one so that people who start from village polytechnics can go all the way and they graduate in technical subjects and we need these technical people to address the issues and challenges that we are facing today and also to help us to achieve our vision 2030. We will not achieve vision 2030 without training (KI- DVC- KAU).

The respondents noted that students should be encouraged to take courses or training programmes which are in line with their talents, interests and abilities. This could be reinforced by creating pathways that develop student's talents or abilities from an early stage.

KI: when we know our talents, we are able to concentrate on areas that we can do our best (FGD-UNIV STUD- PWANI).

KI: everyone who is given pathways is given passion, for example, one want to be a doctor and the other wants to be a teacher, they should not be forced, and that's the right direction we are heading, as a parent or a teacher you should know what a child want to be; does he want to be an artist, dancer, teacher, engineer, actor, entrepreneur, film actor these are the courses that should be pursued in life. And then in that case we will stop the issue of school dropout failure, the society people who have nothing to do, and this will make everybody is being engaged..(KI-CDE-GAR)

12.5.4 Pedagogical Approaches

The study sought to find out the appropriate and relevant pedagogical approaches to deliver the secondary level curriculum. Secondary school teachers and principals responded to a set of items in a questionnaire regarding the extent to which they would like the suggested pedagogical approaches of teaching to be used while delivering the secondary school curriculum.

The Secondary school teachers and principals, sampled randomly from the entire country, preferred to a great extent 21st century teaching strategies as indicated in **table12.19**

Table 12.19 teachers and principals responses on pedagogical approaches

Approaches	% Teachers (N=534)	% Principals (N=109)
Brainstorming	91.30	94.00
Discussions	96.30	94.00
Projects	82.00	74.00
Experiments	94.00	89.67
Demonstrations	92.30	93.00
Field excursions	81.70	75.00
Debate	87.50	79.67
Dramatization	82.70	76.00
Reciting	72.70	75.33
Songs	75.30	69.67
Riddles	72.70	70.67
Dances	71.70	67.33
Experiential learning	87.70	83.33
Drills	67.30	66.33
Storytelling	74.70	78.00
Nature walk	74.30	67.00
Role play	81.00	78.67
Simulations	84.70	79.00

From the analysed data, discussions, experiments brainstorming and demonstrations were rated highly. The findings show that over 90% of the teachers and principals preferred activity-based and experiential learning strategies namely discussions (96.30%, 94.00%), experiments (94.0%, 89.67%), demonstrations (92.30%, 93.00%) and brainstorming (91.30%, 94.00%).

The learners, parent, key informants and other respondents from memoranda also recommended activity based teaching, experimentation, discovery learning and problem-based teaching methods. They also cited team teaching.

The second most preferred approaches by the teachers and principals were: debates (87.50%,79.67%), dramatization(82.70%,76.00%), projects(82.00%,74.00%), simulations (84.70%,79.00%) and role play (81.00%,78.67%). These correspond to the discursive and interactive approaches, cooperative learning, discovery learning, inquiry based learning and project based teaching methods proposed by the learners, parents and key informants. A respondent aptly described them as approaches that liberate the learner.

KI: I would give a very broad answer and say anything that liberates the learner... Approaches that are discursive, dialogic, anything that is interactive, where there is actual interaction not you know for most of our teachers interaction is something like ask a question and the student answers. There is no interaction there ...It calls for creativity on the part of the teacher and it calls for inventiveness ... Then they also need capacity to some kind of reflexivity (**CEB – NYAMIRA**)

Project work and field study are preferred and they are good examples of the collaborative approach in learning. Other approaches cited were: Story telling of real life experiences, mentorship of learners through job shadow experiences and use of guests on academic and non-academic topics.

In the respondents view, the proposed approaches give rise to all round students as they impart practical skills especially those that are hands – on. In addition, they promote understanding and critical thinking as opposed to rote learning which a parent argues turns the students into robots.

Parent: The 8:4:4 turned to be even more theoretical, its products are half baked, for life they cannot even repair a fence or even cut grass for the cow (**PA-FGD-NYANDA-S-NYA**)

Parent:I would say such a child should be all round. We spoon feed children too much. They are taught academics but other thing mtoto hana chochote. Anakuwa kama robot (*they become like robots*). Anaweza kufanya mtihamu na apite kasha ukileta same exam later, hatapata kitu. They cram and if you can change something small they will fail. They need to understand things not cramming.(**PA-FGD-MAKG-S-MAK**)

The respondents proposed that practical skills take up 70% of the teaching time in order to allow the students to participate more. Theory should only take 30% of the time.

KI: ...We want education that allow students to participate, more students participatory and one of our approach...is lesson plan that student centered, you prepare a lesson plan oriented and they participate more, rather than rushing, lets not just rush to do that but I think how much skills have they developed that every time, every topic we want to develop, and we will be keen in what they have achieved..(**KI-CEMASTEANAI**)

The learners, parents and key informants went further to highlight the need for teachers to change their classroom practices by adopting interactive learning approaches. Teachers are

expected to research and carry out reflective teaching, thus the need for creativity on their part. The teachers are also expected to make learning fun; learner centered and be up to date with current information. This will help ensure that curriculum connects with realities of life and allow learners to relate content with their immediate environment.

The respondents deemed discursive and interactive approaches appropriate for the teaching of transferable skills such as time management, communication, planning, work-appropriate behaviour and attitudes, team and independent work, financial literacy, entrepreneurship, workplace health and safety, work place rights and responsibilities, and customer orientation and satisfaction.

Respondents also emphasized the necessity to explore effective and innovative ways of teaching such as Computer aided learning which allows for individualized learning. The students learn more at their own pace. In case of teacher shortage in a particular subject, one can actually use recorded information for teaching. As such technological literacy, one of the key 21st century skills, should be a must for all teachers and should be incorporated in all Teacher Colleges (TCs). Those who are already teaching should undergo in-service courses.

KI: ...all teachers should be competent and able to use IT. It should be incorporated in teacher colleges so that they are versed in that area. Those who are not in teacher training should be in - serviced. **(KI-TCD-KWA)**

Given these required changes, a respondent stated that a reform in teacher education is urgent.

ME: Reports in the media allege that while reforming the curriculum and or education structure, reforming teacher-learning process in Kenya is urgent...Our education system lacks about 100,000 teachers to effectively and efficiently manage the learning process. This goes up if we factor in those who should be removed from the system because they do not teach. **(Okwach Abagi in DN, 2016).**

Parental Participation

Parental involvement in the education of their children was highlighted.

Respondent: a curriculum that includes parental participation on regular basis in and out of school with specific stipulated roles for its success and relevance to the market... curriculum to avail longer sessions for reflection in learning and application of the learnt concepts, cease from more theory to more practice. **(KCP-RI).**

12.5.5 Teaching and Learning Resources

The survey sort to establish the availability and adequacy of resources which are important in implementing and actualizing a competency based curriculum. Information was sort through an

observation schedule whereby the researchers observed the available resources in the secondary learning institutions. The findings are presented in **Table 12.20**

Table 12.20: availability of resources observed in secondary school institutions

Teaching and learning resource	Not Available (%)
Art room	92.1
Music room	90.8
Technical subject	86.5
Home science lab	84.8
Biology, chemistry and physics	63
Library	46.2
Models	48.2
Photographs/ photos	44.6
Charts	22.1
Sports equipments	21.8
Agriculture farm	16.8
Syllabus	8.9
Text books	7.3
Classrooms	6.9

From analysis, the data obtained shows that art room (92%), music rooms (90.8), technical subjects (86.5%), home science (84.8%) and science laboratory (63%) were observed and rated highly as unavailable in the sampled institutions.

Different respondents, through interview and Focus Group Discussion were asked their opinion on the teaching and learning resources. They identified the key resources but also highlighted the disparities in resource allocation and distribution. All the respondents (teachers, students, industry, and informal sector) concur that provision of basic resources is of paramount importance to the quality of education. They noted that these resources are not always available in all the learning institutions, and where they are available they may not be adequate.

The respondents expressed the need for well-equipped libraries and laboratories, computers and computing devices, Internet and e-Platforms; physical facilities like classrooms, fields, libraries and laboratories. Most of the emerging secondary schools do not have physical facilities like classrooms, fields, laboratories and experience shortage of teachers.

On the issue of human resource, respondents indicated that teachers were the number one resource. As such there is need to ensure those entering the profession have chosen it as such teachers will take their work seriously. They should be well trained even on matters of talent identification and nurturing, and be able to attend continuous and regular in-service courses. Ensuring that ESQAC is effective therefore becomes imperative.

Student leader: Some teachers teach without skills. Some come to class and they have no experience. The government should have a way of assisting teacher before they teach (**SL-KABR-S-BAR**)

A good learning environment with ample space for structures and sports fields, isolated from noise pollution is desired. In addition, the need for well equipped language laboratories, demonstration workshops, Information and Communication Technology (ICT) tools, Audio-visual aids, Digital materials, Open Educational Resources, Science kits, drama academies, was also highlighted.

Though the teachers and principals indicated that text books were available, students said that in some cases textbooks were shared by several students (for one book) creating challenges. The students pointed out the need for enough textbooks to enhance learning.

Students...The government should go for infrastructures, provision of enough teachers, textbooks ratio to students should be considered and also by encouraging teachers maybe by early payments ...(S-FGD-PBH-S-UG)

Commenting on the books, parents pointed out that set books should not be changed too often. The parents said a book should be used for a span of 10 yrs. This will also serve to reduce pressure on the needy families.

Parent...Textbook aspect should be addressed i.e. one textbook should be used by other children behind them in a family other than having different textbooks every year. (**PA-FGD-MAT-S-KAK**)

Time as a resource was highlighted by the respondents. Parents were of the opinion that time management should be inculcated in the learning by being exposed to the importance of a time table.

Parent: The importance of the time table should be inculcated to learners for them to be able to keep time. (**PA-FGD-KIS-S-NYA**)

They pointed out that the key to adequate provision of resources is financing. It was apparent that the utilization of finances in the institutions is paramount to the availability of resources. The inadequacy or total lack of resources is a problem the respondents attributed to the mismanagement of the limited finances that institutions get. They said sound financial management practices need to be applied

Disparities in provision of resources between schools in the rural and urban settings emanated as an important concern among the respondents. The marginalized areas are said to be

disadvantaged as far as resource allocation is concerned. Learning in these semi arid regions is further hampered by lack of teachers and lack of commitment from parents.

KI: ... the government should consider the marginalized areas receiving we have great schools in Nairobi and other urban areas but when we go in the low marginalized areas we find that they don't have labs there are students who have gone from form one to form four they are learning about Bunsen burners in schools they have KCSE and they have never seen a Bunsen burner and chemicals so that that's what I think (**KI-STU-KAU**).

All agreed that fairness and equity in resource allocation to schools is critical as it affords every learner the same learning opportunity. The learners are then able to compete competitively on the same level in the job market.

Parent:I think we should problems in equality, nowhere some schools have others don't have and at the end of the year they give some results so the one which don't have really go under (**PA-FGD-MOIG-S-UG**)

12.5.6 Assessment

The study sought to find out the forms of assessment which in the respondents view are appropriate for assessing what the learners have been taught.

Secondary teachers and principals were sampled randomly from the entire country and were asked to respond to the effectiveness and validity of the various assessment forms used in our school system on learners' outcomes. The different forms of assessment were clustered into formative and summative and composite means for each of them calculated. Their responses are presented in **Table 12.21**

**Table 12.21: Teachers responses on assessment
Secondary (N=534)**

Formative assessment (%)		Summative assessment (%)	
Continuous assessment	93.80	End of term examination	91.6
		End of year examination	89.4
		National examination	79.0
		Project work	81.8
Project work	81.80		
Average percentage87.8		Averagepercentage85.45	

Secondary Principals (N=109)

Formative assessment	% rating	Summative assessment	% rating
Continuous assessment	97.6	End of term examination	93
		End of year examination	90.2
		National examination	81
		Project work	86
Project work	86		
Average percentage	91.8%	Average percentage	87.55

An analysis of the teachers and principals responses showed that continuous assessment was the preferred mode of assessment and was rated highest at (93.8%); end of term examination (91.6%); end of year examination and project work (81.8%).

The secondary teachers' responses on various forms of assessment show a preference for formative assessment rated at (87.8%) as opposed to summative assessment (85.45%). Secondary principals' responses rated continuous assessment highest at 97.6%, this was followed by end of term examination at 93%. The least preferred form of assessment was national examination which was rated at 81%.

The learners, parent, key informants and other respondents from memoranda also rated formative assessment highly as compared to summative assessment. They argued in favour of continuous assessment tests noting that CATs motivate learners. They are also viewed as a good way of assessing learners progress through the years as they do not exert as much pressure as the national examinations.

KI: I advocate for CATs in a relaxed and enabling atmosphere not with a policeman with a gun. CATs records covering every topic should be part of the final assessment and not for teachers to use them to light their jikos. As parents look for vacancies in schools they are at pain to explain that the child was performing well but does not know what happened but has not records to show. **(KI-TCDE-KAK)**

Learners were of the opinion that continuous assessment can be used from as early as form one through to form four for a longitudinal presentation of their individual performance. They could also be used as part of the final score in the secondary school level.

Other reasons given for the preference of continuous assessment are that they are a good way of assessing talented and gifted learners and variations in abilities.

The respondents noted that there should be standard continuous assessment measures which will focus on soft skills/life skills/social skills. A respondent indicated that assessment in competencies based curriculum requires development of tool to measure the acquisition of the desired competencies and that this should be done continuously but not at the end of the programme.

KI: I think we must develop a reasonable assessment tool that sometime should even be continuous because sometime you may not be able to evaluate skills that have been learned over long period of time in one instant, the competencies should be constantly evaluated and practiced given room to be summatively evaluated as well (**KI-SGKNNAI**)

Although some learners were in favour of CATS, others felt that it was not a fair way of assessment. They said this type of assessment is influenced by the teachers who set the questions.

Some students were of the opinion that we should still continue having KCPE and KCSE as they help in placement of students. They said summative examinations like KCSE is necessary in that it plays an eliminative role to determine those who would transit to university. However, the arguments brought forth by the respondents for rating summative assessment lower than formative assessments were varied.

In the first instance, they said the exam oriented attitude of Kenyans coupled with ranking of schools disadvantages some learners. It engenders competition and individualism whereas we need cooperation and friendship. They said ranking intimidates learners and should be abolished. Some went further to suggest that KCPE be discontinued.

Respondent: Stop child to child competition and ranking. We don't want to teach rivalry and individualism in Kenya, we want cooperation and friendship. Further, the respondent expressed the need to discontinue KCPE (**ASM-IS**).

Secondly, the respondents argued that that these examinations do not equip learners with the requisite skills for survival. The current system of cramming makes them forget things as soon as they are through with the exam and that is why practical exams are necessary. This examination also disenfranchises learners.

KI:...The challenge with the examination is that it disenfranchises so many people take for example in every one year, you hear for example, eight hundred thousand kids have done KCPE two hundred and fifty thousand go to secondary school, nobody ever takes stock of what really happens to the five hundred and fifty thousand who don't go beyond a primary school. (**KI-CA-NAI**)

Thirdly, although examinations have been said to be a good way of finding out how well learners have learnt in school, administration of exams in the country is wanting. The issue of integrity makes them not always viable. Primary and secondary exam leakages have been rampant,

because of the demand and pressure to pass national examinations. Parents and students noted that to enhance integrity in examinations, independent officers should conduct continuous assessment tests conducted internally in the school. These assessments could replace national examinations which are marred by cheating to enhance the integrity of the examination process.

KI : I recommend removal of the KCPE examination and instead replaced with a continuous assessment system that also takes into consideration the practical, creative and social skills aspects of the learners. A final exam can be offered at the end of the secondary school level (**KI LIS NAI**).

A section of the respondents advocated for the scrapping of examinations at the end of primary school to provide opportunity for all to proceed for secondary education.

Respondent: in primary or form One, they should just continue,---They go on to whatever level they can reach,...was form 5 and 6 by the time they went to University they were already mature,--- from Form One, two,----- end of terms should be considered (**MITU-INF-NYA**)

KI:.. The government it is high time that it can do away with the national exam and then they find a way of testing and analyzing students how they are performing because it is the national exams which brings a lot of theft and corruption issues. (**KI-FGD-RONU**)

Fourthly, commercialization of assessment was criticized by the respondents especially due to the recent development where teachers are not preparing their own tests. Parents said that buying of examinations should be abolished because they don't test what the teacher has taught but the whole syllabus which is wrong.

Other effective assessment forms suggested by the Secondary Principals are Aptitude test, Assessment of research, Co-curricular assessment, Observation and Oral assessment. The learners, parent, key informants and other respondents from memoranda also suggested a variety of assessment methods; regular essays, groups and individual projects, continuous and final year tests in both open and multiple choice questions, national examination for standardization purposes rather than grading, oral and practical examinations, Observing children's behaviour after instructions, and practical trials on real life experiences about their honesty, love and kindness.

A key informant further added that the form of assessment chosen should be meaningful and should be able to address the regional and cultural diversity.

KI : ... should do the same but not similar i.e. a child migrating in rural and is a mobile school and tell him about traffic jam and you have not provided resources so that when you speak of it he can see the video not imagining, how resources are distributed and utilized, a flexible curriculum to address diversity. Also flexibility of children from one class to the other. I.e. not basing on performance and age. Accelerated learning should also be there. Assessment tool should be meaningful.. (**KI-CEB –SIAYA**)

Finally, the respondents called for the adoption of assessment methods that incorporate problem solving and critical thinking skills. In their view assessment should incorporate project work which would assess not only the learned skills but also values. This would make for holistic assessment. They further suggested that KNEC should come up with new modes of assessment.

Parent: KNEC should be given a proper mandate to conduct various forms of assessments, not just academic but they can do other different forms under that cycle and they make it official that this time we do particular assessment (**PA-FGD-MOIG-S-UG**)

12.6 Tertiary Level Needs

12.6.1 Teacher Education Needs

12.6.1.1 Introduction to Teacher Education Needs

This section presents the consolidated key findings of teacher education needs. The chapter is divided into different themes which include: General teacher education needs ,competencies, content/learning areas, talent identification and nurturing, pedagogical approaches, teaching and learning resources, assessment and cross cutting issues

12.6.1.2 General Teacher Education Needs

This study sought to find out the general needs of teacher education. Responses were sought from teacher training college lecturers and principals through questionnaires. Information from the students and parents was sought through focused group discussion. The student leaders and key informants were interviewed. The teacher training college lecturers and principals were asked to indicate the extent to which some identified societal needs should be emphasized in TTC curriculum using a five-point Likert Scale. They were required to indicate their choices by selecting one of the choices given as N for Not at all, VL for very little extent, NS for Not sure, S for Some extent and G for Great extent. The responses of the TTC lecturers and principals on extent to which societal needs should be emphasized in curriculum are presented in Table 12.22

Table 12.22: Responses of Teacher Training Colleges lectures and principals on Societal Needs

	Lecturers	Principals
Societal Needs	% rating	% rating
Patriotism	97.60	94.67
Economic and industrial development	90.90	96.70
Technological development	93.20	96.70
Social development	93.35	72.45
Environmental protection	94.20	96.60
	Average	Average
	93.85	91.42

Table 12.6.1 shows that the lectures rate patriotism the highest societal needs to be emphasized in teacher education curriculum at 97.60%, followed by environmental protection at 94.20%. Industrial development is rated at 90.90% by the lectures. The Principals rate economic and industrial development highest at 96.70%. This is followed by technological development at 96.70%. Patriotism, environmental protection and social development follow with the ratings of 94.67%, 96.60% and 72.45% respectively. The key informants students and parent are in agreement with the lecturers and the principals in TTC in advocating for social development needs in teacher education. The college students in addition advocate for the scrapping of P1 certificate course and instead upgrade it to diploma, because the P1 certificate is more expensive than diploma

Student: P1 certificate should be done away with, upgrade to Diploma. The P1 certificate costs 160 KSH while the Diploma is less yet it's of higher value. (CS - FGD - TTCPKIL – KIL)

The key informants further observed that there is need to update the capacity of the teacher trainer as well at the teacher colleges as well as in the university.

KI: so we need also to put structure and systems to improve the trainer of the teacher and the trainer of the teacher trainer you need those systems... Yes, improve the ways teachers are training. (KI-HQUASO PWANI UNIV)

Key informants proposed that there is need to raise the entry requirement for teacher training. They proposed students who attain grade A should be the ones joining teacher training collages as in other professions

KI: I feel that as we seek for doctors to have A, the people to join teaching should be the people who are A and they should be paid very well. Why? A teacher teaches other professions, so teaching is biggest profession ever because you are taking care of other professions. How do you teach me to become a doctor and you performed poorly? Are you teaching me to get an A and you got a c+ or c-? The students who pass very well, the A students should actually go into teaching so that they can be lecturers and teach doctors who might have scored B or an A- . But teaching must be the best paid profession in this country **KI CPC NAI**).

KI: The minimum qualification should be a diploma .For lower primary and early childhood education, better qualified teachers need to handle the pupils because this is the foundation of their education (**JWM-IS**).

The key informants suggested that the teacher should be well motivated by giving them better salaries, better resources, better houses and allowances, so that they are able to deliver effectively.

KI: yeah our teachers need to be motivated, in all ways possible... in all possible ways, he is better than anything in the world... before you become that doctor, you pass through that teacher. The teachers, they determine so many things in our society right from primary, secondary...., that's the person who will determine life, all of us here, remember our nursery teachers. Partially the reason we are the way we are, so I think our teachers, better salaries, better resources, better houses, allowances, traveling, will be motivated. (**KI-FGD-PWN**)

The key informants proposed that teacher education should aim at making teachers role models of the learners.

KI: We might not succeed if we just look at the curriculum in our schools and ignore the implementers... the character of the teacher is what forms the child and even in Kenya I know we have the history of good teachers who are known and whose products are seen because like Griffins of Starehe and even the one of Alliance Khaemba you know people are looking up to them as role models because the students they produced can be seen. (**KIT - BIS. ONYUKA – HOM**).

The respondents expressed the need for professional development among teachers, for 21st century changes, as well as making signing of teachers' performance contracts compulsory since their role is key in education, They proposed continuous in-service course for teachers be introduced

KI: The role of the teacher is so central and focuses to be given on the 21st century teacher we need. Signing of teachers' contracts should be made compulsory. (**KI-FAWE-NAI**)

KI: We need to subject the teachers to continuous Teachers Education so that we continually build their capacity (**KI-KEPSHA**).

KI: take these teachers for refresher courses at the end of the day and particularly not at the school level because the surroundings they will always see it is the same but either as country level or the county (**KI CDE LAI**)

The parents urged that teacher Training colleges should impart adequate skills and competencies to their trainees

Parent: ... You may find a teacher is supposed to teach computer, but him is not trained. Technical schools used to train teachers thoroughly. The teacher would be very competent in what they do. But today the teachers are shallowly trained. The training of the teachers should be thorough. If it's a teacher for tailoring, he/she should be well trained. (**PA-FGD-UNOAP-MAK**)

12.6.1.3 Teacher Education Competencies

Teachers need to be equipped with some competencies to teach effectively. This study sought to find out the competences that TTC students should acquire. The TTC lectures and principals were asked in a questioner to indicate the extent to which to some specified competences should be emphasized in Teacher education curriculum using a five-point Likert Scale. They were required to indicate their choices by selecting one of the choices given as N for Not at all, VL for very little extent, NS for not sure, S for Some extent and G for Great extent. The responses they gave were clustered into four 4Cs of the 21st century skills. These includes: communication, collaboration, critical thinking and creativity. The ratings of these competences are as shown in Table 12.6.2 and Table 12.23

Table 12.23 Responses of TTC Lecturers and Principals on Teacher Education Competencies

Competencies	Lecturers % N=36	Principals% N=6
Communication	92.80	96.60
Management	95.00	96.20
Leadership	94.70	96.60
	Average 94.10	Average 96.46

The findings in Table 12.6.2 indicates that lectures rate management competences highly at 95.00%. Teacher training Colleges' principals prefer communication and leadership skills more with both having a rating of 96.60%. This finding is similar to that of college TTC students that mentioned that they needed communications and managerial competences.

Student: Since we are teachers we need teaching skills ,Communication skills, sign language, ICT skillsthose talented with Technical skills should develop them fully....Skills in management and administration....Knowledge in specific subject areas and ...I mean specialization: (**CS – TTCMAC - MAC**)

Student: we should be prepared with communication skills...in English and Kiswahili....so as to teach everywhere in the world, also to teach and deliver in any subject at primary level... **(CSL-TTCPMAC - MAC)**

Student: ability to work with others as trainees we should know how to handle different children, situations, management of school, and how to handle staff, relationship with the public. Good leadership skills and how to handle students. ... **(CS –FGD -TTCPSHA- SHA)**

Table 12.24: TTC Principals’ and Lecturers’ Responses on the Extent to Which Competencies under Collaboration should be Emphasized in the TTC Curriculum

Competencies	TTC lecturers (%) <i>N=36</i>	TTC Principals (%) <i>N=6</i>
Collaboration	93.80	96.60
Interpersonal relationship	94.80	89.60
Coordination	94.80	89.60
Planning	93.00	84.00
Organizing	93.80	93.60
Negotiation	92.80	91.40
Coaching	89.60	88.00
Mentoring	96.60	95.60
Networking	89.60	88.00
	Average (%) 93.20	Average (%) 90.70

From the findings in Table 12.23, TTC principals rate collaboration at 96.60% and the lectures rate it at 93.80%. The principals rate mentoring at 95.60% while the lecturers rate mentoring the highest at 96.60% followed by coordination (94.80%).The key informants are in agreement with the teachers and principals that mentoring ,negotiations and interpersonal competences are needed in Teacher education.

KI: Competencies related to life skills development in areas of negotiations, communication,

relating to strangers are crucial for young children. For those who are training as their teachers need to be more careful to exhibit the very values desired of the children. **(ME-BK-IS)**.

The principals rate both critical thinking skills and decision making very highly at 90.40% and lectures at 89.60%. These findings are similar to those of key informants who said critical thinking skills are needed in the 21st century.

KI: Soft skills; 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness, and Teacher professionalization programmes through mentorship. **(ME-CEMASTEAM)**.

The key informants indicated that teachers require teaching skills like handwriting and how to handle indiscipline among learners included into the teacher education curriculum

ME: The total ban on corporal punishment in 2001, teachers have not been equipped with different skills of handling indiscipline among learners... For sustainability, teachers should be imparted with positive discipline skills. **(ME-KCP-RI)**

KI: Things like handwriting you start training again a teacher because those are some of the things we are expecting to see the basic skills. They can hardly write on the blackboards neither can they write well, in fact you go in some classes to see the positioning of the book. You find even the teacher doesn't understand they go to the toilet and doesn't wash their hands. Even sweeping you find like you should pour water on floor before sweeping but practically you don't find the teacher doing that, you find the teacher supervising children and there is dust all over so that one is for the exam, the real practice is not instilled in the children. . **(KI-CEB-NAR)**

The TTC students said they want all round skills included in the teacher education curriculum to enable them make perform many things and improve themselves

Student: I want to leave here as an all rounded person. He who can do everything, because we are trained in very many skills of life, how we can improve ourselves, work with the resources and more so how we to live in any surrounding. As a teacher I would like that when I leave this college I should be the one who can deliver what I have learned and impact the values I have learned here in college to the young ones. Because I will deal more with the younger generation **(SL-TTCP-MIG-MIG)**

ME: We need Self-driven, all-rounded graduates who are able to comfortably go for self-employment as an alternative to formal employment, considering the increasingly reducing opportunities in the job market. **(BUS.MAN-INF-NAI)**

The key informants suggested that teacher education should train on sensitivity and observation skills in order to identify and nurture diversity of learners and learning needs.

ME: It would be prudent for teachers to be trained so that they are more observant to their student's abilities. My daughter is a left-handed child in intermediate - nursery. Each year, I have to bring to the attention of the teachers about her being left-handed when she faces pressure or 'gently' forced to write with her right hand. If teachers were trained to identify these talents, am sure they would be able to bring out the best in the students. **(ME-SN-IS)**.

The students, parents and key informants proposed the following values to be included in teacher education :socialization, corruption, loyalty, self- awareness, peace, negotiation, honesty, and co-existence, selflessness, respect, corruption, faithfulness, positive values Etiquette, Respect, Honesty, Self-control, Patience, Ethics and integrity, patience, accountability, transparency and cohesion. Some of their statements in support of these were:

Student: so the other thing that we should emphasize is the cohesion so that when we are talking. So you find the youth are educated and cannot find job (**CS - FGD - TTIP - WOT - MAK**)

Student: Yes, I have something. So what I is emphasizing it is about corruption. So if corruption it is eradicated early in the society or in our communities, this will help us our children to grow, to grow upright, yaani they develop upright without thinking about corruption (**CS - FGD - TTIP - WOT - MAK**).

Students: We should be taught honesty, respect, patience, accountability transparency and Integrity ...how to respect our elders. (**STTI –TTIPMAC- MAC**)

12.6.1.4 Content/Learning Areas

The relevant content need to be taught in TTC institutions that will enable students acquire the relevant skills and competences they would require for their work at after their training. The study sought to find out the content that needs to be taught in TTC. The lecturers and principal teachers were asked to indicate the extent to which some identified learning areas should be emphasized in the TTC curriculum using a five-pointer Likert Scale. They were required to indicate their choices by selecting either ‘N for Not at all’, ‘VL for very little extent’, ‘NS for Not sure’, ‘S for Some extent’ and ‘G for Great extent’. Their responses are presented in Table 12.25

Table 12.25: Learning Areas to be Emphasized in the Teacher Education Curriculum

Content /Learning Areas	Principals (N=6)	Lecturers (N=33)
Art	86.60	80.00
Design	96.60	86.00
Agriculture	96.60	98.00
Technology	96.60	100.00
Vocational and technical	100.00	87.20

subjects		
Physical Education	93.40	91.00
Climate Change	100	95.2
Environment	100	92.8
Hygiene and sanitation	100	95.2
Entrepreneurship	93.4	94.6
Business Studies	98.5	96.4
Mathematics	96.6	97.0
Languages	93.4	98.2
Sciences	90.0	92.2
Home management	91.5	92.3
Health and nutrition	93.4	95.2
Humanities	83.40	92.20

Table 12.6.4 shows that TTC principals rate inclusion of environment, climate change and environment and vocational and technical subjects into the Teacher education curriculum at 100 %. Inclusion of design into the teacher education curriculum is rated higher by TTC principals (96.60%) and TTC lecturers (86.00%).Inclusion of Technology into the curriculum is rated at 100 % by the lectures. Inclusion into the teacher education curriculum of mathematics is rated at 96.60% principals and 97.00% by the lectures. Inclusion of humanities into the teacher education curriculum is rated at 83.4 % by principals and at 92.00% by the lectures. Likewise all the learning areas mentioned by the lectures and principals are similar to those mentioned by the students , parents and key informants .Just like the lecturers and principals of TTC the student and key informants said they wanted teacher education curriculum to include humanities like CRE,and agriculture, technical subjects home science, technology ,business and arts.

Students: Religious education is a must so that we can get values and attitudes...subjects which helps in nurturing talents such as creative writing and performing Arts, insha/composition, Poems/ poetry; Comedy and drama....technical subjects such as creative arts, home science and agriculture should be emphasized.
(CS - FGD - TTCPMAC - MAC)

Student: Like introduction to business, entrepreneurship, I think it would be better as we wait for employed by the government. The schools are becoming at least they are increasing the private schools but still they are under paid as you can see if somebody had a business idea as he is awaiting this time, this period, this 10 Years in future I believe it might go up to 20 years to be employed we need to be diversified (CSL – TTCP- BAR -BAR)

ME: The curricula at different levels should aim to enhance Accountability, Integrity, Responsibility, Peace, Commitment to work, Negotiation, Acceptance and environmental preservation. This can be achieved by involving learners in community service at all levels during holidays hence inculcating Nationhood in learners. (ME-OCO-IS).

KI: Soft skills; 21st century skills; Computer and Digital literacy; Innovativeness (ME-CEMASTEAS).

Students and key informants in addition want teacher education curriculum to include family life and life skills education.

KI: such things like life skills is not even taught to the teacher for them to deliver so maybe something in the curriculum of teaching something on life skills maybe introduced so that the teacher knows that there is an extra subject to be done in school other than the subject he is coming to teach. (KI – CEC - SAM)

The TTC student further suggested their curriculum should include carpentry, farming and driving which are skills that can be used for daily living

Student :some pupils not comfortable working in class but if you impact something in them that can help them be carpenters, farmers, drivers and we have even be taught something in ICT (SL – TTCP – MIR – MIR).

The TTC Student expressed their desire to be taught all subjects that are taught in schools like music

Student: Ok...maybe an example of a TT College; it should be the same as what we are going to teach there. It should not be like here we are being introduced to music...and when I go out there, I cannot teach anywhere. So, they have to ensure that whatever is in this TTC, they are also back there in our primary schools. (CS – FGD –TTCP - MAA - KAJ)

The parents, lecturers and principals were all in agreement that languages be included in teacher education curriculum. However the parents went further to state that foreign languages like French and Chinese be included in their curriculum

Student: we should be prepared with communication skills...in English and Kiswahili....so as to teach everywhere in the world, also to teach and deliver in any subject at primary level... (CSL-TTCPMAC - MAC)

Parent They should be taught on skills that are job marketable and helps them develop naturally that is, foreign languages like French, Chinese etc. (P- FGD -GKP-UG)

A key informant unlike other respondents proposed that teacher education curriculum should include sex education

KI: with what we are seeing today the media, which is not there many years ago, that one should have a curriculum, I know judges will be opposed but the truth of the matter is we are the parents these are our children we must address issue of sexual education, that's an emerging issue (**KI-KNPA-NAI**)

The TTC student, parents and key informants mentioned other areas of learning that need to be emphasized in for teacher education that are not mentioned by lectures and principals, these are library science, medicine, engineering, economics, psychology, child development , education ,stress management, policies, Arabic , computer education , terrorism ,motivational speaking and guiding and counseling

12.6.1.5 Pedagogical Approaches

Teachers need to use varied teaching approaches to enable learners understand easily. The study sought to find out the pedagogical approaches that can be used in teacher education. The teachers and principal teachers of TTC were requested to indicate in a questioner the extent to which some identified teaching approaches should be used in teacher education, in a five-point Likert Scale. They were required to indicate their choices by selecting one of the choices given as N for Not at all, VL for very little extent, NS for not sure, S for Some extent and G for Great extent. The responses they gave are grouped in categories as 21stCentury teaching strategies, Practical methods; experiential learning and lecture method and presented in Tables 12.6.5, 12.6.6, 12.6.7 and 12.

21st Century Teaching Strategies

Table 12.26: Responses by TTC Lectures and Principals' on 21st Century Teaching approaches

21st Century Teaching Strategy	Lecturer (N=33) % rating	Principals (N=6) % rating
Brainstorming	91.00	94.33
Discussions	97.00	94.33
Average %	94.00	93.33

The findings in Table 12.6.5 show the discussion is rated the highest 21st Century teaching strategy to be used for teacher education at 97.0 % by lectures who also rate brainstorming at 91.0 %, while the principals rate both discussion and brainstorming as the highest 21st Century teaching strategy at 94.33%. This was echoed by the key informants who mentioned discussions to be utilized in teacher education

KI: I would give a very broad answer and say anything that liberates the learner ...Approaches that are discursive, dialogic, anything that is interactive, where there is actual interaction not you know for most of our teachers interaction is something like ask a question and the student answers. There is no interaction there..... It calls for creativity on the part of the teacher and it calls for inventiveness (CEB – DR. CHARLES NYANDIGIRISI - NYAMIRA)

Practical Methods of Teaching

Table 12.27: Responses by TTC Lectures and Principals' on Practical based Approaches

Practical Methods	Lectures % rating (N=33)	Principals Percentage rating N=6)
Projects	79.67	94.33
Experiments	79.67	89.00
Demonstrations	91.00	89.00
Field excursions	71.67	72.33
	Average	%
	80.50	Average % 86.17

The findings in Table 12.6.16 shows that the lectures rate demonstrations the highest practical method of teaching and learning to be used in teacher education at 91.00%, while the principals rate it at 89.00 %. TTC Principals rate projects as the highest practical method of teaching and learning for teacher education at 94.33% while the lectures rate it at 79.67%. Field excursions are rated by principals at 72.33% and lectures at 71.67%. Likewise the student mentioned that projects and field excursions pedagogical approach need to used in teaching and learning in teacher education

Student: TTC should change as a primary teacher you should enquire and have more research or project (CS FGD TTCP NAR NAR),

Student: We can observe how they are performing and their outcomes...and find out how they have come to be successful... you take these children out daily and then you see the outcome as the day ends, if you achieve what you wanted, then you can say that you know (CSL – TTCP – NAR - NAR)

Learners' Activity based strategies

Table 12.28: Responses by TTC lectures and Principals 'on Learners' activity based Approaches

Learners' Activity based strategies	lectures % ratings (N=33)	Principals % ratings (N=6)
Debate	77.67	77.67
Dramatization	75.67	83.33
Reciting	64.67	77.67
Songs	64.67	72.33
Riddles	64.67	77.67
Dances	59.67	72.33
Average %	67.84	76.83

According to the findings in Table 12.6.7, TTC lectures rate debate (77.67%) the highest learners' activity based strategy to be used for teaching and learning in teacher education while the principals rate dramatization the highest at 83.33%. Both dance and songs are rated the lowest learners' activity based strategies to be used for teaching and learning in teacher education at 72.33% by the principals.

Experiential Learning Strategies

Table 12.29: Responses by TTC Lectures and Principals' on Experiential Learning Approaches

Experiential Learning Strategies	lectures % ratings (N=33)	Principals % ratings (N=6)
Experiential learning	80.67	89.00
Drills	66.67	83.33
Storytelling	71.67	89.00
Nature walk	70.67	77.67
Role play	75.67	89.00
Simulations	77.67	83.33
Average %	73.84	85.22

From the findings presented in table 16.2.8 experiential learning strategy is the highest rated experiential learning strategy as rated by both teachers(80.67%) and principals (89.00%).Role play approach (75.67%) is the least rated experiential learning strategy by TTC lectures .Nature walk (77.67%) is the least rated experiential learning strategy by principals. The students concur with the lectures and principals that nature walk as a teaching and learning strategy need to be

used in teacher education since they will be able to make observations of what is happening in the field

Student: We can observe how they are performing and their outcomes...and find out how they have come to be successful. For example, that cultural day which is in the university, it did not end well because of those clashes that came. So you can see that maybe this thing is not doing well, and you leave it out. But when you practice it daily, you take these children out daily (**CSL – TTCP – NAR - NAR**)

Similarly the students mentioned experiential learner strategies be used in TTC to instill practical skills

Student: most of the learning offered is in theory where by home science is a practical subject but given in theory only....so you find that when you want to go and implement on the field you find that you don't have that practical part. (**CS - FGD - TTCPBAR - BAR**)

Lecture method

Lecture method is rated by lectures at 84.00% and at 94.33% by the TTC principals. These findings are similar to those of the key informants and students who are in favor of lecture approach, but added that its use must be limited

KI: teachers to use as many methodologies in their teaching. Not only lecturing and talking the whole day. They should understand their learners, they have different abilities we teach them to cover the syllabus ...we are touching only a few children in a class (**KI CEE KIL**)

12.6.1.6 Talents Identification and Nurturing

This study sought to find out the talents that can be developed in teacher education students, ways of identification and how talents can be developed .The students, parents, key informants and student leaders identified the following talents that TTC students need to have: singing, reading, drawing, Writing, football swimming, drumming

Student: If the child is talented in the drum thing we ensure that he or she performs to their level by establishing some talent academies (**CSL TTP BAR BAR**)

Student: You know when these pupils are young...that is when they realize their talents...like creative arts and music...so if the music is introduced, at least it would be better...because there are those students who maybe don't have an opportunity to go to church and sing...and realize their talent. But then when they realize they will be doing it... (**CS – FGD – TTCP – MAA - KAJ**)

The student suggested that talents could be identified during the teaching of creative arts, physical education and sports

Student: talents can be identified when teaching creative arts.....during physical education and competitions. (**CS - FGD - TTCPMAC - MAC**)

The student suggested that talents could be identified through appreciation of the work done not only in schools and recognition to be done at the lowest level e.g. at counties and use of media, churches and communities

ME: A broad and diversified curriculum is needed so as to take care of the needs of all children and not only those who perform well academically. As proposed, education should be opened up to recognize and facilitate various types of talents such as technical, entrepreneurship, fine and creative arts, trade and tourism, emerging technologies, agriculture. These different tracks should be all is developed to help the country grow in all the different but important fields. Encourage workable and relevant collaborations with the private sector. Explore this alternative for possible co-funding of education. .. Use of media positively, churches and communities to recognize talents. (**KCCB-RI**).

Student: The learners have different talents. These talents we can be able to see in a child from a very young age. So the interest of the child maybe is having an interest in maybe football. You can just see that this learner might be interested in this. These outdoor activities should also be encouraged (**CSL - TTCP – NAR- NAR**)

12.6.1.6.1 *How to Nurture Talents*

The TTC lectures and principle teachers were requested to mention the ways that can be used to nature talents among students. The findings are of the principal's and collage lectures are presented in Table 12.30

Table 12.30: Ways of Nurturing Talents of Learners According to TTC Principals and Lecturers

Ways of Nurturing Talents	Principals (%) N = 6	lecturers (%) N = 32
Games and sports	99.40	95.10
Curriculum enrichment	98.00	94.70
Clubs and societies	98.30	94.30
Cooperative learning, Competition among schools and academic conferences	94.70	93.70
Ability grouping and mentorship programs	93.00	93.00
Special schools for G&T	92.90	89.40
Special needs classes	91.00	86.10
Accelerated learning and advanced placement	83.30	86.50
Early admissions to school	78.70	74.50

The findings in Table 12.6.9 shows that the highest rated way of nurturing talents by teachers is games and sports (99.40%) , While the principals rate games and sports the highest at 99.40%.The least rated strategy by principals is early admission to schools at a percentage ranking of 78.70% where as the lectures rate early admission to schools at 74.50%. Clubs and societies were rated by principals at 98.30 % and by teachers at 94.30. Games and sports were rated by principals at 99.40 % and by lectures at 95.10 %. Curriculum enrichment was rated by principals at 98.00 % and by teachers at 94.70%.The principals rate competition among schools at 94.70 % while the lectures rated it at 93.70 %.These findings are similar to those of college student who proposed that the learners should be given adequate time for games, clubs, competition among schools, curriculum enrichment, provision of materials and establishment of talent school for nurturing of their talents

Student: Be giving enough time, in an institution, that a teacher comes in to have a lesson to in between the time for games, so this teacher does not see the needs to nurture talents, giving equal time to learning areas (CS FGD TTCP NAR NAR)

Student: So on the side of talent exposes them, give them materials and then provide a conducive environment for the play and for performing their talents and activities (CSL FGD TTP BAR BAR)

Student: Talents can also be grown through club work....and lectures can help us to participate in inter college activities. (CSL TTCPMAC MAC)

Unanimously, learners suggest that talents can be nurtured through government networking with schools to make a follow up and setting up specialized talent academies and recreational centers

Student: Maybe if you are talented in creative arts, that are the art and craft, I think the government should come up with a process that they make room for those who are talented. They go and participate in that drawing...and after each drawing (competition), the participants are rewarded...maybe in terms of money so that they can boost themselves. (CS FGD –TTCP –MAA –KAJ)

Student: If the child is talented in the drum thing we ensure that he or she performs to their level by establishing some talent academies (CSL TTP BAR BAR)

Student: Multipurpose recreation centers, if we take music e.g. the various talents can be enhanced with the relevant instruments (CS - FGD – TTCP –THO – KIA).

12.6.1.7 Teacher Education Assessment

This study sought to find out the mode of assessment that should be used in teacher education. The teachers and principals were requested to indicate the extent to which some specified

assessment modes could be used in Teacher education in a five-point Likert Scale. They were required to indicate their choices by selecting one of the choices given as N for Not at all, VL for very little extent, NS for not sure, S for Some extent and G for Great extent. The Responses were clustered into formative and summative and composite means for each of them calculated. Their responses are presented in Table 12.31

Table: 12.31: Responses of Lecturers and Principals' on Assessment Modes at the Teacher Education level.

Assessment Mode	Lecturer % rating (N=32)	principals % (N=6)
Continuous assessment	96.8	96.6
End of term	91.8	93.4
End of year examination	91.8	96.6
Project	90.0	93.4
National examination	86.2	93.3
	Average 91.32	Average 94.68

According to the findings in Table 12.6.1.10, the TTC lectures rated continuous assessment very highly at 96.8% while the principals rated it at 96.6%. This was followed closely by end of year assessment rated by principals at 93.6%. National examinations were the least preferred form of assessment as rated at 86.2 % by lectures and at 93.3% by principals.

These findings are similar to those of college student who mentioned that assessment can be conducted, twice per term or at end of year and could include oral questions. The students added that the continuous assessment tests at PTE are sufficient on their own and further said there is need to have every subject examined practically.

Student :currently we have the PTE and trebly and CATS.I don't think that the current methods are bad, but maybe we need to have practical for these subjects becauseall subjects even agriculture and social studies can have practical...like map work in social studies. (CS –FGD – TTCPMAC - MAC)

The students further suggested having KNEC exam after each academic year like that of the universities than after three years

Student: My opinion about the KNEC exam it is better for us to do the exam after the end of very year than to wait for three years like in universities (CS FGD TTCP KAG NYE).

Student: The mode of assessment should be like university, topic after topic. We have 12 subjects, where they are examined at end of the course; it should be done after every topic, instead of piling all at the same time. Like first year we handle 12 subjects and are assessed at the end of the term. First year we handle 12 subjects, and those 12 subjects are examined at the end of term, since we have teachers and we also trained like teachers (CS FGD TTCP NAR NAR)

Student: End of year, end of course, combined assessments. Like university each year assessment is done then an aggregate done (CS FGD TTCP – THO – KIA).

Some students further added that the national KNEC exams should be removed and they be tested after each topic

Student: This is a tertiary institution- we should be tested immediately after every topic. The tests cover many topics. We need to be tested at the end of topic, and if you fail you resist immediately rather than have a referral at end of two years. I think we should do away with final PTE exam teachers can get the average of tests done and get a final grade. Thus CAT's can be used for grading students. (CS - FGD – TTCP-KIL)

The students gave the opinion that the quality assurance officers need not assess them

Student: I get so irritated that I'm been assessed here and when you go to these other schools you rarely find these, why do they do it at the college level because I've taught us a trained teacher and you will find a quality assurance officer asking one question or he doesn't even ask and goes (CSL TTCP BAR BAR).

The students suggested that assessment in TTC's should be mainly be practical coupled with, theory assessment in written and test oral form and projects continuously during the learning process

Student: According to me, student teachers should be assessed in Practical teaching because this is what matters most in their course... theory assessment through written test, oral test and projects continuously during the learning process. (CS –FGD – TTCPMAC - MAC)

The students suggested that incase of failing in a subject a candidate should be graded but not resit for the subject again

Students: On exams – I suggest referral should be stopped because sometimes you pass all subjects and only get a referral in one subject. I think this should be added to and one is graded instead of one having to come back to re-sit for exams. (CS - FGD - TTCPKIL - KIL)

12.6.1.8 Contemporary and Crosscutting Issues

This study sought to find out the crosscutting issues that affect the society that need to be included in teacher education curriculum. The teachers and principals were requested to indicate the extent to which some specified emerging Issues could be covered in teacher education curriculum in a five-point Likert Scale. They were required to indicate their choices by selecting one of the choices given as N for Not at all, VL for very little extent, NS for Not sure, S for Some extent and G for Great extent The responses are presented in Table 12.32:

Table: 12.32: TTC Principals' and Lecturers' Responses to crosscutting Issues in Teacher Education Curriculum

Crosscutting Issues	Teachers	principals
	% rating (N=65)	% rating (N=18)
Drug and substance abuse	97.20	97.20
Technology	96.40	97.80
Integrity	95.20	98.90
Financial literacy	94.80	93.60
Security and safety	92.60	97.80
Health hygiene	91.70	96.10
Gender issues	91.40	95.80
Disabilities	89.20	96.60
Environment	88.20	89.60
Child rights	84.40	91.60
	Average (%) 92.11	Average (%) 95.50

The findings in Table 12.6.11 shows the principals rated integrity at 98.9%, drug and substance abuse at 97.2%, and financial literacy at 93.6% .The least rated crosscutting issue was

environmental at 89.60% by principals. The teachers rated integrity at 95.2%, as the highest followed by drug and substance abuse at 97.2%, and financial literacy at 94.8. The least rated was child rights at 84.4%.

The students and parents similarly mentioned the same emerging issues drug and substance abuse, security, gender, integrity, technology and environmental issues that are mentioned by the teachers and principals that should be included in teacher education curriculum. Some of the statements they mentioned are in support of inclusion of the crosscutting issues in curriculum are:

Student: when I first came to Bumbe I don't know what to do. Later I chose food and beverage ... I had that feeling that this course is for ladies. So something was telling me to quit but I went on and I made it. That belief was there when I went to attachment I realized it's not only for ladies. You just have to change your attitude (SL TTIP BUM BUS)

Student: Corruption, HIV & AIDS and it be as open as possible. Sexuality education and adolescence be given ... Safety, terrorism problems, substance and drug abuse, relationships (CS - FGD - TTCP - THO - KIA)

Student: I think the person should be discouraged on taking drugs. The institution should take time like weekends to have a guidance and counseling session on drugs and other issues. And they bring many people from outside to talk about it (CS - FGD - ISTP - NIST - NYA).

Student: Security is the cancer right now, it's the most dangerous disease as per now (CSL TTIP SIN KAK)

Student: insecurity...we should have conducive environment to learn. (STTI- TTIPRTI -UG)

Student: Environmentally, it is as results of noise pollution due to industries being built near schools which becomes a huge distracter (CSL - TTIP - WOT - MAK).

Student: Environmental issues like air pollution e.g. smoke, noise, dumping, cutting down of trees (CSL - TTIP-UKU-KWA)

Parent: Everybody is struggling to get a phone, and one has no money, he/she will use any means to get one this brings about theft, prostitution because they want the best but they cannot afford (PA FGD TTI UKU KWA).

KI-when you listen to people talk is like corruption has become like our culture and when you talk about culture, culture is like something that is 703 practiced by all people in the whatever community you are talking about. So corruption in our case has become a way of life ok, and then you know even if it's a way of life you know what it means so I think whether invaded in another curriculum it is an area which needs to be tackled by any means. (KI-REG-LAU)

The students were in agreement with the lectures and principals that technology was a crosscutting issue that needs to be added in the teacher education. However the students added

that the modern technology in form of mobile phones had made students engage in sexual immoralities and led to lack of concentration of students in class in class.

Student: The technology sometimes lowers dignity of people like mobile phones. When I go to internet I can be able to access everything worldwide. I am student but because I am accessing all these things I will be influenced to do what I am doing. They should prohibit those things to learners. We need to control internet (CS – FGD – ISTP - NIST - NYA).

Student: Technological there is lack of concentration in studies thus students should be taught on how to use the technology instead of using their phones to watch pornography (CSL - TTIP - WOT - MAK).

12.6.2 TVET Needs

12.6.2.1 Introduction to TVET Needs

TVET includes TTI, national polytechnics and youth polytechnics

This section presents the consolidated key findings of TVET needs. The chapter is divided into different themes which include: general TVET needs, competencies, content/learning areas, talent identification and nurturing, pedagogical approaches, teaching and learning resources, assessment and crosscutting issues

12.6.2.2 General TVET Needs

This study sought to find out the general needs of TVET Institutions .Responses were sought from TVET lecturers and principals through questioners. Information from the learners and parents was sought through focused group discussion .The student leaders and key informants were interviewed .The TVET lectures, and principals were asked in a questioner to indicate the extent to which some identified societal needs should be emphasized in TVET curriculum using a five-pointer Likert Scale. They were required to indicate their choices by selecting one of the choices given as N for Not at all, VL for very little extent, NS for not sure, S for Some extent and G for Great extent. The responses of the TVET lectures and principals are presented in Table 12.6.12

Table 12.6.12: Responses of TVET Lecturers and Principals on Extent of Emphasis of Societal Needs in curriculum

Societal Needs	Lecturers % rating	Principal % rating
Patriotism	94.13	91.93
Economic and industrial development	93.20	97.40
Technological development	94.80	95.30
Social development	90.50	90.80
Environmental protection	89.80	93.10
	Average (%) 92.49	Average (%) 93.71

The findings in Table 12.6.12 indicates that lectures in TVET rate technological development as the highest need at 94.80% followed by patriotism need at 94.13%. These societal needs were followed closely by economic and industrial development need at 93.20%. The TTI principals emphasized the need for economic and industrial development and gave it a rating of 97.40% followed by Technological development at 95.30%.

The students and parents are in agreement with the lectures and principals that there are social development needs and economic and industrial needs that should be addressed in TVET curriculum .The students proposed that the TVET curriculum needs to highlight issues of teacher absenteeism, drunkenness, misappropriation of school funds as it hampers effective curriculum implementation.

Student: And still, I don't think, I don't know whether you can come up with aaah...nini of coming, mmm... of supervising some teachers. You find that teachers they don't come for some lessons. Simply because they have them after and months they will go for their salaries. So they don't mind if the syllabus is covered or not. Simply because, they will tell you, okay, I did my education, so struggle for yours. Or some teachers come to class while drunk. Simply, what will that teacher deliver to them? **(CS - FGD - TTIP - WOT - MAK)**

Student: Another thing the government has to inspect is concerning the money. It donates for the buying of learning equipment and books. You see the government can donate 25million to cater for the books and stationery materials in short. And you find the school fails to purchase such items needed in academic and then the students ends up lacking those essentials to support academic **(CS - FGD - TTIP - WOT - MAK).**

The key informants, lectures and principals are in agreement that economic and industrial development needs to be emphasized in TVET curriculum

KI: At technical level they need to be self-reliant by the time they complete their courses they need to be self-reliance or employability ...being able deliver and give, they should also positive

attitudes towards work they should also have entrepreneur skills because most of them should not expect to be employed but walk out and be entrepreneur whereby they can earn and employ others. Again one other thing is innovation and creativity. **(KI-CBE-KIT)**

Other issues pertaining TVET needs from the qualitative data are that the key informants suggested the need to have TVET lecturers undergo a training course on teaching

KI: We have a number of those trainers in the TVET institutions who did bachelor in science in mechanical engineering, technical engineering and are not basically teachers so we want to come up with curriculum whereby those who have not done education should go either back or be retrained in teaching because there are number of them who have higher diploma who don't have basics in teaching and apart from that we need to have adequate workshops so we will be able to workshops and laboratories because in TVET we are sure you want to teach practically apart from theory you need also to teach **practically (KI DDE MUR)**

The Key informants added that TVET courses be offered through different mode such as distance learning model, weekend model, and evening class's model so as to give room to the students to work or attended to their family issues. They can also learn through attachment.

KI: students should not sit in classrooms particularly in TIVET institutions where some of them have other responsibilities ... the programs can be flexible so that we can have part time learning and distance learning. Apprenticeship can be very helpful since when it is hands on it becomes more interesting. Attaching students to the industry will be very helpful. **(KI-CEE-KWA)**

The students mentioned the need for constant monitoring and evaluation of the TVET institutions by the ministry of education and KICD to avert the challenges in their institutions

SL: .There should be genuine monitoring and evaluation from the ministry of education and KICD basing on academics. Because, you can find there are so many students, we are suffering down here but when we have that evaluation from the ministry of education you can find that they will report that education is taking place correctly and yet we are suffering down here **(SL TTI BUM BUS).**

12.6.2.3 TVET Competencies

TVET students are expected to acquire some competences by the time they leave the institution. This study sought to find out the competences that TVET students should acquire. The TVET lectures and principals were asked to indicate the extent to which to some specified competences should be emphasized in TVET curriculum. They were required to indicate their choices by selecting one of the choices given as N for Not at all, VL for very little extent, NS for not sure, S for Some extent and G for Great extent .The responses of the TVET lecture and principals are presented in Table 12.6.13

Table 12.6.13: Responses on TVET Competencies for Inclusion in Curriculum from Lecturers and Principals

Competencies	Lecturers % N=67	Principals % N=20
Communication	92.40	89.20
Management	95.80	88.60
Leadership	94.90	83.00
Collaboration	90.00	100.00
Critical thinking	92.20	93.80
Reflection	79.40	94.80
Decision Making	95.60	93.80
Reflection	79.40	94.80
Interpersonal relationship	92.00	96.60
Coordination	93.80	84.00
Planning	82.40	96.60
Organizing	84.60	96.60
Negotiation	88.00	90.00
Coaching	94.80	92.00
Mentoring	100.00	88.00
Networking	96.60	95.60
Decision Making	95.60	93.80
	Average 90.80	Average 92.73

The findings in Table 12.6.13 indicates that all the competences were very highly rated for inclusion in the TVET curriculum by both teachers and principals with ratings of above 79.0%.The competency of mentoring was rated at 100% by the lecturers and collaboration was rated at 100% by the principals .The competencies of organization, planning and interpersonal relationships are all rated at 96,60% by the principals .The

least rated competency by the teachers is Reflection at 79.4% while the least rated competency by the principals is leadership at 83.0%. Communication skills were rated by the lecturers at 92.4% and principals at 89.2%. A key informant emphasized the need for writing skills and communication skills and cited the journalists who lack communications skills and newspapers with grammatical mistakes. Training of journalists does not emphasize speaking or articulation skills.

KI: Certainly there must be those aspects in the in the curriculum and so and particularly on the ability to write. Today if you if you go through nation media for example or nation newspaper you will at least pick ten mistakes even in a page spelling mistakes, grammatical ...The other concern that we have the training of journalists do not emphasize on speaking and articulation skills so that ... Most of the top the top five journalists working in radio getting the highest pack are not journalists at all the people that have communication skills and all those are things that should harness in our training. The other thing that we should be able to harness is patience as a value and the desire to make a difference as an individual through your work (**KI-CEO-MCK-NAI**)

Focused group discussion of TVET students and parents of students in TVET institutions identified the following competences for inclusion in TVET curriculum: Poultry keeping, building, research, HIV, time management, electrical engineering, automotive, presentation skills, catering, hotel management, social work, farming, creativity, innovation, music, management, community development, teaching, business, food and beverage, leadership, reporting, public speaking, singing, sports/ football/ volley ball/ athletics/ swimming, computer skills, clothing, love for the country ,technical skills, entrepreneurship, coaching and mentorship skills,entrepreneurial skills, independent living skills, carpentry, cooking, business, masonry, tailoring and computer technology. The following are some of the statement by students, parents and key informants on the competences required for TVET institutions

Student: Due to the technology we are living with right now it is better to engage ourselves in Form one. Because the generations we are living within like my little sister she knows everything in computer. Let us start it at class 6, with packages. Then computer studies when you go to secondary school. In colleges you do programming and packaging. All the levels should be provided with the adequate computers (**CS – FGD – ISTP - NIST - NYA**).

KI: The entrepreneurship component leaves a big gap. The element of ICT has not been incorporated in our TVET. If we could have ICT empowered students then they can be able to use ICT to look for new designs or marketing their work (**KI-CEE KWA**).

The TVET learners mentioned that they need entrepreneurial skills included in their curriculum to enable them create jobs for themselves and others. They should also have positive attitude towards work.

KI: At technical level they need to be self-reliant by the time they complete their courses they need to be self-reliance or employability ...being able deliver and give, they should also positive attitudes towards work they should also have entrepreneur skills because most of them should not expect to be employed but walk out and be entrepreneur whereby they can earn and employ others. Again one other thing is innovation and creativity. (KI-CBE-KIT)

Key informants indicated that TVET student's curriculum should include skills such masonry and tailoring after form four when students are mature enough

KI: TIVET is a critical area. We believe that to make our country development agenda a reality, the TIVET curriculum need to be aligned to address form four leavers not class eight or form two drop out. This is because at form four children have matured enough to realize their full potential. At 12 years children will not have developed the ability to take in such skills as masonry jua kali etc. First of all give them the necessary skills required in secondary school. ... A class eight drop out children are not the best of themselves. That is why when they are given a sewing Machine, watakanyanga jerahani But when you give these people skills, after form four, these people will become major designers, because they are innovative, but at class eight the designers will be calling them to Kanyangia Jerahani... (KI KPSA UG)

A key informant mentioned that TVET students should have innovative skills included in their curriculum

KI: In addition to having the capacity to innovate so as to improve on those skills for better results. They should accommodate other people with different skills and pull together. They should be innovative. (KI-NCC-NAI)

12.6.2.4 Values and Attitudes

This study sought to find out the values and attitudes that are needed for inclusion in TVET curriculum. Responses were sought from learners, student leaders, parents and key informants. The respondents identified the following values which need to be included in TVET curriculum : socialization, corruption, loyalty, and self- awareness, uphold peace, negotiation, honesty, co-existence, selflessness, respect, corruption, faithfulness, positive values, etiquette, respect, honesty, self-control, patience, ethics and integrity, patience, accountability and transparency. The following are some of the statement by students, parents and key informants on the values required for TVET curriculum

Student: so the other thing that we should emphasize is the cohesion so that when we are talking. So you find the youth are educated and cannot find job (CS - FGD - TTIP - WOT - MAK)

Student: Yes, I have something. So what I was emphasizing it is about corruption. So if corruption it is eradicated early in the society or in our communities, this will help us our children to grow, to grow upright, yaani they develop upright without thinking about corruption. So that should be emphasized. And the best thing is to start early campaign about the corruption and that will help the people not to stop the corruption so the other thing that we should emphasizes, it is the retirement (CS - FGD - TTIP - WOT - MAK).

Students: We should be taught honesty, respect, patience, accountability transparency and Integrity ...how to respect our elders. (STTI –TTIPMAC- MAC)

KI: Certainly there must be those aspects in the in the curriculum and so and particularly on the ability to write...we should be able to harness patience as a value and the desire to make a difference as an individual through your work (KI-CEO-MCK-NAI)

The key informants emphasized on enhancing values even in the production and marketing of items.

Ki: This involves the doing of the technical design. Values are handy here as one does the technical work. May it be a stool, what quality is to be brought out? Bring out a product that is not questionable. The values acquired in lower levels can be reflected on the products i.e. using dry timber and creating standards. Even when selling products what language is it endearing? Creating values and high standards of excellence is key here. (KI-EAC-NAI)

Key informants indicated the need for integrity, appreciation for other people's culture and interrelationships for inclusion in curriculum.

ME: We need a workforce with strong resentment towards corruption and well equipped to fight it morally and otherwise. A workforce that appreciates the ethnic diversity and is able to amicably integrate in all engagements. We need Self-driven, all-rounded graduates who are able to comfortably go for self-employment as an alternative to formal employment, considering the increasingly reducing opportunities in the job market. (BUS.MAN-INF-NAI)

12.6.2.5 TVET Content / Learning areas

The relevant content need to be taught in TVET institutions that will enable students acquire the relevant skills and competences they would require for their work at end of their training. The study sought to find out the content that needs to be taught in TVET. The lecturers and principal teachers were asked to indicate the extent to which some identified learning areas should be emphasized in the school curriculum using a five-pointer Likert Scale. They were required to indicate their choices by selecting one of the choices given as N for Not at all, VL for very little extent, NS for not sure, S for Some extent and G for Great extent. The responses are presented in Table 12.6.14

Table 12.6.14: Content /Learning Areas to be Emphasized in TVET Curriculum

Content /Learning	Principals (%) (N=19)	Lecturers (%) (N=66)
Art	85.2	86.0
Design	94.8	93.0
Physical Education	83.2	83.0
Humanities	80.0	76.6
Climate Change	84.20	92.80
Environment	92.60	91.20
Hygiene and sanitation	84.20	92.80
Entrepreneurship	93.60	91.40
Business Studies	93.60	90.40
Home management	88.40	87.60
Health and nutrition	87.40	90.40

According to the findings in Table 12.6.14 inclusion of design into the TVET curriculum is rated the highest by TVET principals (94.8%) and at 93.0% by lectures. Inclusion of Entrepreneurship into TVET curriculum is rated at 93.60% by principals and at 91.40 % by lecture. The principals rate the inclusion of humanities into TVET curriculum at 80.0 % and lecturers rated it at 76.6%. Similarly the student said they want inclusion of humanities like CRE in order to grow spiritually and added that they would also need health and nutrition in TVET curriculum.

Student: I believe at this level, we are mature people and are not controlled to go to church. I think they should introduce C.R.E that will help ... grow spiritually. (STTI –TTIPEGE- NYAM)

Students: I would like to be a nutritionist when I leave school. (STTI- TTIPRTI-UG)

The lectures, principals and the key informants were all in agreement that TVET students should be taught entrepreneurship skills relevant to their way of life.

KI: At TVET the learners should be taught skills like cattle rearing, pastoralism and entrepreneurship. (KI-TCD-GAR)

In addition the students suggested to be taught vocational skills which can be localized

Student: I would expect to see if there was...at least somebody has something to do...maybe those polytechnics...they can offer dressmaking...so you can come up with your own business (CS – FGD – TTCPP- MAA - KAJ)

Parent: .Courses in Ukunda Polytechnic should be those courses of the needs of the local people in Kwale or Ukunda ... Kwale is a tourist place, so courses on tourism should be taught... The whole of Coast Province has no college on catering yet Coast depends on tourism. (PA FGD TTIP UKU KWA)

The lectures, principals, students and the key informants, all concur that TVET curriculum should include content on health and nutrition and home management.

The students suggested other areas of learning not mentioned by the lectures and principals that need to be include in TVET curriculum, these are contemporary issues like insecurity which is facing the country and gender issues

Student: I would say that currently, Kenya is facing a lot of challenges, at the tertiary level, I would advise the curriculum to be engaging at what is now facing the country, like the al shabaab who are attacking the country. (STTI -TTIPEGE -NYAM).

KI: Gender must be mainstreamed. (KI-FAWE-NAI)

The key informants further mentioned that TVET student should be taught modern technological skills like ICT to enable them perform their work better

KI: The element of ICT has not been incorporated in TIVET. If we could have ICT empowered students then they can be able to use ICT to look for new designs or marketing their work. (KI-CEE-KWA)

Student: In colleges you do programming and packaging. All the levels should be provided with the adequate computers (CS – FGD – ISTP - NIST - NYA).

The students and the key informants mentioned other content /learning areas not mentioned by the lectures and principals that should be covered in TVET curriculum :These are drawing, driving, poultry keeping, building, research, HIV, time management, welding, masonry, carpentry, automotive, electrical engineering, presentation, catering, hotel management, social

work, communication, management, community development, teaching, business, food and beverage, leadership, reporting, public speaking, singing, healthy living, diseases, farming, police science, ,dressmaking, music, marketing, Geo Informatics System (system to support survey), structural engineer, material engineer, guidance and counseling, ,hair dressing and beauty therapy.

12.6.2.6 TVET Resources

Resource refers to any inputs that are used in the learning environment to effectively achieve the desired outcomes .Resources enhance learning, make it enjoyable and enhance understanding. This study sought to find out the resources that are needed in TVET institutions. An observation of resources available in TVET institutions was conducted in each institution visited. Table 12.6.15 show the availability of resources observed.

Table 12.6.15 Availability of TVET Teaching and Learning Resource

Teaching and Learning Resource	Not Available (%)
Art room	92.1
Music room	90.8
Technical subject	86.5
Home science lab	84.8
Biology, chemistry and physics	63
Library	46.2
Models	48.2
Photographs/ photos	44.6
Charts	22.1
Sports equipment	21.8
Agriculture farm	16.8
Syllabus	8.9
Text books	7.3
Classrooms	6.9

Table 12.6.15 shows that art room (92.1%), music rooms (90.8%), technical subjects (86.5%), home science (84.8%) and science laboratories (63%) were observed unavailable in the sampled TVET institutions. Less than ten percent of TVET institutions have classrooms (6.9%) and textbooks (7.3%) unavailable.

When the learners and parents in a focused group discussion and the key informants in interviews were asked to mention the resources they would require in TVET institutions for curriculum implementation they identified the following:

Modern equipment such as computers, books, library technicians, balls, pens, exercise and text books, uniform, internet connectivity, electricity, television, GIS instruments e.g. Geodetic – GPS to replace total station, instructors, boarding facilities, local testing kits, Information science instruments, Advanced reading materials, practical materials and equipment, funds, libraries, Wi-Fi in the school, Qualified teachers/instructors, Radio, desks, libraries, sewing machines and laboratories, laptop, modem, netball, football, table tennis, open up polytechnics in all counties, machines, smart phones and lectures.

SL: At least you should come up with a strategy, maybe if it is to employ the technicians who will be coming to inspect or perform some interview of our lecturers so that the lecturers should have a wider knowledge of their subjects (**SL TTIP BUM BUS**)

Students: I think through the ministries, ministry of education roads and health. Like the ministry of health knows the equipment needed for doctors learning so they should provide them in tertiary colleges. .. (**STTI- PRTI- UG**)

Students: I think the students taking civil engineering, they should be provided with machines and constructions materials... (**STTI –TTIPRTI- UG**)

The student suggested that the government needs to equip the students with modern technology tools and computers.

Student: Leaders to provide the institutions with the assistance they need... technologically... we need the government to equip the students with the modern technology. (**STTI –TTIPEGE- NYAM**)

Student: In colleges you do programming and packaging. All the levels should be provided with the adequate computers (**CS – FGD – ISTP - NIST - NYA**).

Student: Inadequate tools and worn out and need for computer practical (**CS – FGD – YPP - NAI - BUN**)

Students proposed that adequate qualified teachers should be employed in all TVET institutions to address teacher shortages and have adequate resources in all TVET institutions

Student: I think as in our institution the overworking of teacher should be reduced. You see a teacher in one class then he will go to another in the next lesson. The government should increase the teachers (**CS – FGD – YPP - NAI- BUN**)

Student: The teacher who teaches maths in technical courses should be one who is experienced. It should not be given all other subject he should have experience and deals with one subject (**CS – FGD – ISTP - NIST - NYA**).

Student: What I can say first in terms of education in our technical institutions, there is a big challenge we face and what I can say for us to improve the education sector within our institutions, first thing is the matter of having more teachers and teachers who are more educated concerning the subject they are teaching yea (CSL - TTIP - MAW - HOM).

Student: That's why you find the people from Jua kali have more experience in terms of practical compared to us and for us to improve maybe to compare ourselves to South Africa or Malaysia we should be given more resources for us to achieve that goal so that if you are interviewed with them you can be somewhere (CSL - TTIP - MAW - HOM).

Student: Can bring some improvement also the environment where students learn also matters a lot. If the environment is so pathetic the students cannot perform (CSL - TTIP - MAW - HOM).

Student: The government should be improving resources such as labs, stationery, and furniture and adding of classes to facilitate more students and employ more teachers (CSL -TTIP - WOT - MAK).

Student: The government should be improving resources such as labs, stationery, and furniture and adding of classes to facilitate more students and employ more teachers (CSL -TTIP - WOT - MAK).

Student: Teachers- when the teachers leave, there should be addition of more teachers by the government thus the students cannot miss out. The government should also look into the issue of teachers strike and pay them (CSL -TTIP - WOT - MAK).

Students: I think each, every other place, every other maybe e.g. in ukambani, the education system must be the same as any other place out there. You know there is maybe in here Makueni. We are more equipment with each equipment's, more equipment's there is somewhere in Turkana, they don't have teachers, they don't learn actually, so I think the education they must consider other places to build more schools and teachers. (CSL -TTIP - WOT - MAK).

The key informants suggested the following resources as key in media, library, proper editing suites, video cameras, designing desktop and conducive learning environment isolated from noise pollution.

KI: You may need very good library, you need modern facility computers, for example if you are in media you need proper editing suites, you need ...studios, you know you need cameras you need ...steel cameras, you need video cameras, and then you need ...Proper skills in terms of use of computers and designing desktop, kind of skills you know so that people can be able to do desktop publishing and all that and ... more importantly also you need some better environment for learning with ample space well aerated, clean space, isolated from the pubs, the markets, (KI-CEO-MCK-NAI)

12.6.2.6.1 Support

This study sought to find out the type of support the TVET institutions would require for curriculum implementation. The parents and students in focus group discussions were of the

view that students can be supported by providing them with basic resources relevant to their needs like uniform, shoes and equipment: Parents said

Parent: We have footballers but you will find this footballer has no shoes, no uniform, such a person is demoralized but if balls are there, shoes are there, if the materials are there the player will be encouraged to practice more (PA FGD TTIP UKU KWA)

Parent: If you see a child interested in farming, you encourage him/her on farming by buying him/her equipment for farming, you send him/her to agricultural schools, to see how farmers do their work and the equipment for farming (PA FGD TTIP UKU KWA)

The students expressed the desire to be supported by being taught by people who have adequate knowledge on what to teach who had done the course that they teach.

SL: There should be lecturers who are to teach in technical institutes maybe basically these students who have gone through the technical education. Because the lecturers from universities come to teach you, but the technical classes he does not just understand what he is telling you... he has to read while teaching so it's very difficult to understand things because he is also in the process of learning and teaching (SLTTIP BUM BUS)

Student: I think as in our institution the overworking of teacher should be reduced. You see a teacher in one class then he will go to another in the next lesson. The government should increase the teachers (CS – FGD – YPP - NAI- BUN

Student: What I can say first in terms of education in our technical institutions, there is a big challenge we face and what I can say for us to improve the education sector within our institutions, first thing is the matter of having more teachers and teachers who are more educated concerning the subject they are teaching yea (CSL - TTIP - MAW - HOM).

Students: I think each, every other place, every other maybe e.g. in ukambani, the education system must be the same as any other place out there. You know there is maybe in here Makueni. We are more equipment with each equipment, more equipment's there is somewhere in Turkana, they don't have teachers, they don't learn actually, so I think the education they must consider other places to build more schools and teachers. (CSL -TTIP - WOT - MAK).

Learners expressed the need for support in replacement of inadequate and worn out tools and provision of infrastructure, stationeries and computer for practicals.

Student: Inadequate tools and worn out and need for computer practicals (CS – FGD – YPP - NAI - BUN)

Student: The government should be improving resources such as labs, stationery, and furniture and adding of classes to facilitate more students and employ more teachers (CSL -TTIP - WOT - MAK).

Students: I think through the ministries, ministry of education roads and health. Like the ministry of health knows the equipment needed for doctors learning so they should provide them in tertiary colleges. (STTI- PRTI- UG)

The students suggested that the government support the TVET students by giving them loans so as to continue learning and repay the loans after employment.

Student: I would like to say that, the government should support the TTI trainee with loans to continue with their studies which they can pay back when they are employed. (STTI -TTIPEGE -NYAM)

The students pointed out that there is need to have their environment improved to enable them perform well

Student: Can bring some improvement also the environment where students learn also matters a lot. If the environment is so pathetic the students cannot perform (CSL - TTIP - MAW - HOM).

12.6.2.7 TVET Pedagogical Approaches

Teachers need to use varied teaching approaches to enable the learners understand easily. The study sought to find out the pedagogical approaches that can be used in TVET. The teachers and principal teachers were requested to indicate the extent to which some identified teaching approaches should be used in TVET in a five-pointer Likert Scale. They were required to indicate their choices by selecting one of the choices given as N for Not at all, VL for very little extent, NS for not sure, S for Some extent and G for Great extent. The responses they gave are grouped in categories as 21st Century teaching strategies, Practical methods, experiential learning and lecture method .The different categories are presented in Tables 12.6.16, 12.6.17, 12.6.18, and 12.6.19,

21st Century teaching strategies

Table: 12.6.16 Responses by TVET Teachers' and Principals' on 21st Century Learning Approaches

	Teachers (%) (N=67)	Principals (%) (N=19)
Brainstorming	90.33	91.33
Discussions	93.33	87.67
	Average 91.83%	Average 89.50%

Table 12.6.16 shows that the teachers of TVET institutions rate discussions as the highest 21ST century teaching strategy at 93.33% while principals rate brainstorming as the highest 21ST century teaching strategy at 91.33% for use in teaching and learning in TVET. Similarly the students, are in favor of discussions and brainstorming pedagogical approaches in teaching and learning and said the following

Student : Another thing what I can say is about the students coming together from different technical institutions and sharing ideas what they are being taught in different institutions so that

at least they can have more knowledge. And due to that we are seeing in the universities we have if for example Nairobi university and Maseno university the leaders meet and sometimes and share ideas. In a technical institution that one is not happening. So we want to encourage that leaders from different institutions can meet even once and share ideas from their institutions so that they gather more knowledge when they are coming to their students they teach them what they have learnt from their colleagues (CSL - TTIP - MAW - HOM).

Practical Methods of Teaching

Table 12.6.17: Responses by TVET Teachers' and Principals' on the Practical based Approaches

Practical Methods	Teacher percentage rating .N=67	Principals rating N=19 Percentage
Projects	84.00	89.33
Experiments	92.67	96.33
Demonstrations	90.67	96.33
Field excursions	78.00	87.67
Average(%) 86.34		Average % 92.42

From the findings displayed in table12.6.17 demonstrations and experiments practical teaching methods are rated highest by principals at 96.33% while demonstrations are rated at 90.67% by the teachers .Field excursions are the least rated practical teaching and learning methods by lectures at 78.00 % and principals (87.67%).Likewise a TVET student leader was in favour of use of practicals in teaching and learning in TVET and they said;

Student: What I can say under education it's important for the TTI's to have more facilities which can help them gain more experience when they are going outside they know what they are supposed to do rather than if you are in a college and most of the things you are doing are only theory with no practical's it's very difficult for a student when they are going out there you force them to go for jua kali to gain experience rather than gaining it here (CSL -TTIP - MAW - HOM).

Learners' Activity based strategies

Table 12.6.18 Responses by TVET Teachers' and principals' on Learners' Activity Based Approaches

Learners' Activity based strategies	Teachers Percentage ratings	Principals Percentage ratings
	(N=67)	(N=19)
Debate	79.33	73.67
Dramatization	74.33	65.00
Reciting	64.00	63.00
Songs	58.33	56.00
Riddles	60.67	56.00
Dances	60.00	58.00
	Average % 67.84	Average 61.95 %

Both teachers and principals of the TVET institutes rate debate as the highest learners' activity based strategy of teaching and learning at 79.33% and 73.67% respectively. The teachers rate songs (58.33%) as the least learners' activity based strategy of teaching and learning at TVET, while the principals rate songs and riddles at 56.00%.

Experiential learning strategies

Table 12.6.19: Responses by TVET Teachers' and Principals' on Experiential Learning Approaches

Experiential learning strategies	Teachers % rating (N=67)	Principal % (N=19)
Experiential learning	90.33	89.00
Drills	69.33	93.00
Storytelling	72.33	70.33
Nature walk	66.67	65.00
Role play	76.00	76.00
Simulations	84.00	84.00
	Average %76.44	Average 79.56

Experiential learning is the highest rated experiential learning strategy by TVET teachers with a percentage rating of 90.33. Both TVET teachers and principals rated nature walk the lowest

experiential learning strategy at 66.67% and 65.00% respectively. Similarly the students, student leaders and key informants are in favour of nature walk role play and experiential learning .They indicated that learning in TVET should be interactive and that learners should be allowed to apply what they have learned. Some of their statements regarding their favour of such approaches are

KI: So there is need for strong interaction between the teacher and the students opposed to increased kind of lecture format of training and there must be a lot of practical work so that if for example, you are a journalist and you have been trained on feature writing the next thing that should happen is that you should be let out to go and write a feature several of them. (KI-CEO-MCK-NAI)

Student: If for example I take agriculture and all I see is subsistence farming. Then I will tend to think it is all about that. The curriculum should state that all students should go out and see those big farms. Link education with the career areas (CS – FGD – ISTP - NIST - NYA)

Student: If for example I take agriculture and all I see is subsistence farming. Then I will tend to think it is all about that. The curriculum should state that all students should go out and see those big farms. Link education with the career areas (CS – FGD – ISTP - NIST – NYA)

Student: The student should be given motivational talks. Role models should be called to talk to pupils (CS– FGD – ISTP - NIST - NYA).

Student: In courses like electrical more practice should be given a lot of time and units that are not helpful being remove (CS – FGD – ISTP - NIST - NYA).

Student: What I can say under education it's important for the TTI's to have more facilities which can help them gain more experience when they are going outside they know what they are supposed to do rather than if you are in a college and most of the things you are doing are only theory with no practical test very difficult for a student when they are going out there you force them to go for jua kali to gain experience rather than gaining it here (CSL - TTIP - MAW - HOM).

KI: people learn differently...lecturer method works up to a certain way... you actually need to let those children know whether it is to explore you.... there group work, role play, discussions, experience sharing...methodology really needs to change and you know if that happens, then even the size of the classes need to change, the number of the teachers (KI-KNHCR-NAI)

Lecture method

The ratings for TVET teachers and principals on lecture pedagogical approach of teaching and learning are 84.67% and 82.33% respectively. Likewise a key informant mentioned the need for lecture used in TTC though it is not the best.

KI: people learn differently...lecturer method works up to a certain way (KI-KNHCR-NAI)

12.6.2.8 TVET Talents Identification and Development

This study sought to find out the talents that can be developed in TVET learners, ways of identification and how they can be developed. The students, parents, key informants and student leaders identified the following talents that TVET students have: Football, netball, Sports , like athletics, drama, karate, dancing, Swimming, Dancing, singing, music, modeling Art and design, poetry, rugby, hockey, arts, comedians and modeling.

Student: we should have those specialists in those areas e.g. poetry, music, in primary and secondary, by the time they reach colleges they a lot in them. (STTI- TTIPRTI-ELD)

Student: And if somebody is, sasa, an example is good in playing soccer; he can get a sponsor in the same (CSL - TTIP - WOT - MAK)

12.6.2.8.1 Talent Identification and Nurturing

The Teachers and principle teachers were requested to mention the ways that can be used to nature talents among students. The findings of the principal's and collage lectures are presented in Table 12.6.20

Table 12.6.20: Ways of Nurturing the Talents of Learners According to TVET Principals and Teachers

Ways of Nurturing Talents	Principals (%) N= 19	Teachers (%) N= 65
Special schools for gifted and talented	94.8	92.9
Games and sports	93.6	92.8
Curriculum enrichment	92.6	91.8
Special needs classes	91.6	89.7
Clubs and societies	90.6	89.3
Cooperative learning, academic conferences and completion among the schools	88.4	88.4
Accelerated learning and advanced placement	87.4	85.8
Ability grouping and mentorship programs	82.2	79.8
Early admissions to school	78.1	74.1
	Average % 88.8	Average % 87.2

The findings in Table 12.6.20 shows that the highest rated way of nurturing talents by teachers is establishment of special schools for gifted and talented(92.8%),While the principals rate it the

highest at 94.8%. The least rated strategy of nurturing talents is early admission to schools which is rated at 78.1% by principals and 74.1% by teachers. Clubs and societies were rated by principals at 90.6% and by teachers at 89.3% as ways of nurturing talents among learners. Games were rated by principals at 93.6% as preferred ways of nurturing talents. Similarly the students, student leaders and key informants mentioned clubs, curriculum enrichment, and games can be used to nurture talents. A parent and some students said:

Parent: 4K clubs in schools where members do farming, they grow tomatoes, Sukuma wiki, so from there, the child goes out with skills to use at home, but these things are all gone. There were chicken bandas, others keeping cattle, so you see the 4K club is always there, others are selling milk, eggs, the child leaves the school with the talent, he/she goes to use it at homes, **PA FGD TTIP UKU KWA**).

Students: By coming up with clubs and going to music festival thus enabling them to nurture their talents **(CSL - TTIP - WOT - MAK)**

Student: on the side of talents, those with different talents have been forgotten. Why I sat this, when you look at the Institute timetable it's just full of subjects from 8am to 5pm, then these people are rarely recognized. They should be allocated time and their own class. **(STTI- TTIPRTI- UG)**

Student: talents should be given more concentration... time table is set from 8am to 6pm so there is no time to go and nurture your talents so the school program should be adjusted to allow an hour to nurture talents just like other lessons...creating time for them...allocation of funds to buy items. **(STTI- TTIPRTI -UG)**

Student: I think those people who have talents, they must be, they must be given a chance to show off their talents now for example, much, for example:

(CS - FGD - TTIP - WOT - MAK) KI: yea... we have those things like in my school me I learnt in Art and Craft most in fact I was the best student by that time. so...by the moment I came into the welding sector it wasn't hard for me and because I got somebody who had learnt a lot they still injected some ideas in me easily. **(WEL-INF-NAR)**

The students from Machakos Institute for the blind want to be taught subjects that can make them identify their talents such as, music, physical education which supports the suggestion by lectures and principals that curriculum enrichment can be utilized to develop talents

Students: Let me say, for example in the curriculum if there can be physical lesson, such subjects can help in nurturing the talents. **(STTI- TTIPMAC- MAC)**

In addition the TVET students, student leaders and key informants suggest the following as ways of nurturing talents among the learners; provision of facilities such as balls, playing grounds, referees, provision of finance, appreciation, exhibitions every term, exposing learners to activities where talents can be identified like talent shows, set apart sports days, time for practice and use of mentors. Following are some excerpts supporting these.

Student: And if somebody is, sasa, an example is good in playing soccer; he can get a sponsor in the same (CSL - TTIP - WOT - MAK)

Students: And if one knows he is more talented to something, he has to make sure, he has to find something that is going to expose him or her to the society so that none notices, and if one notices it will boost him to another area. So, you see, if he is boosted, one will notice this is more talented and will get a chance to have a job. (CS TTIP WOT MAK)

Student: Yes, it can come, coming up with clubs which they can join and their talents are identified and nurtured (CS - FGD - TTIP - WOT - MAK)

The students in addition called upon the county government to get involved in sensitization of talent in the communities and build schools where learners with talents can go and study so as to nurture their talents

Student: Then, they should be giving people to encourage the, people to be sent from the county from government and also from the country government to be sent to the communities and talk to those people now, who have their talents (CS - FGD - TTIP - WOT - MAK)

Students: I require the government to introduce a talent school, where those students who are talented to be schooling there and be provided with all the requirements. (STTI -TTIPEGE -NYAM)

12.6.2.9 TVET Assessment

The study sought to find out the mode of assessment that should be used in TVET. The teachers and principal teachers were requested to indicate the extent to which some identified assessment modes should be used in TVET in a five-pointer Likert Scale. They were required to indicate their choices by selecting one of the choices given as N for Not at all, VL for very little extent, NS for not sure, S for Some extent and G for Great extent. The Responses were clustered into formative and summative and composite means for each of them calculated. Their responses are presented in Table 12.6.21 and 12.6.22

Table 12.6.21: Responses of Lecturers on Assessment Modes at the TVET Level.

Formative Assessment	% Rating (N=65)	Summative Assessment	% Rating (N=65)
Continuous assessment	95.6 %	End of term examination	95.0%
Project work	95.4%	End of year examination	94.2 %
		National examination	92.6%
Composite mean	95.5%	Composite mean	93.9%

The findings indicate that the teachers' have more preference for formative assessment (95.50%) than summative assessment (93.90%) though both forms of assessment were relatively highly rated. Continuous assessment was rated highest at (95.60%) followed closely by Project work (95.40%) as compared to end of term examination (95.00%), end of year examination (94.20%). National examinations were the least preferred form of assessment (92.60%) by the teachers

Table 12.6.22: Responses of Principals on Assessment Modes at the TVET Level.

Principals (N=19)				
Formative Assessment	% rating (N=19)		Summative assessment	Percentage rating (N=19)
Continuous assessment	97.80		End of term examination	91.6
Project work	94.80		End of year examination	86.4
			National Examination	86.4
	Average 96.30	%		Average rating 88.1

The findings in Table 12.6.22 indicate that the principals have more preference for formative assessment (96.30%) than summative assessment (88.1%) though both forms of assessment were very highly rated. Continuous assessment mode was rated highest at (97.80%) followed closely by Project work mode of assessment (94.80%) as compared to end of term examination (91.6%). National examinations were the least preferred form of assessment (86.4%) as rated by the principals. The key informants, students and student leaders likewise identified similar forms of assessment methods, continuous assessments and project to be used in TVET. However the students said the CATs should run across all years with the final marks contributing to final grade which will lead to elimination of exam cheating in KNEC exams and loss of marks due to irregularities. The following excerpts are in support of this.

SL: CAT or the general exams to be consider what the colleges are learning so that exams don't give you a hard time and you may have the issue of mwakenya **(SL TTIP BUM BUS)**

Student: You also lose all grades if there was some irregularities in one subject. Why lose say seven units because of only one? **(CS – FGD – ISTP - NIST - NYA)**

In addition the key informants and students advocated for summative assessment to be administered externally at the end of TVET level because it's used for selection of students, to the university and for joining the job market.

KI: Summative assessment at the end of every level...has never been convinced that we should have a system without a summative assessment. These examinations are used for selection; they are used to join the job market... But if we have no examination to determine who is slightly better than who. Then it's only the children of the rich that will go (**KI-TCD-KWA**)

Student: Another thing you see the national examination they persist; people do secure certificate to show that they have completed that level. And the same certificate, they can use to secure jobs. So if, the continuous assessment tests is introduced, will there be those certificates to be credited to the various students at various continuous assessment tests or it will be just doing continuous assessment tests and then it persists? So if that, if national examinations are given a lot of effort, yani it is tested in a way that it can boost various skills and the abilities of various students, than that it is not majoring maybe taking various done in major that is it is depicted in capacities and skills of students and the pupils at the various levels because the talents and so on. So, I think to me, the national examinations will have to persist since it will secure the certificate and so on (**CS - FGD - TTIP - WOT - MAK**)

The students in addition suggested that the KNEC exam should only test what is covered in the syllabus and that there be practical exams for Technical subjects

Student: I think marking of KNEC exams should aim at only testing what is in course outline. Technical should not be assessed using exam papers only. The exams should also be to encourage not discourage (**CS – FGD – YPP - NAI - BUN**)

The students further added that the mode of assessment if one fails a certain paper in KNEC be changed to ensure a candidate gets a certificate indicating the subjects passed

Student: After doing six courses and If I pass 2 I get referred if I fail 3, I am supposed to repeat everything. Why and I they should change that system and give the certificate for those I have passed. Because maybe I was sponsored (**CS – FGD – ISTP - NIST - NYA**).

The students were of the view that grade test mode of assessment is good at TVET level and proposed it be used instead of the Kenya national examination mode of assessment.

Student: Trade Test is good (**CS – FGD – YPP - NAI - BUN**)

Student: Like Institutions, there should be “grade test exams”. Because there are those who are not good in KNEC Exams but are in singing, computer programmes and even building but not in exams. When it comes to exam papers he can't do anything (**CS – FGD – YPP - NAI - BUN**)

12.6.2.10 TVET Crosscutting Issues

This study sought to find out the crosscutting issues that affect the society that can be included in TVET curriculum. The teachers and principals were requested to indicate the extent to which some specified crosscutting issues should be covered in TVET curriculum in a five-point Likert Scale. They were required to indicate their choices by selecting one of the choices given as N for Not at all, VL for very little extent, NS for not sure, S for Some extent and G for Great extent. The responses are presented in Table 12.6.23

Table 12.6.23: Principals' and Lecturers' Responses to Crosscutting Issues That Should Be Addressed in TVET Curriculum

Cross Cutting Issues			Teachers		Principals	
			Percentage (N=65)	Rating	Percentage (N=18)	Rating
Drug	substance	and	97.20		97.20	
Technology			96.40		97.80	
Integrity			95.20		98.90	
Financial literacy			94.80		93.60	
Security and safety			92.60		97.80	
Health hygiene			91.70		96.10	
Gender issues			91.40		95.80	
Disabilities			89.20		96.60	
Environment			88.20		89.60	
Child rights			84.40		91.60	
			Average (%)	92.11	Average (%)	95.50

The findings in Table 12.6.23 shows that crosscutting issues should be emphasized in TVET curriculum at an average rating of 95.5% as indicated by principals and at a rating of 92.11% as indicated by the teachers. The principals rate emphasize in TVET curriculum of integrity at 98.90 %, drug and substance abuse at 97.2%, and financial literacy at 93.6% .The least rated crosscutting issue in TVET curriculum by principals is environment at 89.60%.The teachers rate the emphasize in TVET curriculum of integrity (95.2%), as the highest followed by drug and substance abuse at 97.2%, and financial literacy at 94.8.The least rated crosscutting issue for inclusion in TVET curriculum is child rights (84.4%) as indicated by the teachers .

The students, student leaders and key informants similarly mentioned the same emerging issues like insecurity, drug and substance abuse, gender and environmental issues that are mentioned by the teachers and principals that should be included in TVET curriculum. Some of the statements they made were

Student: when I first came to Bumbe I don't know what to do. Later I chose food and beverage ... I had that feeling that this course is for ladies. So something was telling me to quit but I went on and I made it. That believe was there when I went to attachment I realized it's not only for ladies. You just have to change your attitude (SL TTIP BUM BUS)

Student: I think the person should be discouraged on taking drugs. The institution should take time like weekends to have a guidance and counseling session on drugs and other issues. And they bring many people from outside to talk about it (CS – FGD – ISTP - NIST - NYA).

Student: Security is the cancer right now, it's the most dangerous disease as per now (CSL TTIP SIN KAK)

Student: insecurity...we should have conducive environment to learn. (STTI- TTIPRTI -UG)

Student: Environmentally, it is as results of noise pollution due to industries being built near schools which becomes a huge distracter (CSL -TTIP - WOT - MAK).

Student: Environmental issues like air pollution e.g. smoke, noise, dumping, cutting down of trees (CSL – TTIP-UKU-KWA)

The teachers, principals and student are all in agreement that technology is a crosscutting issue that should be emphasize in the TVET curriculum .How ever in addition the students mentioned that modern technology in form of mobile phones have made students engage in sexual immoralities and led to lack of concentration in student in studies

Student: Technological there is lack of concentration in studies thus students should be taught on how to use the technology instead of using their phones to watch pornography (CSL -TTIP - WOT - MAK).

Student: The technology sometimes lowers dignity of people like mobile phones. When I go to internet I can be able to access everything worldwide. I am student but because I am accessing all these things I will be influenced to do what I am doing. They should prohibit those things to learners. We need to control internet (CS – FGD – ISTP - NIST - NYA).

Other crosscutting issues that should be emphasized in TVET curriculum mentioned by parents and key informants only were corruption and prostitution

KI-when you listen to people talk is like corruption has become like our culture and when you talk about culture, culture is like something that is practiced by all people in the whatever community you are talking about. So corruption in our case has become a way of life ok, and then you know even if it's a way of life you know what it means so I think whether invaded in another curriculum it is an area which needs to be tackled by any means. (KI-REG-LAU)

Parent: Everybody is struggling to get a phone, and one has no money, he/she will use any means to get one this brings about theft, prostitution because they want the best but they cannot afford (PA FGD TTI UKU KWA).

12.7 SPECIAL EDUCATION NEEDS

12.7.1 Introduction

This chapter presents findings on the following themes in line with the objectives of the needs assessment: Societal Needs, competencies, learning areas, pedagogical approaches, assessment modes, nurturing talents, Learning resources, emerging and contemporary issues and essential for 21st Century schools. It also captures findings on specific issues that relate to special needs education. The analysis incorporates both quantitative and qualitative findings.

12.7.2 Societal Needs

Table 12.7.2.1 SNE teachers' responses on the extent to which primary level curriculum should emphasize societal needs.

	%
Societal Needs aspects	rating
Patriotism	97.53
Economic and industrial	92.50

development

Technological development	95.10
Social development	98.80
Environmental protection	100.00
Average percentage	96.79

Special needs education teachers were required to give their responses in regards to the extent to which societal needs should be emphasized in the curriculum. On average 96.79 of the respondents were in agreement on inclusion of societal needs in the school curriculum. The respondents rated Environmental protection highest at 100%, followed by Social development at 98.80%, Patriotism at 97.53%, Technological development at 95.10% and Economic and Industrial development at 92.50%.

Qualitative data on Special Needs Education (SNE) was also collected from parents of learners with special needs, specialists in SNE, learners with special needs and regular learners in regard to inclusion of societal needs in the curriculum.

The findings were in agreement with the responses from quantitative finding. The respondents felt that education should enhance social, economic political and technological development. They indicated that education for learners with special needs should aim at imparting skills that will enable learners to achieve economic independence and self-reliance despite the disability. Similarly education should address societal issue such national cohesion, inequalities and discrimination against persons with special needs. The respondents further suggested that education should prepare learners with special needs to be good leaders who are development oriented and whose aim is to improve the lives of the citizens. On technological development respondents advocated for introduction of digital literacy in the school curriculum.

PA: So they can stop being dependent wholly, partly they can be dependent because there are those who cannot manage by themselves. But there are those who can do something little for themselves, so we can reduce the cost of taking care of them, and that can only be possible if we educate them;. (PA - FGD-LI- LAI)

PA.... Become leaders despite disability, show people that you love your country, make people good, help people live together and understand each other. (PA-FGD-KAJ -SNE-KAJ)

P: Government to teach children how to use Laptops and give computers (P-FGD-OLK-SNE-NYAH)

12.7.3: Competencies

Table 12.7.3.1 Primary head teachers and teachers' EARC officers' views on SNE Competencies

<i>Competencies</i>	<i>N=164</i> SNE/Pry. Trs(%)	<i>N=20</i> SNE/ H Pri. (%)	<i>N=20</i> EARC officers (%)
Collaboration	93.8	93.8	100
Communication	90.80	97	96.6
Coordination	93	87.6	100
Planning	93.8	93.8	100
Organizing	92.8	91.4	96.6
Reflection	93.8	93.8	96.6
Decision Making	94.8	94.8	96.6
Mentoring	93.6	92.2	100
Networking	91.4	93.8	100
%	91.8	92.2	97.6

Respondents were required to identify competencies that learners with special needs should acquire at the primary school level. In average the findings indicated high rating of the following key competences: collaboration 95.9 %, communication 94.9 %, mentoring 95.3 %, networking 95.7 %, decision making 95.4 %, reflection 94. 7 % and planning 95.9 % as indicated in table 12.7.3.1 .

In addition, findings from qualitative respondents identified crucial competencies for learners with special needs to include self care, communication, ICT, entrepreneurship, critical thinking, problem solving, socialization and research skills. Concerning values and attitude the respondents felt that education should strive to enhance self –esteem in learners with disabilities who in most

cases experience low self esteem because of the unwarranted stigma associated with disability. They suggested that education should emphasize values such as obedience, respect, discipline, humility, kindness, politeness, care and hard work. Learners should also be taught good morals and responsibility.

PA: Not to despise themselves. To be able to do small things for example wearing clothes and taking care of themselves, to understand sign language, to communicate and be able to think and solve their problems (PA-KIB- P – KIL)

PA: and education should promote the self esteem of learner with disability so that he doesn't hate himself and the one who went to school and got education therefore proves disability is not inability(PA-P-JOY-KIA)

12.7.4: Learning Areas

Table 12.7.4.1: Heads of SNE Institutions, Teachers and EARC Officers responses on the extent to which the following learning areas should be emphasized in the school curriculum.

Learning areas	Primary Schools (SNE) Head teachers (N=20)	SNE Teachers (N=164)	EARC Officers N=20
Art	91.8	88.4	89
Design	85.2	82.2	94.0
Agriculture	96.5	98.0	
Speech training	97.2	88.8	97.0
Orientation and mobility	97.2	90.6	99.0
Activities of daily living	100	93.0	100
Vocational and technical subjects	98.0	100	96.0
Physical education	98.0	97.2	95.0
Home science	100	88.6	94.4
Hygiene and sanitation	100	98.0	100.0
Environment	97.4	93.2	98.0
Entrepreneurship	95.0	94.2	90.0

Health and nutrition	100	100	95.0
Mathematics	100	97.2	91.0
Sciences	99.2	98.1	91.0
Climate change	94.6	89.8	90.0
Technology	91.1	91.4	95.0
Humanities	94.6	94.2	91.0
Languages	98.4	100	93.0

The respondents were asked to rate the extent to which various learning areas should be emphasized in the curriculum for learners with special needs. According to the findings, the respondents rated the following learning areas as critical to be emphasized in the SNE curriculum; Design, Agriculture, Speech training, Orientation and mobility, Languages, Vocational and technical subjects, Physical education, Home science, Hygiene and sanitation, Environment, Health and nutrition, Mathematics, Sciences and Activities of daily living. This is indicated in table 12.7.4.1.

Similarly findings from qualitative data indicated that there is need to introduce various learning areas specific for learners with special needs such as Braille and sign language. They also suggested introduction of other languages, practical subjects and ICT. Respondents also indicated the need to introduce assistive technology to learners with visual impairments at an early age. They observed that the use of Braille machine, slate and stylus was cumbersome.

P: It is good to learn home science, CRE, art and craft and do English, Kiswahili and computer (P- FGD-YAMB-SNE-HOM)

In addition the respondents suggested the establishment of vocational wing for teaching subject such as tailoring, computer, farming, cooking and cleaning. They further expressed the need to re-introduce technical institutions and establish vocational training centres for learners with special needs who may not proceed to secondary school. They also indicated the need to introduce talent schools for those who have talents.

Just to add on the area of assistive technology for the visually impaired now that we are in era whereby we want to include computer knowledge in our primary schools. I wish that the curriculum will consider the blind such that they learn the computers using the assistive technology and with time they are going to do away with the Braille machines because they are cumbersome and they are very heavy. If they can learn computers from very early age they will be able to work with the computers and not keep on carrying the heavy machines all working manually with the slate and stylus they can use the computers. (KI- KIS -NAI)

PA: They are some few that being handicapped may not enable them to study may be so fast academically and they may be involved in such areas of interest. To me I may request the government to support these people by creating a school like these with vocational department such as that if a child is not fit

academically to continue my involve in vocational skills such that if he leaves a place like this with a profession at least this may involve tailoring, computer work {PA NYAN PHB}

Concerning teacher education, respondent suggested that inclusive education should be taught as core subject in teacher training. They expressed the view that in addition to skill in computer offered in teachers training colleges, there should be training in use of assistive technology so that teachers are able to impart the same in learners with special needs

As we come for the reforms we should take care of them and have inclusion as a subject. A subject just like any other subject and I believe their component at primary teachers training has group A subject and group B. My take on this inclusion just like a subject and be in both groups such that the teachers graduating from TTC (KI KIS NAI)

But something so important is missing assistive technology for the visually impaired not just the visually impaired assistive technology for all areas of special needs and here I emphasize the..... and the ... every teacher who is leaving the college today they find him/herself in a school for the blind, school for the PH or other school they need to know how to expose those learners to computer.(KI KIS NAI)

12.7.5 Pedagogical Approaches

Table 12.7.5.1 responses of SNE primary teachers, head teachers' and EARC officers on the extent to which the following pedagogical approaches should be used in teaching learners with special needs.

Approach	SNE Teachers	Approach	EARC	
	Percentage rating (N=164)		Percentage rating (N=20)	Percentage rating (N=20)
Brainstorming	79.00	Brainstorming	90.33	85.00
Debate	82.00	Debate	90.33	86.70
Dramatization	91.67	Dramatization	95.33	93.30
Reciting	83.67	Reciting	85.67	83.30
Songs	86.33	Songs	85.67	88.30
Riddles	73.33	Riddles	81.00	85.00
Dances	88.33	Dances	90.33	90.00
Projects	83.33	Projects	95.33	86.70
Experiments	91.00	Experiments	100.00	86.70
Demonstrations	96.33	Demonstrations	100.00	96.70
Field excursions	89.00	Field excursions	90.33	93.30
IEP/ITP	92.00	IEP/ITP	90.33	93.30

Respondents were asked to rate the extent to which various pedagogical approaches should be used to teach learners with special needs. They rated highly the following pedagogical approaches as suitable for learners with special needs as indicated in tables 12.7.5.1
Dramatization, Songs, Dances, Field excursions, Experiments, Demonstration, Projects, and use of Individualized Education/ Training programmes.

Responses from qualitative data indicated that Learner centred approaches should be emphasized. Learning should be practical oriented with only 30% of theoretical learning.

12.7.6: Assessment

Table 12.7.6.1: SNE Primary Head Teachers, Teachers and EARC officers responses on the extent to which various forms of assessment should be used measure achievement of learners' with special needs at Primary level.

	SNE head teachers	SNE teachers	EARC Officers
Functional Ass	-	-	100
Formative			
Continuous			
ASS	97.2	92.2	98
Project Work	94.2	83.8	91
Observation		85	
Oral Questions		88	
Summative			
End of Term	94.2	78.6	94.2
End of year	88.6	76	88.6
National Exam	80	66	80
project Work	94.2	83.8	94.2

In response to the question on the extent to which various assessment methods should be used to measure achievement of learners with special needs the respondents showed preference for formative assessment, Continuous assessment, project and use of observation. Functional assessment was rated very highly by EARC officers. A national examination was the least preferred form of assessment.

In the same vein, responses from qualitative data suggested that learners should be assessed continuously during the learning process. They were strongly opposed to KCPE being the sole determinant of promotion of learners to secondary schools. They pointed out that vocational skills should be assessed through project work and underscored the use of observation to assess behaviour. The respondents also advocated for adaptation of assessment to suit learners with special needs. They were of the view that learners who are deaf should be supervised by teachers who are trained in sign language to ensure that they get proper instructions and suggested oral examinations as an alternative mode of assessing learners with reading difficulties.

KI: I think the curriculum should come up in a way of assessing learners with reading problems such that they may not just be assessed through reading. We can have somebody read for them and they answer the questions orally or in written form. Then we have those learners probably with learning difficulties in writing. Written expression these children they can read they can comprehend but have difficulties in writing. They are smart they are good but since our assessment mode here has to go through writing then the child fails. In this case probably we can have an alternative way of assessing these children (KI-KIS-NAI)

.....And even KNEC when KNEC for example sends even assessors or supervisors and the supervisors are not knowledgeable in sign language skills you get they are going to a school then telling a teacher come sign for us to the students to tell them like this, it is like a joke calling for the same teacher to sign for you so could actually call the same teacher to sign the exams

Concerning functional assessment, the respondents advocated for a comprehensive health and educational assessment at the stage of starting schooling so as to ascertain type and severity of disability and how to manage it in a school environment. They raised concern over the nature of assessment that is done to identify learners with learning disabilities and suggested a more comprehensive assessment at an early stage to necessitate early intervention.

R: There should be regular, accurate and comprehensive assessments of students with ASD since it is the foundation for effective programs services and professional development. (MA-IS)

This is a matter of concern because taking an example of learners with learning disabilities and especially those learners who have issues with reading difficulties and comprehension difficulties which interfere with all their learning. Sometimes they come here for assessment they are brought by their parents they have been referred here by the school and when we are carrying out the assessment and the child has gone thorough up to class 8 others are in secondary school and when we are carry out the assessment and probably we feel that this child should join a vocational training and we ask the parent or the teachers which potentials does the child have which abilities does the child has the parents do not know the teachers do not know it becomes an issue (KI KIS NAI)

12.7.7 Nurturing Talents of Learners

Table 12.7.7.1 SNE Primary Head Teachers, teachers and EARC officers' responses on strategies of nurturing talents in learners with special needs.

	Head teachers	EARC	Teacher
	Percentage Rating	Percentage Rating	Percentage Rating
Special schools for gifted and talented	93.7	91.0	100
Special need classes	93.0	87	100
Games and sports	98.7	97.0	100
Early admissions	86.1		91.4
Curriculum enrichment	94.3	98.0	100
Cooperative learning, competition among schools and academic conferences	89.4	85.3	97.2
Clubs societies	94.7	91.0	97.2
Accelerated learning and advanced placement	86.5	82.0	88.6
Ability grouping and mentorship programs	95.1	90.5	97.2

Respondents were required to rate various strategies of nurturing learners' talents as indicated in table 12.7.7.1. The following strategies were the most preferred; games and sports, ability grouping, mentorship programmes, clubs and societies, curriculum enrichment, special schools for gifted and talented and special needs classes. Other preferred strategies include cooperative learning, competition among schools, academic conferences, accelerated learning, advanced placement and early admission to schools.

On the other hand respondents who provided qualitative data pointed out that, learners with special needs were talented in different ways and their talents could be identified and nurtured by teachers who are specially trained in talent development. They suggested that teachers should be prepared to understand that every learner has talents and therefore they should be given opportunity to develop. Respondents expressed the view that emphasis should be given to core

curricular activities to enable learners develop their talent in areas such as sport, music and drama among others. Learners' talents can also be nurtured by availing enough time to practice in time tabled lessons and by rewarding those who do well to motivate them. They suggested that there should be initial assessments before the child is placed in school in order to identify their talents then be progressively assessed so that his or her talents are known by the time they reach class 4

If teachers can be made to understand that there is something within everybody by the way everybody has something they can show is only they either given the chance or they are not given a chance it is possible. (KI KU NAI)

First we need to bring back ... you know we have become too exam oriented and I would suggest that we bring back the co-curricula or if we have it then we need to compliment that component. Sports, music, clubs because part of the talent is gotten from there a significant part of the talent (KI KU NAI).

every student should be done initial assessment for educational placement before they go to school at whatever level because now that is the starting point. Because if you have a questionnaire from the questionnaire you are able even to identify the talents that the child has from the parents even before coming to school then progressively every year these learners are supposed to be assessed in order to rediscover or discover some of the competences the child has potentials that the child has by the time the child reaches class 4 (KI KIS NAI)

12.7.8: Emerging and Contemporary Issues

Table: 12.7. 8.1: SNE Primary Head teachers, teachers and EARC officers' responses on Emerging and Contemporary issues that should be addressed in the curriculum.

Cross cutting issues	SNE primary Head teachers Percentage rating(N=20)	SNE primary teacher Percentage rating(N=164)	EARC Percentage rating(N=20)
Health and hygiene	91	98.3	95
Environment	91.4	93.2	94
Security and safety	93.2	96	97.5
Drug and substance abuse	93.2	93	98.5
Technology	96.6	95	95
Financial literacy	96.6	92.6	96.6
Child rights	96.6	97.6	97

Gender issues	97.2	92,6	96
Integrity	100	96	96.5
Disabilities	100	97	98
Average	95.08	95.21	96.41

Respondents were required to rate the extent to which various emerging and contemporary issues should be included in the school curriculum. Over 95.0% of teachers of Special Needs Education (SNE) in primary school level affirmed the need to have these issues addressed by the curriculum. The ratings were as follows; integrity at 96%, drug and substance abuse at 93%, financial literacy at 92.6%, security and safety at 96%, gender issues at 92.6%, health education which includes other aspects such as HIV/AIDS, sexuality education and hygiene at 91%, technology at 95%, environment which includes climate change at 93.2% , child rights at 97.6% and disabilities at 97.8% .

The head teacher's responses rated integrity at 100%, drug and substance abuse at 93.2%, financial literacy at 96.6%, security and safety at 93.2%, gender issues at 97.2%, health education at 98.3%, technology at 95%, environment at 91.4% ,child rights at 96.6% disabilities at 100%.

EARC officers ratings on inclusion of emerging and contemporary issues were as follows: integrity 96.5%, drug and substance abuse 98.5%, financial literacy 96.6%, security and safety 97.5%, gender issues 96%, health education 95%, technology 95%, environment 94%, child rights 97% and disabilities 98%.

Respondents who provided qualitative data were in agreement that emerging issues should be addressed by the curriculum identified environmental pollution, security, HIV and AIDS, Sexuality, Poverty reduction, use of social media, Social problems and Peer pressure as some emerging societal issue that need to be addressed through education. They also expressed the need to sensitize parents and members of the community on disability.

PA: Learners should be taught about terrorism and more about disaster management, to have safety and security there should also be a campaign because you know there are those

who believe that because the child is disabled, they should not spend on them. So they should be taught to change the attitude and know that even the disabled are human beings. d (PA - FGD-LI- LAI)

Issues of sex and sexuality, these learners experience desires to those of opposite sex, some of the learners get stimulated and sometimes have problems concentrating. These learners have to be guided and constantly supervised to ensure they conform to acceptable behaviours (PA KAB-SNE BAR)

12.7.7 Learning Resources SNE Primary

The resources are geared towards enhancing learning, teaching and content delivery. Educational resources are the teaching and learning items, structure materials and human resources that assist the teacher to effectively and efficiently deliver content. In recent years there has been a shift among educationists from the traditional teacher-centered learning to student-cantered learning. It is has been established that effective instruction is more allied to active participation in the teaching learning process (as in laboratory work) than to passive participation (as during a lecture). This shift in pedagogy calls for use of different strategies to effectively engage learners to acquire requisite knowledge, skills and attitudes.

In line with the Education for All (EFA) initiatives, Millennium Development Goals (MDG's), Sustainable Development Goals (SDG), Education for Sustainable Development (ESD), the Constitution of 2010, Sessional paper no 1 of 2015, the realization of Kenya's Vision 2030, of providing a globally competitive quality education, training and research for development, will be achieved through adoption of pedagogy that emphasizes exploration, collaboration, experimentation, creativity, critical thinking and innovation. This calls for the provision of relevant resources that promote these 21st century skills and competencies.

12.7.8 Educational Resources

Tools and equipment, materials and facilities

The respondents felt that the government needs to equip schools with enough text books, library books, computers and other learning tools that adapted to suit the needs of learners with special needs. In addition learners should be provided with workshop materials to enable them learner vocational skills practically.

P: Government to give schools library books and more text books and adapted tools and materials to learn better. Have good computers (P-FGD-OLK-SNE-NYAH)

Infrastructure

The respondents emphasized the need for building more special schools to cater for many special needs children still waiting to be admitted in the few existing schools. They also suggested that the government should expand the existing special school so that they may admit more learners.

PA: Let's say for example, some parents who were saying they would like to take their children to school, but when they come, they are told there are no vacancies for their children, so infrastructure also should be put in place such that there should be enough dormitories and enough classes as well as enough caregivers (PA - FGD-LI- LAI)

Human resource

Assessment officers

Parents expressed the need to employ more assessment personnel and establish more assessment centres to enable parents access assessment services easily and reduce cost.

PA: Poverty is also another big issue because some other if you ask them to come all the way from Narumoru or even past Narumoru, to come seek for assessment, maybe they can come and find that the officers are out in the field and there is no officer in the office, they are forced to go back home yet they can't manage to come back again, so also the poverty also deters them from doing so. (PA - FGD-LI- LAI)

SNE teachers and support staff

Parents suggested that there is need to train and employ special needs education teacher to work in special schools and inclusive programmes. They expressed the need to train teachers in vocational skills in order for them to have the capacity to train the learners in vocational areas. They underscored the need to equip support staff with the relevant skills for dealing with learners with special needs.

The teachers need also to be trained on the skills for vocational training such as carpentry, welding etc. this is necessary because the teachers are trained on how to teach and handle special needs learners but lack these vocational skills which could be of great help (PA KAB-SNE BAR)

Learning environment

Learners suggested that the school environment should be made friendly for learners with physical disabilities. They expressed the need to adapt the physical environment by providing ramps for those on wheelchairs and adapting toilets.

Majority of our children do not have potential to cope up with environment due to their disabilities. I suggest government should create environment where they can cope well and excel. (P-FGD-OLK-SNE-NYAH)

Provision of bursary

Parents suggested that learners with special needs should be given bursaries just like their colleagues without disabilities and support them to start small business enterprises and earn a living

PA: There is also this one more thing. Bursaries should also be given to the children. The same way they give to other regular schools, even for the disabled, they should also be given. (PA - FGD-LI- LAI)

Time

The respondents wanted the lesson time and examination time to be increased

More time allocated in class and to do exams (extra time) because some people write slowly those with PH may spend a lot of time trying to sit upright. (PA-KAJB-SNE-KAJ)

Assistive devices

The respondents expressed the need to provide assistive devices that lessen the severity of the disability with regard to accessing education.

PA: These children need assistive devices such as hearing aids and wheel chairs (FGD-NGARI-LAI)

12.7.9 Needs for Learners with Hearing Impairment

Competences

Abilities

The respondents underscored acquisition of computers skills, and practical skills such as farming, rearing animals and carpentry. Learner who are deaf also need to learn sign language so that they can communicate well and be equipped with self care skills so that they can take care of themselves.

Not to despise themselves. To be able to do small things for example wearing clothes and taking care of themselves, to understand sign language, to communicate (PA KIB P KIL)

Content /learning areas/pathways

Vocational pathway

The respondents suggested establishment of vocational wings for teaching subject like tailoring, computer, farming, cooking and cleaning especially for pupils who may not pursue academics

They are some few that being handicapped may not enable them to study may be so fast academically and they may be involved in such areas of interest. To me I may request the government to support these people by creating a school like these with vocational department such as that if a child is not fit academically to continue may involve in vocational skills such that if he leaves a place like this with a profession at least this may involve tailoring, computer work {PA NYAN PHB }

Learning Areas

The respondents suggested that pupils with SNE should be taught practical skills such as cookery, farming, cleaning and other subjects that involve use of hands. In addition, learners should be taught Kenyan sign language and that Kiswahili should be adapted into Kenyan sign language because it is understood by most parents..

PA: I would wish them to be taught anything that involves use of hands. Sometimes children fear work that involves use of hands. You can start with a child when they are still very young. {PA NYAN P HB }

PA: Kiswahili can also be adapted to Kenya Sign Language just like English; this is because Kiswahili is a user friendly language even to illiterate parents. {PA NYAN P HB }

PA: Kiswahili can also be adapted to Kenya Sign Language just like English; this is because Kiswahili is a user friendly language even to illiterate parents. {PA NYAN P HB}

Learning Resources SNE Primary

Learning resources are geared towards enhancing learning, teaching and content delivery. Educational resources are the teaching and learning items, structure materials and human resources that assist the teacher to effectively and efficiently deliver content. In recent years there has been a shift among educationists from the traditional teacher-cantered learning to student-cantered learning. It has been established that effective instruction is more allied to active participation in the teaching learning process (as in laboratory work) than to passive participation (as during a lecture). This shift in pedagogy calls for use of different strategies and resources to effectively engage learners to acquire requisite knowledge, skills and attitudes.

In line with the Education for All (EFA) initiatives, Millennium Development Goals (MDG's), Sustainable Development Goals (SDG), Education for Sustainable Development (ESD), the Constitution of 2010, Sessional paper no 1 of 2015, the realization of Kenya's Vision 2030, of providing a globally competitive quality education, training and research for development, will be achieved through adoption of pedagogy that emphasizes exploration, collaboration, experimentation, creativity, critical thinking and innovation. This calls for the provision of relevant resources that promote these 21st century skills and competencies.

The survey sort to observe the availability of resources that will assist the nurturing of SNE learner potentials. The observers rated in percentage the availability or none availability of the resources to be used to assist the learner with hearing impairment, Mental handicap, visual impairment, physically handicapped, deaf blind and those with autism in the learning process.

Table: 12.7.9.1 Observation schedule of availability of learning resources for learners with Hearing impairment

Hearing impaired	Availability of resources (%)
-------------------------	--------------------------------------

	Yes	No
Hearing Aides/ individual hearing aids	50	50
Group hearing aids		100
Loop induction hearing aids		100
Audiometer	25	75
Ear moulds	25	75
Otto scopes		100
Early toileting materials	25	75
Syllabuses	50	50
Curriculum support materials	25	75
Kenya sign language resource materials	50	50
Speech room		100
Speech training Kit		100
Functional assessment tools	25	75
Sign language interpreters	25	75
Support staff	75	25

The summary of the findings are shown in Table: 4.3.7 .1 and Table: 4.3.7 .2. From the table it can be noted that some of the resources were not available completely like Loop induction hearing aids, Group hearing aids, Otto scopes, Speech room and Speech training Kit .The other resources like Audiometer, Ear moulds, Curriculum support materials and Functional assessment tools were not available in 75% of the schools visited’.

Findings from the qualitative data on the availability of learning resources are as indicated below.
Curriculum support materials

The respondents suggested that there need to supplement totally sign language books and other learning materials in schools because most learners come from poor families and a majority are not accepted by their own family members. They also felt that laptops, computers and books should have sign language caption to facilitate communication for pupils who are deaf

Parents: TV/Laptops/computers can be fitted with sign language information to boost acceptance by SNE students. Most books do not contain Sign language but it is necessary that books should have adaptative language. (PA ST,ANT P BUN)

Human resource

The respondents highly recommended that sign language be included in teacher training curriculum at all levels.

S: Need for Sign language being taught in other schools especially teachers training colleges to ease communication among learners...Computer literacy be taught in rural public special schools (S MUMI S-SNE KAK)

Infrastructure

The respondents suggested that there is need to establish more vocational centres in order to allow for smooth transition of learners from primary level especially those who excel in practical subjects. They should also be provided with vocational skills facilities and materials.

We expected the learners to progress to the next level but we lack facilities to train the learners in various vocational skills. We should have institutions that train and help learners in vocational skills.(PA KAB-SNE BAR)

Inclusion

The respondents expressed the views that learners with hearing impairment should not be educated in the same primary schools as the mainstream learners because of communication barriers which may bring negativity

Pupil: language will be barrier because they use sign language and facial and they use speaking language will be barrier hence bringing negativity.(PP NYAN HB)

At the secondary level however, students suggested that they would wish to learn together with regular learners so that they may be motivated through competitions and interactions.

- S: Be mixed with other normal children (S MACHA S-SNE MACHA),
 S: Integrated so that they are able to work harder(S ST. BREG S-SNE BUS)

12.7.10 Needs for Learners with Mentally Handicapped

Competencies

Abilities/skills

The respondents suggested that learners with mental handicap should acquire practical skills, communication and social skills.

PA: Yes, I can say, if you know you can tell him/her to wash clothes, clean self or even feed the chicken and give them water, feed and milk cows he/she can be able to do so. (PA - FGD-LI- LAI)

Mine I would like to learn communication and social skills. (PA - FGD-LI- LAI)

content/learning areas/pathways

The respondents suggested that learners with mental handicap should learn practical subjects such as tailoring, carpentry, knitting, beadwork, agriculture, building, cookery and laundry. They emphasized the need to teach entrepreneurship to impact business skills. They also need to be trained in adaptive skills such as self care skills and appropriate behavior.

PA: There is something like agriculture because there are children who are good in farming, others you will like to keep things like rabbits, chicken.....so if they are taught a subject like agriculture, in a practical way, they can be independent. (PA - FGD-LI- LAI)

P: To know how to sew bangles, sweater, to be able to sent to shops (P-FGD-WAITH-SNE-NAI)

PA: My child is very big but still behaves like a small child and I would like her to be taught to behave well and do things that are of her age for example, doing things such as cooking and washing clothes. (PA - FGD-NGARI- LAI)

Pathways

The respondents expressed the need to re-introduce technical institution, establish vocational centres for learners with mental handicap who may not proceed to secondary school and build talent schools for those who have talents.

PA: Technical secondary schools should be re-introduced and vocational centre for learners with mental handicapped. Institutions that nurture talents should be established and children to be placed according to their talents and potentials(PA - FGD-NGARI- LAI)

Learning resources

12.7.10.1 Observation schedule of availability of Mental Handicapped SNE Teaching and Learning resources

Mental handicapped area / autism	Availability of resources (%)	
	Yes	No
Syllabuses	57.2	42.8
Curriculum support materials	62.5	37.5
Vocational workshops, materials, tools, equipment	28.6	71.4
Perceptual training materials	85.6	14.4
Daily living skills training materials & equipment	32	68
Adapted seats	32	68
Communication devices	25	75
Musical instruments	71.4	28.6
Audio visual materials and equipment	14.3	85.7
Adapted P.E material and equipment	62.5	37.5
Physiotherapy rooms & equipment	16.7	83.3
Physiotherapist	16.7	83.3
Support staff & specialized teachers	71.4	28.6
Tambourines	28.6	71.4
Speech kits	14.3	85.7
Swimming pool		100
Floaters		100

The respondent registered an acute shortage of crucial resources for learners who are mentally handicapped. These included Tambourines, Speech kits, Swimming pool, Floaters, Vocational workshops, vocational materials, tools, equipment, Daily living skills training materials and equipment, communication devices, Physiotherapy rooms & equipment and Physiotherapist. These resources are very critical to assist the already disadvantaged SNE learners.

Findings from other respondents were in agreement with the fact that most of the crucial learning resources for learners with mental handicap were unavailable as indicated below.

Tools and equipment, materials and facilities

The respondents suggested that learners needed to be provided with materials, tools and machines for tailoring, carpentry and animal rearing to enable them gain practical skills in these areas. They should also be provide with games and sports a materials and equipment.

PA: Like those who know tailoring, they should be helped with a tailoring machine, those who know things like making furniture, they should be provided with machines for doing carpentry, those who can rear animals, they should be assisted in getting animals to rear such as a cow, goat or chickens so that they can support themselves. (PA - FGD-LI- LAI)

PA: They should be provided with games and sports, materials and equipment (FGD-NGARI- LAI)

Infrastructure

The respondents advocated for establishment of vocational centres for learners with mental handicap. In addition more special schools for learners who are mentally handicapped should be built to cater for their unique needs which are ignored in the mainstream. They noted that mainstream learners ridicule them and this leads to low self –esteem.

PA: And if possible, they should also have their own schools separate because sometimes like for instance my child, I had taken him to a regular school and in class you find that the things that were asked in the class and he doesn't know, he would shy off and lack the morale to go to school. (PA - FGD-LI- LAI)

PA: And also in class other children laugh at him because they say there is nothing he knows and that there is nothing he can do for himself. (PA - FGD-LI- LAI)

Human resource

Parents suggested the need to provide specialized teachers who are specifically trained to teach learners with mental handicap. There is also need to employ trained care givers for both girls and boys.

PA: These children need to be taken care of and taught by specialized personnel and big girls and boys should be assisted by men and women respectively to take care of gender (FGD-NGARI- LAI)

Assessment modes

Formative assessment

Parents suggested that there is need for learners to be guided through practical assessment as they perform tasks at each stage of project work should be assessed and that they should be tested on what they have been taught

PA: Children should be assessed as they undertake a project. Every step of a project should be assessed continuously (FGD-NGARI- LAI)

Summative assessment

Parents felt that learners who are mentally handicapped should not be subjected to summative evaluation

PA: These children should not be subjected to summative evaluation (FGD-NGARI- LAI)

Contemporary and emerging issues

Alcohol and drugs

Parents noted that children with mental handicap are lured into abusing alcohol and drugs by their non-handicapped peers and suggested that they need to be sensitized about drugs and alcohol abuse.

PA: The children should be taught about drugs and alcohol because they are cheated to take alcohol and drugs by their non-handicapped peers (PA-FGD-NGARI- LAI)

12.7.11 Learners for Learners with Physical Handicap

Competencies

Abilities/skills

The respondents suggested that there is need to provide learners with mental handicap skills that will help self reliant and lead successful life. They also felt that they needed knowledge about their country and information on how to choose careers.

P: Schools can give you knowledge to live a successful life. (P-FGD-OLK-SNE-NYAH)

PA: Teach them self-reliance skills like cutting, knitting, painting should carry on (PA-FGD-OLK-SNE-NYAH)

Values and attitudes

The respondents suggested that education should emphasize values such as obedience, respect, discipline and hard work. They felt that education should strive to promote learners' self –esteem especially those with disability who in most cases experience low self esteem due to being physically different. Learners should also be taught good morals and responsibility.

P: Lets learners get moral values in school, by having obedience and respect. Pupils to work hard and have discipline. (P-FGD-OLK-SNE-NYAH)

PA: Na kupata masomo kwake, kutapromote self-esteem hatakuwa anaijichukia na hata atakuwa example kwa hao wengine, eti huyo alipelekwa shule fulani alipata masomo, kwa hivo disability is not inability. (PA- FGD-JOY-SNE-KBU)

Content/learning areas/pathways

Primary

The respondents proposed that learners should be taught practical skills such as art and craft, homescience, carpentry, tailoring and agriculture which would enable individuals with disability

get self employment and earn a living. They emphasized the importance of learning religious education to acquire moral values; computer studies to acquire digital literacy and communication skills using different languages.

P: It is good to learn homescience, CRE, art and craft and do English and Kiswahili. (P- FGD-YAMB-SNE-HOM)

PA: For example those who cannot perform very well, they should attend something like carpentry, tailoring and other things in vocational training centres. (PA- FGD-YAMB-SNE-HOM)

Learning Resources

The respondents expressed the view that learners with physical disabilities should be provided with assistive devices such crutches and wheelchairs. They should also be facilitated with indoor games facilities so that those who have severe disabilities can have an opportunity to participate in games.

PA: others are adapted games that is in door games some are good since they can be played indoors for children with challenges to move (PA-FGD-OLK-SNE-NYAH)

PA: Clutches and wheelchairs provided but which has to be fitted now and again as the child grows (PA-FGD-KAJ-SNE-KAJI)

Learning environment

Learners suggested that the school environment should be made friendly for learners with physical disabilities. They expressed the need to adapt the physical environment by providing rumps for those on wheelchairs and adapting toilets.

Majority of our children do not have potential to cope up with environment due to their disabilities. I suggest government should create environment where they can cope well and excel. (P-FGD-OLK-SNE-NYAH)

Assessment Modes

Respondents were strongly opposed to KCPE being the sole determinant of promotion of learners to secondary schools. They suggested that continuous assessment marks should constitute the biggest percentage of the marks attained at the end of every level. Parents expressed the need to develop special examinations and tests for learners with special needs in order to cater for their unique needs.

PA:..... Suppose it is put in a way that evaluation is a kind of continuous or regular such that you are able to monitor the child through out. (P-FGD-OLK-SNE-NYAH)

PA: To prepare special examinations for special students since even these children are special since they cannot do normal work. Mainly concerning daily living. (PA-FGD-OLK-SNE-NYAH)

12.7.12 Needs for Learners with Visual Impairment

Curriculum adaptation

The informant suggested that there is need for curriculum adaptations for learners who have low vision. In addition teaching methodologies should be adapted to suit the visually impaired and provide adapted software such as JAWS to help the blind use computers independently.

I did indicate that adaptation should focus on methodology and content. I maintain the stand with the following suggestions for computer studies adaptation in this field which should focus on audio output software with the jaws programme leading the pack. (ON-2-IS)

Adaptations of curriculum support materials

The informant suggested that the government should explore means of providing adapted curriculum support materials in tactile form to support learners with visual impairment. They noted that it is currently very expensive to produce these materials and thus, the need to explore cheaper ways.

Tactile books and tactile learning materials are a big concern. We all appreciate the value of diagrams to all learners, those with sight as well as those who may have lost sight. The machine being used to draw tactile diagrams is imported and costs approximately kshs. 400 000.00. The special paper is also imported. There are simpler ways of doing the same, developed by Kenyans. (ON-1-IS)

Inclusivity

The respondents held the opinion that learners with physical disabilities should learner in integrated programmes so that the society can understand and accept them.

PA: Best thing to have learners with disabilities educated in integrated programmes like here the society will understand them and not fear them. (PA-FGD-KAJ-SNE-KAJI)

12.7.13 Needs for Learners who are Deafblind

Competences

The respondent indicated that education should equip learners who are deafblind with practical skills and positive attitude towards manual work

Will base comments and education where we hope to prepare a learner with a positive attitude to the world of work? These learners should be exposed to skills like growing crops and rearing rabbits. (PA KAB-SNE BAR)

Content /learning areas/pathways

The respondents suggested that the learners needed skills in self care, communication, social interaction and vocational training to acquire competences for independent living.

The learners need vocational training which require materials and other resources for these learners and how to care for themselves and communicate to other. (PA KAB-SNE BAR)

Educational resources

The respondents expressed the concern that the school was lacking adequate teaching learning materials, assistive devices, trained human resource. They proposed that schools should be equipped with adapted resources and enough trained personnel. More special institutions and vocational centres should be established to cater for the increasing number of learners who are deafblind.

We lack many resources such as assistive devices like hearing aids, walking canes healthy facilities with trained personnel

The government should be encouraged to establish more institutions and units should be established in every county to avoid situation where parents travel from far counties like homa bay and others to cater for varied disabilities (PA KAB-SNE BAR)

Assessment Modes

Continuous assessment tests

The respondents felt that the learners should be continuously assessed on what they are able to do on a daily basis and they should not be assessed through KCPE and KCSE

We assess these learners every day and make a report of what the learners can do
We recommend that these learners should not be assessed using KCPE or KCSE because they are different and rate of learning is much slower than the normal children. (PA KAB-SNE BAR)

Contemporary and emerging issues

Cross cutting issues are matters that touch a number of different aspects of the society, on general principles such as democracy, human rights, good governance, children's rights, gender equality, population and family life education, poverty alleviation, environment and development, to mention but a few. Cross-cutting issues are commonly defined as topics which, by their very nature, have a strong impact on all operations in a given field and, therefore, must receive special attention hence their inclusion in the intended new curriculum. These issues cut across all the levels of education. Hence they need to be addressed effectively in the curriculum. The following are the responses from various informants in different levels of education with regards to the contemporary and emerging issues that should be emphasized in the curriculum

Sexuality education

The respondents expressed the need to provide sexuality education to the learners so that they know how to relate with the opposite sex and how to manage their sexual feeling. The parents also felt that one of things that need to be addressed is sexual abuse by other people especially close family members

Issues of sex and sexuality, these learners experience desires to those of opposite sex, some of the learners get stimulated and sometimes have problems concentrating. The male children sometimes have to be stopped by the teachers from going overboard. When they are sexually stimulated they tell us their desires to explore their surrounding e.g. the way cows behave when they are on heat. These learners have to be guided and constantly supervised to ensure they conform to acceptable behaviors (PA KAB-SNE BAR)

CHAPTER 13

13.3.2. ECDE Level Needs

13.3.2.1 Introduction

This chapter focuses on the discussions of the findings of the needs assessment study for ECDE curriculum reform.

13.3.2.2 General Societal ECDE Needs

In terms of needs for social development, respondents indicated that environmental protection, patriotism, social, technological, economic and industrial development should be embedded in the envisaged curriculum in addition to religious and moral values. The respondents further proposed that curriculum should be relevant to every community in terms of resources of the catchment area. They posited that experts from every county should be involved in the development of the ECDE curriculum in accordance with the needs of the locals. Other respondents proposed a curriculum that is holistic in nature, thus addressing the physical, social, psychological, spiritual, intellectual, moral, character formation and value education as contained in the Constitution of Kenya.

The findings are in line with (NESP, 2015) which points out that societal needs are considered to be what the people who constitute the population of a country need for their lives to be productive and happy in the local context. Further it indicates that the curriculum is a major factor determining the knowledge and skills that future citizens will possess, and hence their capacity to contribute productively to their society.

KIE, (2002) indicates that societal considerations are important in guiding the way content of curricula should be designed to inspire and enrich peoples lives with the knowledge, skills and attitudes most helpful to them and their country. Empirical evidence has it that value education is essential for sustained social and economic development and the realization of human potential. Value education is a powerful force in shaping human beings in any society and plays a vital role in giving the youth, the training necessary to pursue their dreams and aspirations. The dreams of youth in a society can only be actualized if the curriculum is guided by the philosophical ideals of a societal aspects like nationalism, patriotism, national unity, economic

and industrial development, technological development, social development, international consciousness, respect for all cultures, self-fulfillment, social equality, social responsibility, sound morals, good health, information, communication and technology and environmental protection are given due consideration. It is with the view of the aforementioned that the societal needs should be entrenched in the upcoming competency based curriculum.

13.3.2.3 Competencies

The ECDE teachers preferred creativity, organizing, interpersonal relationships, planning, coordination and decision making, innovation, teamwork and virtues such as hard work, honesty, communication, play and associating with others, expression in music, basic life skills, basic arithmetic and responsibility. The findings on creativity and innovations are in line with the Education for All (EFA) initiatives, Millennium Development Goals (MDG's), Sustainable Development Goals (SDG), Education for Sustainable Development (ESD), the Constitution of 2010, Sessional paper No. 1 of 2015, and Kenya's Vision 2030 of providing a globally competitive quality Education, Training and Research for Development. This observation is also in line with a study carried out in Korea by IBE-UNESCO (2012) which indicated that competency skills recommended for elementary level should be problem-solving skills, communication skills and cooperation skills. These will enable students to be prepared to face these challenges and seize the opportunities brought about by new forces locally and internationally. Similar studies carried out in Singapore by Soland et al. 2013, and Voogt&Roblin 2012) indicates that emphasize on the features of their framework for 21st C including creative and critical thinking, communication and collaboration, and social and cultural skills were core values that the Singapore education system hoped to cultivate in all its students. This is critical because if knowledge is learned to support the performance of skills then learners will satisfactorily excel in aspects of knowledge, skills and values (Soland et al. 2013, and Voogt&Roblin 2012).

13.3.2.4 Identification and Nurturing the Potential and Talents of Learners at ECDE Level

13.3.2.4.1Talent identification

The findings indicated that identification of talents is the responsibility of parents and teachers. The parents should monitor their children in order able to identify what they are good at from the time they are very young in early childhood.

Other platforms for identifying talents to include: Annual science congress, annual term games, arts, annual drama and music festival, use of mentors, teacher/staff nomination, peer nomination and parental information. It was further noted that talents can be identified in different settings which include the school, religious institutions and at home where the family members can identify unusual abilities in children.

13.3.2.4.2Nurturing Talents

Some of the talents identified to be nurtured include visual and performing arts, culinary arts, sports, pottery, fine arts, music and drama among others. Other suggestions on nurturing talents are; establishment of talent academies, provision of adequate resources, creation of incubation centres for innovations, schools exhibitions in areas like science, handcrafts, IT, sports, games, music and drama, equipping teachers with competencies to identify and nurture talents, realigning teacher education to produce teachers in all the potential pathways of academic, technical and vocational, sports, creative arts among others, establishing pathways early enough to nurture sports, music, performing and creative arts and crafts.

The findings indicated that ECDE teachers highly preferred games and sports, clubs and societies, cooperative learning, competition among schools and holding of academic conferences, curriculum enrichment, ability grouping and mentorship programs as the best strategies for nurturing the potential and talents of learners.

This implies that games and sports, clubs and societies, cooperative learning, competition among schools and holding of academic conferences, curriculum enrichment, ability grouping and mentorship programs should be embraced as the best strategies for nurturing the potential and talents of learners in the envisaged ECDE curriculum.

These findings are in line with the tenets of the Kenya Vision 2030 which calls for curriculum that develop learners' entrepreneurial skills, competencies and talents (Republic of Kenya, 2007). The Sessional paper no. 2 of 2015 expounds on the need to develop and nurture talents for global competitiveness while the Taskforce Report mentions identification and advancement of talents among core curriculum competencies (RoK, 2012). The curriculum policy (2015), indicates that since the curriculum as it is does not give linkage of talents to development of careers, further education or training, there is need to address the aspects of identifying, nurturing and developing talents among learners. This therefore implies that identification and nurturing of talents should be highly considered in the envisaged curriculum,

13.3.2.5 Activity Areas that should be included in the School Curriculum

Based on the findings it can be concluded that ECDE teachers would prefer language, mathematics, life skills, creative arts, communication skills, numeracy and literacy skills; creative and manipulation; social and life skills; environmental awareness; respect for and sanctity of life; nutrition and health; religion and ethics; national values; patriotism; self-awareness, self-esteem, self-confidence, personal safety (security), technology, emotional awareness, empathy, self-regulation and conflict resolution; respect for the rule of law, appreciation for democracy; critical thinking, problem solving; geometry, patterns and classifications, natural and the physical world, inquiry skills and physical education learning areas to be fully embedded into the curriculum from the foundational level among other societal needs.

The high ratings on mathematics, languages and sciences are in line with the aspirations of the country's blue- print for economic development which flags the teaching of mathematics, languages and sciences as being vital to the country's development. Vision 2030 indicates that by 2012 the country should mainstream Science, Technology and Innovation (STI) into the curriculum (RoK, 2007). Studies have also shown that countries like Singapore and Malaysia with high technological development have put great emphasis on mathematics and sciences as a foundational requirement for their technological advancement. The Malaysian education system,

like others around the world, has emphasized the development of strong content knowledge in subjects such as sciences, mathematics, and languages (Government of Malaysia, 2012).

The high ratings on creative arts are in line with a study carried in Nigeria by Ajibade and Elemi (2012) on importance of learning visuals in school. The study found that art and design is significant in the development of a child as it is a tool subject and students performed better using visuals and illustrations to learn than those who learnt without them. According to (Enamhe, 2001) visual arts find practical use in other subjects in schools and pupils who partake in art classes perform better in illustrations. Ajakey (1982) indicates that creative art is a correlation of all other subjects in school, for it influences their successful teaching through sketches or illustrations and art as a subject may compensate for the education of persons who are not science inclined.

Owing to their importance and contribution to development, languages, mathematics, life skills and creative arts activity areas should be highly considered for inclusion in the envisaged curriculum at the foundational stages.

13.3.2.6 Learning Approaches

From the findings, the respondents proposed learner centred methods such as role plays, songs, dance, recitals, demonstrations and thematic approaches be used with young children in delivery of the curriculum. Other methods proposed include; participatory learning, exploratory/discovery methods, field studies,

According to KIE 2013, for effective teaching to take place, a good method should be adopted by a teacher. The study findings are in line with the KIE study which indicate that learner centred methods enhance their participation in the learning process improving their individual concentration. This implies that learner centred methods should be highly embraced in the upcoming competence based curriculum.

13.3.2.7Resources

Resources are important in the learning process and the respondents were required to suggest learning and teaching resources in order for the education to be successful. The resources are geared towards enhancing learning, teaching and content delivery. Educational resources are the teaching and learning items, structure materials and human resources that assist the teacher to effectively and efficiently deliver content. The survey sort to establish the availability of resources which are important in implementing and actualizing a competency based curriculum. Information was sort by researchers observing the available physical resources in the ECDE centres.

The findings show that the most available resources were classrooms, syllabus, furniture and toilets, and playground. Considering that resources in the form of human, physical and material play a very important role in facilitating learning the findings reflect the current situation in ECDE centres. The respondents indicated that some of the resources required to implement a competency based curriculum include laboratories both for sciences and languages, print materials, quality teachers and ICT and workshops, enough classrooms and play fields. The institutions should be provided with a very wide and diverse resource based on available means, locally relevant and without and the issue of shortage of teachers be addressed. The learners should also be provided with play materials. The respondents expressed the need to revive Teacher's Advisory Centres to help equip teachers with skill.

McAliney (2009) indicated that for effective teaching and learning, quality human and physical resources are required. The findings are in line with a study by Bauer, Brust and Hubbert (2002) which found out that investment in physical resources contribute directly to academic learning environment. He indicated that the other resources that may influence learning environment are well stocked libraries, well supplied and maintained classrooms with laboratories including computer labs and well maintained grounds.

The study found out that the least available resources included IPads, iPods, Recording studio, Storage devices, Computers, Radio and Mobile phones. These resources are an important component in the learning process and their absence may adversely affect the quality of learning. According to Deolikar (1997), inadequacy in school equipment is one of the most important factors adversely affecting the quality of education in Kenya.

13.3.2.8 Forms of Assessment

Findings from the study indicate formative assessment and summative assessment were suggested. In the formative assessment, progress assessment was the most preferred followed by observation checklist, and continuous assessment. In the summative assessment, end of term examination was the most preferred and end of year examination.

From the findings, formative assessment should be more emphasized than summative assessment in the envisaged ECDE curriculum.

These finding are in line with a study carried out by UNESCO which established that in formative assessment the teacher is able to understand how students are leaning, to identify problems that the students may face in the learning process and to use feedback to ensure that all have the opportunity to learn (UNESC, IBE No. 15 – 2015)

13.3.2.9 Cross Cutting Issues

Hygiene, child rights, environment, security and safety should be embedded in the envisage ECDE curriculum. The proposed cross cutting issues have also been identified in different policy documents such as the Constitution, Vision 2030, Education for Sustainable development (ESD), Child Act (2001), Millennium Development Goals (MDG), Sustainable Development Goals (SDG), and NESP (2015) among others. Each of these documents emphasizes different aspects of the cross cutting issues and education has been identified as the wheel to nurture them among the youth. This therefore implies that the identified cross cutting issues should be embedded in the envisaged competency based curriculum.

13.3.3. Primary Level Needs

13.3.3.1. Societal Needs

Educational policies the world over have been grounded in prevailing needs and challenges of societies. The critical societal needs often encompass the social, economic, political and cultural facets, among others. The growing national interest towards achieving Kenya Vision 2030, and meeting other international goals like the SDGs, has influenced new standards against which the curriculum should measure to achieve national aspirations.

Teachers and head teachers highest ratings were for the need for patriotism, followed by environmental protection, social development, technological development, and economic and industrial development. In their responses, 91.16% and 92.50% of the teachers and head teachers agreed to a great extent that the curriculum needed to be more responsive to patriotism as a dimension of our development. Learners observed that the situation in the country was declining as a result of the state of politics in the country.

Pupil: the politics of the country is declining because the candidates opposition and incumbent leader are always arguing now and then we need peace in our country. **(P-FGD-KATP-MAK)**

Parents on their part suggested that politicians should work more towards development.

Parents: on the political side, the politicians should reduce politicking and concentrate on developmental work **(PA-NYA-NY)**

Additional findings showed that environmental protection was the second priority on societal needs. It was affirmed by 93.2% teachers and 93.6% head teachers. The findings further showed that learners noted a discrepancy between what they learnt and what they practice, in regard to environmental protection.

Pupil: “We have been taught how to keep the environment clean but up to now I never understand why we keep throwing wrappers of food stuff everywhere” **(SL-SOSP-UG).**

Third in the ranking was the need to improve the social facet of development. This was a response from 92.5% of teachers, and 92.8% of head teachers who responded. The pupil leaders called for concerted efforts to stem the vice in the country. They further encouraged the use of legal mechanisms to ensure that the perpetrators of corruption faced the necessary legal action.

Pupil: We need to stop corruption. Corruption is really hitting us so it requires a stern action taken on the perpetrators’. **(PL- FGDP- KIP-UG)**

Other findings show similar needs in the technological and economic and industrial development. The pupils expressed a need to introduce technology in schools. Early initiatives and in the use of technology in schools were found particularly advantageous for technological development.

Pupil: We should introduce computers in at least every school especially to young children as young as about 10yrs or even 8yrs. **(PL- FGD- KIP-UG)**

In recognizing these gaps in the society, the findings lend credence to Kenya Vision 2030, which also aspires for a just and cohesive society, that allows citizens to enjoy equitable social development in a clean and secure environment (Republic of Kenya. 2007). The findings are also aligned to the proposition of UNESCO, 2015, which acknowledges education as a key to many ends of social and political development. In advancing the social melorism theory, (Kleibard 2004) states that a curriculum that is focused directly on social ills like inequalities, the abuse of privilege and power has the capacity to deal effectively with them. This argument views curriculum as a road for achieving socially agreed development and education goals (UNESCO, 2015).

In spite of the pivotal role that is given to education as an instrument for change, the expressed gaps still point to an education that does not translate to realistic gains. The continued disconnect between societal needs and education that is offered in Kenya are inconsistent with the goals of education (KIE, 2009), as articulated in the curriculum. This disharmony between goals that have been spelt out and the reality of the societal circumstances calls for a transformation in the way it is conceptualized and delivered.

13.3.3.2. Competencies

Competences are broadly understood as a combination of theoretical and practical knowledge, cognitive skills, values and behavior used to improve performance; or a description of skills, knowledge, attitudes and behaviors required for effective performance of a real-world task or activity (Weddel, 2006,p2). This description presumes that a competence is as a culmination of all these factors, into a demonstrable outcome. The rapid development and proliferation of ICT have further compounded the expectations of competencies and placed the bar higher across most sectors of the economy.

This study sought to establish the competencies that are required at the primary school level in Kenya. The findings of the study show that there is a demand in the curriculum for the 21st Century skills. Views from key informants emphasize the focus on the new skills whose influence has been catalyzed by the rapid production and distribution of knowledge universally.

KI: Soft skills; 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness, and Teacher professionalization programmes through mentorship (KI-CEM-NAI).

The findings revealed among the teachers and head teachers communication skills are ranked the highest. Embedded in this category is management as well as leadership skills. This was followed by the need for creativity as a competence in primary schools, which entails innovation, analysis, entrepreneurship, research and problem solving.

At the national level, the findings affirm what are in concurrence with the expectations drawn out in Kenya Vision 2030. The blue print for the country's development anticipates a middle-income country in which all citizens will have embraced entrepreneurship, be able to engage in lifelong learning, perform more non-routine tasks, be capable of more complex problem-solving, be able to take more decisions, understand more about what they are working on, require less supervision, assume more responsibility, and as vital tools towards these ends, have better reading, quantitative reasoning and expository skills (Republic of Kenya, 2012) .

The findings show that there is a growing national interest in the production of learners who can be counted in the global labour market. The findings also show that the push for an education that creates humans with capabilities is inevitable.

This also means that citizens should be able to compete effectively and be counted as participants in the global labour market. The highlights from the study are consistent with the analysis of (UNESCO 2015), which acknowledge that the global community has integrated most of these skills into a wide array of the sectors.

13.3.3.3. Talent Identification and Nurturing

Talents refer to innate abilities that learners possess which can be nurtured through school and curriculum experiences.

The findings in this section show that the respondents equivocally advocated for curriculum that nurtures talents of the learners, attributing talents to the development of self and society and therefore the need for early identification. They proposed a three-pronged approach in talent identification involving parents, teachers and the community.

Parent: Some talents can be identified as early as STD 1. Through exposure to various activities where they show interest or capability (**PA-FGD-KIARP-MUR**)

Talents identified ranged from those associated with visual and performing arts, to games and sports. Amongst strategies identified by respondents as most appropriate in nurturing talent include games and sports, curriculum enrichment, clubs and societies, ability grouping, mentorship programmes, cooperative learning, establishment of, talent academies as well as innovation and incubation centres (See 12.2.4.) They recommended also that talents should be identified as early as possible. They called for rationalization of content and creation of a pathway that nurtures talents inclusion of subjects that nurture talents like Music, Art and Craft, Physical Education, drama and acting, among others. The least preferred strategies were accelerated learning, advanced placement and early admissions.

Parent: ECD and Primary school level students should be exposed to various talents, then government should think of coming up with talent academics .Probably in secondary school level where various talents are developed and if we had talent academies (**PA-FGDPP-MOI-UG**)

The strategies suggested by the respondents are consistent with studies that recommend the epistemological concept model which focuses on talented students' understanding and reflects a concern for exposing students to key ideas, themes, and principles within and across domains of . (Ward, 1961; Hayes-Jacob, 1981;Maker, 1982; Tannenbaum, 1983).

A key issue raised by respondents as playing a critical role was provision of facilities, infrastructure and capacity building of teachers.

Pupil: ... introduction of them in school. provision of materials availability of talent clubs... practice..... encouragement. competition with other schools....availability of big playing field and facilities.....be given hope.

According to the curriculum policy (2015), the curriculum as it is does not give linkage of talents to development of careers, further education or training. There is need to address the aspects of identifying, nurturing and developing talents among learners. Kenya Vision 2030 calls for curriculum that develops learners' entrepreneurial skills, competencies and talents. Additionally, Sessional paper no. 2 of 2015 expounds on the need to develop and nurture talents for global

competitiveness while the Taskforce Report mentions identification and advancement of talents among core curriculum competencies.

13.3.3.4. Content/Learning Areas/Pathways

Learning areas refer to content to be taught and learnt. The school curriculum defines learning areas as content to be taught and learned, by whom, when and where (UNESCO- IBE Korea – 2015). It is important to underscore the place of organisation and sequencing of content to facilitate learning.

The study sought to find out what learning areas would be most appropriate for the curriculum reforms. The respondents identified learning areas generally under the umbrella of humanities, Mathematics and Sciences, Languages and Communication, technical and vocational technology and emerging issues. Over 90% of teachers and curriculum support Officers emphasized Sciences, Health and Nutrition, Languages, Social Sciences. Of great significance were voices of parents, learners, industry, informal sector and key informants calling for vocational, practical and technical areas. They cited subjects and learning areas like Home Science, Agriculture, Art and Design as well as Craft and Wood Work, livestock rearing, Geography, History, culture, unity and patriotism, masonry, motor vehicle mechanics, needle work, cookery, knitting, tailoring, Physical Education, ICT, financial literacy, entrepreneurship, environmental conservation, among others. (See 12.4.4)

The new areas emphasized by respondents include foreign languages, financial literacy and entrepreneurship, values, unity and patriotism respondents, talents, while neglected learning areas like Home Science, Agriculture, Art and Design and Physical Education should be revamped.

Pupil: We should learn foreign languages like German, French, Chinese, Russian, Arabic, india ... so that we can be able to communicate with foreigners (P-FGD-HVAPP-KIL)

The findings on content areas are supported by studies carried in Nigeria by Ajibade and Elemi (2012), (Enamhe, 2001) and Ajakey (1982) which show that Creative Arts influence successful teaching through sketches or illustrations. Additionally, art as a subject may compensate for the education of persons who are not science inclined.

Teaching of foreign languages is anchored in Sessional paper no. 2 of 2015, which calls for education for global competitiveness, while Kenya Constitution 2010 (GoK, 2010) advocates for teaching of English, Kiswahili and Mother Tongue.

Vision 2030 lays importance on Agriculture, financial literacy and entrepreneurship as well as mainstreaming of science, technology and innovation in the school curriculum (Gok, 2007). Vocational and technical subjects are in line with a study by Herman in 18 countries, (2011) whose results indicated that students from vocational streams acquire skills better and had better chances to get employment as well as higher salary.

The findings on the need to teach Physical Education are in line with the monitoring studies carried out by KIE (2004, 2006, 2007) that indicated that Physical Education. was not taught despite its vital role in promoting healthy physical, emotional development and social interaction. Finally, the inclusion of content on emerging issues such as environment climate change, lends credence to the Sustainable Development Goals. (UNESCO, 2015)

13.3.3.5 Pedagogical Approaches

Pedagogical approaches are also referred to as learning approaches or teaching methods.

Pedagogy is the art and science of teaching that involves incorporating an array of teaching strategies that support intellectual engagement, connectedness to the wider world, supportive classroom environments, and recognition of difference, should be implemented across all key learning and subject areas((Source:

<http://education.qld.gov.au/curriculum/learning/teaching/technology/pedagogy/index.html>. In line with the Sustainable Development Goals(SDG), Education for Sustainable Development (ESD), the Constitution of 2010, Sessional paper No.2 of 2015, the realization of Kenya's Vision 2030, of providing a globally competitive quality education, training and research for development will be achieved through adoption of pedagogy that emphasizes exploration and experimentation.

The pedagogical approaches that were desired most include; practical methods of teaching; learners' activity-based strategies, experiential learning strategies were ranked highly (See12.4.5). However, the lecture method was least preferred by all respondents. This is consistent with Active Learning theory by Cornell, which posits a set of strategies that places

responsibility for learning with to a student through discovery; problem based learning, discussions, experiential among others.

These pedagogical approaches were emphasized by key informants as pointed out below:

KI:child centred approaches, you would want where the child learns by doing themselves the discovery efforts, the investigatory efforts more than the lecture approaches” (**KI-HQUASO PWANI UNIV**).

These responses are closely linked to, Grant’s (2002) findings that the Project-based Learning (PBL) is an approach that emphasizes meaningful learning activities that are long-term, interdisciplinary, and student-centered. The learning activities are designed to provide students with real world relevance, complex tasks, and creative outcomes.

In addition, educators have been moving toward more student-centered understanding-based constructivist teaching that focuses on exploration and experimentation (Smerdon et al.1999).

KI: people learn differently.. there is group work, role play, discussions, experience sharing... (**KI-KNHCR-NAI**).

This concurs with many researches which explain that learning in the 21st century needs higher order thinking skills related to sophisticated cognition such as inquiry process, formulating explanations, and communicating understanding, which are difficult to measure with multiple choice or paper-and-pencil tests (Quellmalz & Haertel, 2004; National Research Council, 2006).

13.3.3.6. Teaching and Learning Resources

These refer to any inputs that are used in the learning environment to effectively achieve the desired outcomes. Findings from the study findings show that resources most frequently highlighted by respondents were text books and teachers. However, respondents decried inadequate books and teachers and their inability to afford the required text books.

Pupils: There are few textbooks and revision books. We are told to buy them whereas they are very expensive and poor students can’t afford them..... (**P- FGD-GZEP -KIF**)

The sentiments expressed by the respondents are echoed in the Taskforce Report (2012) on the implementation of Free Primary Education, which show that most schools lacked basic requirements such as teaching and learning materials, tuition equipment and physical facilities as well as teachers especially for the practical and vocational subjects. Infrastructure and learning

environment were considered by respondents as playing a key role in attaining optimum teaching and learning in primary schools including internet connectivity, electricity and computers.

According to NESP, Vol One (GoK, 2015), good physical facilities are important to enhancing school attendance and in turn pupils' achievement. Littlejohn and Windeatt (1989) in supporting this view argue that materials have a hidden curriculum that includes attitudes toward knowledge, teaching and learning, the role and relationship of the teacher and student, and values and attitudes related to gender, society, among others. (Littlejohn and Windeatt, 1989)

13.3.3.7. Assessment

Marion et al (2014) defines assessment as a process that involves; establishing goals for student learning, gathering qualitative and quantitative evidence for how well students meet those goals and using the information to improve. Assessment can span from the classroom to program and institutional levels, from class project evaluations to alignment of that evaluation to departmental learning goals. There were two modes of assessment; formative and assessment summative. Formative was highly ranked compared to summative (**12.4.7**).

These responses can be closely linked to studies have shown that, it is not about passing or failing a candidate and evidence collection is more than just setting a test. During teaching – learning process learners may be required to undertake a series of tasks for assessment purposes such as assignments, projects, tests, exams or labs. It is the sum of all these assessments that deems a learner to be competent or not.

However, Singapore, an example of successful Competency Based Curricula has four types of assessment such as diagnostic, formative, summative and skill recognition (Singapore, Competency Based Assessment Plan, 2012). This is different from the current scenario in Kenya, where national examinations are highly emphasized.

Eric.W. and Barbara Gaston (2008) in their study pointed out that it is not about passing or failing a candidate and evidence collection is more than just setting a test. During teaching-learning process learners may be required to undertake series of tasks for assessment purposes such as assignments, projects, tests, exams or practical. It is the sum of all these assessments that

deems a learner to be competent or not.

In view of the challenges associated with summative examinations alone, it is apparent that respondents suggest a certain method of assessment that takes into account progressive tracking of learners' attainment and also providing a national comparison of learners' performance.

13.3.3.8. Contemporary/Emerging Issues

Contemporary and Emerging Issues refer to social issues (also called a social problem, social conflict, or social illness refers to an issue that influences a considerable number of individuals within a society.

The cross cutting issues are addressed in the study were issues that touched a number of different aspects of the society, on general principles such as democracy, human rights, good governance, children's rights, gender equality, population and family life education, poverty alleviation, environment and development, to mention but a few. The results revealed that all these issues should be embed into the curriculum reforms (**see12.4.9.1**).

Similarly a study conducted in Singapore and Korea shows that a systematic and intended packaging of competencies (i.e. knowledge, skills and attitudes that are underpinned by values) that learners should acquire through organized learning experiences both in formal and non-formal settings.

These findings were fully in agreement with responses drawn from parents, learners and key informants, as they pointed out that good curriculum plays an important role in forging life-long learning competencies, as well as social attitudes and skills, such as tolerance and respect, constructive management of diversity, peaceful conflict management, promotion and respect of Human Rights, gender equality, justice and inclusiveness.

Policy documents point out that good governance is a key pillar in all socio-economic and development endeavors globally. Improving governance is a key pillar in all socio-economic and development endeavors globally. Improving governance and enhancing institutional integrity in

Kenya's education sector is a vital a step towards achieving our national educational goals and objectives. These provisions need to find a place in the curriculum reforms.

13.3.4 Secondary Level Needs

This section presents the discussion of the research findings. The discussion is done in relation to different themes.

13.3.4.1 Competencies

Literature defines competency as a set of defined behaviors that provide a structured guide enabling the identification, evaluation and development of the behaviors in an individual. Some scholars consider "competence" to mean a combination of theoretical and practical knowledge, cognitive skills, values and behavior used to improve performance; or a description of skills, knowledge, attitudes and behaviors required for effective performance of a real-world task or activity (Weddel, 2006, p. 2). It is a word used to denote a person's ability to acquire, retain and evaluate information (Drew, Hardman & Hosp, 2008).

13.3.4.1.1 Desired competencies

The findings identified different competencies that were clustered into four 4Cs of the 21st century skill. These includes: communication, collaboration, critical thinking and creativity(see **12.5.1**).The term 21st century skills refers to a broad set of knowledge, skills, work habits, and character traits that are believed by educators, school reformers, researchers, employers, and others to be critically important to success in today's world, particularly in collegiate programs and contemporary careers and workplaces. The 21st century skills can be applied in all academic subject areas, and in all educational, career, and civic settings throughout a student's life. This was consistent with study by Rychen and Salganik (2001) which revealed that a creative person should have divergent thinking, problem solving skills, originality, and ability to see or create new values. Considering the convergence on the need to nurture creativity in the curriculum and the literature encountered, constructs of problem solving, divergent thinking, research and innovation will find their place in the content of the proposed curriculum. These findings are also

supported by **Dewey theory** that curriculum should ultimately produce students who would be able to deal effectively with the modern world.

Further, the task force on re-alignment of education (2012) which recommended some core competencies that should be acquired by learners such as communication skills, Manipulation skills, Social skills, Environmental awareness, Numeracy, Writing, enquiry skills, ICT, talent potentials, Observation skills, Entrepreneurial skills, Ethical skills, Investigative skills among others also supports the findings. A study carried out in Korea by IBE-UNESCO (2012), revealed that a CBE is not in conflict with the existing curriculum and that specific subjects continue to provide a critical path in promoting acquisition of key competencies such as communication and efficient management, is also consistent with the Kenyan findings

The respondents also gave a lot of weight on entrepreneurship and financial literacy skills. The respondents pointed out other skills related to security, financial literacy, and psychomotor development. This conforms to the Kenya Vision 2030 which places great emphasis on the link between education and the labour market, the need to create entrepreneurial skills and competences, and the need to strengthen partnerships with the private sector. It is the curriculum which is supposed to develop these skills and competencies.

Student leader: coming back to the economy you find that some of these countries that have developed... you find that entrepreneurs are highly encouraged... when you talk of like my society entrepreneurship is not known.. we leave school we start looking at the white collar jobs and that's exactly what teachers taught us for the education system in Kenya is such that we are taught to look for the white collar jobs and not the blue collar jobs (**SL-MBIT-S-HOM**)

In addition to the skills, the respondents enumerated values and attitudes that should be inculcated in the learners. These include: patience, hard work, taking care of environment, community service, moral and spiritual values. Others include obedience, tolerance, love, humility, respect (including respect for property), good citizenship, discipline, diligence, loyalty, honesty, peace, social justice, unity and cooperation, integrity, the virtues of honor, courage, industry, confidence, kindness and assertiveness, nationalism and patriotism, responsibility, courage and industry, accountability, socialization and environmental concerns, etiquette, appreciation, tolerance, caring and compassion. These findings are consistent with **Developmentalists theorists** that curriculum should focus attention to the development of children's emotional and behavioral qualities

13.3.4.2. Talent Identification and Nurturing

Talent is a natural endowment or ability of superior quality (source). A credible education system should nature every child potential. Children blossom through the academic curriculum when sports and arts are integral to their learning environment. For a long time intelligence of a child has been measured by the grades, ranks and marks scored in school examinations. Many parents reprimand or give up on their children who do not measure up to this yardstick. The result of this is frustration on the part of the learners and negligence on the part of the parents with serious consequences at both individual and societal level. Desired psychological constructs such as a sense of confidence, self-awareness and self-esteem fail to be nurtured and developed in such children.

13.3.4.2.1 Strategies of nurturing the potential and talents of learners

The findings from the study revealed that nurturing of learners potential and talents may be best enhanced through curriculum enrichment, games and sports, clubs and societies, cooperative learning, competition among schools and academic conferences, ability grouping and mentorship programs, special schools for gifted and talented, special needs classes and accelerated learning and advanced placement. Other strategies by respondents were; creative arts, reward system for gifted children, development of a wide curriculum with technical and vocational learning areas, performing and creative arts, field excursions, creation of incubation centres for innovations, teacher- parent collaboration, career talks and open days, student service and attachments and debates (see 12.5.2)

The findings on talents identification and nurturing are supported by Theorists such as Ross, Bobbitt, Gilbreth, Taylor, and Thorndike who asserted that students would be scientifically evaluated (such as talent identification and testing), and educated towards their predicted role in society. Talents identification and nurturing is also in tandem with the curriculum policy (2015), which postulates that the curriculum as it is does not give linkage of talents to development of careers, further education or training. There is need to address the aspects of identifying, nurturing and developing talents among learners. Kenya Vision 2030 similarly, calls for curriculum that develops learners' entrepreneurial skills, competencies and talents. Additionally,

Sessional paper no. 2 of 2015, expounds on the need to develop and nurture talents for global competitiveness while the Taskforce Report on re-alignment on education (2012), mentions identification and advancement of talents among core curriculum competencies further supports the findings.

The findings also show that games and sports are critical avenues for nurturing talents. This is consistent with the National Youth Situation Analysis Report of 2009, which indicates that majority of Kenya's population comprises of youth aged between 15 - 29 years. The report further noted that the youth have talents but have no opportunities to exploit or market them. The report recommended the need for resource centres where the youth could spend time to gain useful skills and develop their talents such as sports, music and art. One of the respondents stated;

Student: You find in school there are talent night. We have games you will see somebody is playing well and also in music some sing well. The teacher should know there student who have talent. And they will employ a teacher for those talents (S-FGD-KIS-S-NYAN).

The establishment of special schools to cater for the gifted featured prominently among the respondents as way of nurturing the talents among the learners. This was in conformity with the Presidential Working Party on Education and Training for the Next Decade and beyond (Kamunge Report, 1988) noted that every society Kenya included has its specially gifted children who need special education to develop their special intellectual, creative, artistic or other talents to the maximum level possible. Accordingly, the committee recommended that such children be identified early and special programmes developed to enable them to realize their full potential in order to enable them to contribute to the society. Special educational programmes for such children should be developed in the interest of national development. The committee proposed the establishment of "Centres of Excellence" as pacemakers for advanced knowledge and technology in order to meet the needs of the society. On ways of identifying talents, a stated;

Student: Before admission, they should like fill a questionnaire that... has a section for the talents for the students. Because we would have already been identified in the admission forms, the schools will start preparing (SFGD-MEKA-SP-KWA)

13.3.4.2.2 Stakeholders to identify talents

The respondents asserted that different stakeholders should be able to identify the talents. These included parents, teachers, and experts. Parents were of the opinion that they should be at the forefront in identifying talents in their children. This is done by children sharing with them and

observing the children. The parents should monitor their children and be able to identify what they are good in from the time they are very young in early childhood. However, a respondent said that teachers have no capacity to identify talents in learners and how to nurture them. He further said that even if talents were identified, the question would still be whether we have time to nurture them since all the time is study time.

KI: Does the teacher have the time to observe these children? Do even the students have the time to do these things because even break time “kuna assignment yenye mwalimu amewapatia.” Lunch time has been reduced to 15mins and games time is revision. So we need to consciously know that part of the curriculum is talent, part of the curriculum is co-curricular activities and mainstream them. Actually this is one thing that I passionately would ask KICD to do to mainstream these things .You know we call them co-curricular but we still treat them there are schools which believe that they are not important. **(KI-CEB -NYAM)**

13.3.4.2.3. Assessment of Talents

From the findings respondents proposed fair evaluation and appraisal systems and parents emphasized on the need to encourage learners’ involvement in the talent areas by ensuring that they are assessed.

Parent: The talent areas should be assessed and marks given to encourage the students since now they either take or not nobody bothers. . **(S-FGD-KIS-S-NYA)**

It was suggested by the learners that schools could consider issuing leaving certificates that articulate one’s talent areas. This would serve to motivate learners.

Student: The school should also consider leaving certificates. So they can know on what they are good in. From the classification they will know where your talent is **(S-FGD-KIS-S-NYAN)**.

13.3.4.3. Content / Learning Areas / Pathways

This study defines learning area as the content to be taught and learnt. From the findings from different respondents on the learning areas, it is clear that most of the subjects that are currently being taught in secondary schools can be included in the new curriculum. The learning areas range from technical subjects, humanities, mathematics, sciences, Languages, (including foreign ones). The technical subjects were given prominence by the respondents probably because they are practical in nature and through them they will impart practical skills to the students. There is need for change of attitude towards these subjects especially as gender is concerned. All the students, boys and girls, should therefore be encouraged to take up these subjects as they all have potential beneficiaries from the same.

KI-There are very few girls who have been trained in electrical in motor vehicle because basically of attitude. Boys too you find very few tailors mending because of that kind of attitude we have so we have to develop or we have to teach them that kind of how to accept such kind of things (**KI-NVCET-NYA**).

A general feeling among the respondents was that the secondary education should be geared towards addressing the needs of an individual learner, ensuring that the learners get to do something in life after school.

Parent: Our education system should cater for needs that would give the child the skills that would shape their minds or intellectual needs and not just educationally but practical needs (**PA-FGD-MOIG-S-UG**)

This could be the same feeling that led to the suggestion of Entrepreneurship as a learning area that can impart skills that can be used in the business world. Entrepreneurship, Financial literacy and climate change were relatively new areas that were suggested for the new curriculum.

Pupil: at secondary level, I think we need to be taught on how to be entrepreneurs because not everyone that goes to secondary will get As, you got an A and becomes a doctor, engineer teacher, lecture What about the person who scored D? Where do they go? If you are taught on how to become entrepreneur they obviously will have idea of making ends meets that is starting small and then growing big” (**PL-SOSP-UG**)

The findings of this study are supported by the spirit behind the Kenya Vision 2030 that places great emphasis on the link between education and the labour market, the need to create entrepreneurial skills and competences, and the need to strengthen partnerships with the private sector.

In relation to languages, students said that in addition to English and Kiswahili, they should also be taught foreign languages like Chinese, French, and German in schools where they are not currently offered. The call for the teaching of foreign language is consistent to the Sessional paper no. 2 of 2015 that expounds on the need to teach foreign language in our system of education for global competitiveness.

The suggestion of Computer studies, Children’s rights, Citizenship, First Aid, Disaster Management, Psychology, and Age appropriate and value based sexuality as learning areas is an effort to raising up all round citizens who are not only patriotic but who understands all what surround them as they grow and how to deal with them. This means that the proposed curriculum should address all spheres of life, that is, economic, socially, politically as well as technologically.

Different pathways were suggested by the respondents. The call for establishment of polytechnics which would offer vocational courses to cater for learners who do not perform well in the academics is an effort to ensure none of the learners is left out of the system. Such a pathway would ensure that the graduates of a certain level do not rely on formal employment but instead would go for self employment. These suggestions are in line with the ideas of Inwang (1985) in Ibukun, Akinfolarin and Alimi (2011: 179), who says “Vocational Education helps to fix right habits of thinking and doing in students through repetitive training, carried out to the extent where it gives the trainee a productive ability with which he or she can secure employment. Student learning outcome are likely to be practically seen in Vocational and Technical Education where students discover and do things themselves”.

The pathway of the talents also implies that those who have some abilities can pursue that line and also earn their living. The implication on this is the needs for a well laid down a system that identifies the talents of the learners from early age and start nurturing them alongside the school curriculum. Those who are good in academic and those in talents should be encouraged to go on as pointed out by one of the key informants.

KI: everyone who is given pathways is given passion, for example, one want to be a doctor and the other wants to be a teacher, they should not be forced, and that’s the right direction we are heading, as a parent or a teacher you should know what a child want to be; does he want to be an artist, dancer, teacher, engineer, actor, entrepreneur, film actor these are the courses that should be pursued in life. And then in that case we will stop the issue of school dropout failure, the society people who have nothing to do, and this will make everybody is being engaged..(**KI-CDE-GAR**)

These findings generally provide much-needed evidence to educators, policymakers, and legislators who are in dire need of research-based guidance on the learning areas for competency based curriculum. The findings of learning areas are critically important given the vision of the curriculum reform on nurturing every learner potential.

13.3.4.4 Pedagogical Approaches

Literature defines pedagogical approaches as instructional strategies and techniques of carrying out instruction in the delivery of curriculum content. In the Kenyan context, it has been noted that more often than not, teachers rely on the traditional approaches of teacher centred learning in their effort to cover the syllabi. Societal needs have evolved and so have learner needs. The

study, therefore, sought to find out the appropriate and relevant pedagogical approaches for the implementation of the secondary education curriculum.

The findings of the study reveal a desire for instruction that is more learner centred, approaches that are interactive and geared towards the acquisition of practical skills. All the categories of respondents in the study emphasized the need for experiential learning by advocating for activity based, project based and inquiry based learning methods. This persistent preoccupation with methods which in the respondents view, liberate the learner, is fuelled by the growing concern amongst Kenyans of the emergent skill gaps in the job market.. In order for the products of the Kenyan education system to be ‘work and life-ready’, Kenyans seem to be persuaded that a competency based curriculum is the answer.

The Ministry of Education, Science and Technologies’ (MoEST) clarion call has been for a skills oriented instruction as stipulated in Kenya Vision 2030. Vision 2030 defines the desirable skills to be acquired by learners thereby providing a rationale for the implementation of the relevant pedagogical approaches.

The skill gap is invariably attributed to an education system that is exam-oriented and promotes rote learning. The products of the system are considered half-baked and lacking vital life skills.

Parent: The 8:4:4 turned to be even more theoretical, its products are half baked, for life they cannot even repair a fence or even cut grass for the cow (**PA-FGD-NYANDA-S-NYA**)

It is the respondents opinion that the correlation between curriculum content and the realities of the learners’ lives can be enhanced through interactive and experiential approaches; discussions, experiments brainstorming, demonstrations, field trips, dramatization, debates, and projects. They were highly rated as preferred learning approaches in the study.

Review of related literature indicates that with the current clamour for 21st century skills, the instructional methods must be more learner-centred. This justifies the need expressed in the study for promotion of critical thinking, creativity, innovation, collaborative learning, problem solving and decision making skills. It is further supported by the views of cognitive constructivist theorists like J. Piaget and J. Dewey who posit that learners are not passive recipients of information but they actively construct their own understanding. Piaget et al advocate for experiential learning where learners are taught to solve real life problems.

Another finding concerns the time allocated to practical work vis –a-vis theory in the teaching and learning process. Instruction that focuses on skills requires sufficient amount of time allocated to the acquisition of skills. In the study respondents proposed that three quarters of instruction time be allocated to practical skills. According to the U.S Department of Education (2002), one of the major challenges of implementing Competency Based Curriculum (CBC) is that rules, regulations and time constraints may forbid experimentation, exploration and innovation. Another major challenge is ensuring that the competencies are both effective and consistent with the ultimate purpose.

Institutionalization of learner centred approaches is not a totally novel idea in the Kenyan context. Policy documents have articulated the need for a skills oriented education. The Task Force on Re-alignment of the Education Sector (2012) bespoke of too much focus on academics. This came in the wake of growing disenchantment with the 8-4-4 system whose initial aim was to equip learners with skills for self-reliance. Ong’ondo (2010) quoting KIE, 2002: viii observes that one of the aims of secondary education in Kenya is to ‘develop the intellectual ability for enquiry, interaction, critical thinking and rational judgment.’ The fact that it has not been totally achieved constitutes a gap which needs to be bridged. One of the sure ways of bridging the gap is by reforming teacher education.

The need for the reversal of the traditional classroom practices and integration of technology in classroom instruction was the third issue. An approach is as good as the implementer. The effective implementation of the proposed approaches will be determined by the teacher quality. Instinctively, the focus shifts to the question whether the current teaching force is well grounded in competency based methodologies. The answer may well be in the respondents views in the study. They said a reform in teacher education is required urgently.

ME: Reports in the media allege that while reforming the curriculum and or education structure, reforming teacher-learning process in Kenya is urgent...Our education system lacks about 100,000 teachers to effectively and efficiently manage the learning process. This goes up if we factor in those who should be removed from the system because they do not teach. (**Okwach Abagi in DN, 2016**)

It is the view of the researchers that attitude change is not only expected of the learners. A buy-in of the teachers on the expected reform changes is vital to the success of the entire process. David Tyack, Michael Kirst, and Elisabeth Hansot (1979), having reviewed curriculum reform efforts from 1840 to the present concluded that "reforms calling for new skills or added efforts on the part of existing staff" tended not to last. What the respondents in the study propose will require

added effort on the part of the teaching staff. The big question is; how will the buy-in of the teachers on the curriculum changes be executed? How will it be ensured teachers are empowered to adopt these approaches through a re-vamped pre-service curriculum and in-service courses?

While we may not predict accurately the degree of success of the curriculum change efforts, suffice it to say that enhancing teacher quality will play a pivotal role. The country should therefore endeavour to ensure continuous professional development through the newly mandated ESQAC. Respondents actually recommended that ESQAC should be more effective.

13.3.4.5 Teaching and Learning Resources

In this study, teaching and learning resources refers to any inputs that are used in the learning environment to effectively achieve the desired outcomes. These could be human, infrastructure, realia or financial resources. The study sought to find out the resources necessary for the implementation of the new curriculum and also their availability in schools.

The high levels of unavailability of facilities like art room (92%), music rooms (90.8), technical subjects (86.5%), and Home science room (84.8%) is evidence that these subjects are not given a lot of weight in the current curriculum. In the current policies, these subjects are optional and only few learners consider pursuing them. However, this is against the spirit of the competency based curriculum that emphasis on practical skills. This is a worrying factor because, for effective implementation of the curriculum, the facilities that allow experiential learning need to be availed. In essence, unavailability and inadequacy of essential resources imply a radical turnaround for implementation of any curriculum. Competency based curriculum is not spared either, with the quality of education in mind. As Ngware, Wamukuru and Odebero (2006) observes, quality and adequacy of resources such as physical facilities have a direct bearing on quality as they determine how effectively the curriculum is implemented. To these researchers, quality education cannot be achieved and sustained if the resources and facilities are not available in sufficient quality and quantity. The suggestion by most respondents that such resources should be availed in schools is a clear indication of the weight that the respondents place on technical subjects.

Other resources that the respondents expressed the need for were well-equipped libraries language and science laboratories, computers and computing devices, Internet and e-platforms; physical facilities like classrooms, fields, equipped laboratories, demonstration workshops, Information and Communication Technology (ICT) tools, Audio-visual aids, Digital materials, Open Educational Resources, Science kits, sports fields. All these are resources will have a bearing in developing diverse skills among the learners. These are resources necessary in Science, Technology and Innovations.

A wide variety of education researchers and economists agree that teachers make the most important in-school difference for student achievement (Berry, Smylie, & Fuller, 2008, p. 4). The findings indicated that the teachers as human resource were inadequate and in some cases incompetent. Others were said not to be serious with their work. This compromises the quality of education. The implication of these findings is that the issue of teacher training and deployment needs to be of immense concern to educational administrators, policy makers and teacher-preparation institutions. Given the high suggestion on the talents as one of the pathways, it therefore means that teachers should not only be trained on their teaching subjects but also on how to identify and nurture the talents. Continuous and regular in-service courses are necessary for the teachers who are already in service.

It was apparent that the utilization of finances in the institutions is paramount to the availability of resources. The inadequacy or total lack of resources is a problem that the respondents attributed to the mismanagement of the limited finances that institutions get. The issue of funding is in line with the findings of Ikoya (2008) who aver that many school heads, who are managing schools with inadequate facilities, complain of poor funding. Others talk of untimely release of funds but most view it as a problem of poor management of available resources because of existing dysfunctional school resource management policies and structures. In schools, particularly those without clear policy on management of physical facilities, the outcome of such huge investments hardly yield any profitable dividends to the schools. In such cases, most schools experience perennial shortage of school facilities, poor academic performance, high level of indiscipline and wastage. Lack of educational resources in some schools may not necessarily be due to inadequate fund, but to inefficient management of

available funds. All these depend on proper planning and the creativity of the school administrators.

Disparities in provision of resources between schools in the rural and urban settings emanated as an important concern among the respondents. The marginalized areas are said to be disadvantaged as far as resource allocation is concerned. Learning in these semi arid regions is further hampered by lack of teachers and lack of commitment from parents.

All agreed that fairness and equity in resource allocation to schools is critical as it affords every learner the same learning opportunity. The learners are then able to compete competitively on the same level in the job market.

13.3.4.6 Assessment

Learning outcomes are measured through assessment. The study sought to find out the forms of assessment which in the respondents view are appropriate for determining whether the set goals have been achieved.

The key findings were that formative assessment, in the form of continuous assessment tests, take precedence over summative evaluation mainly due to issues of credibility, competition and a general feeling that summative evaluation disadvantages and disenfranchises learners; summative evaluation and the consequent ranking of schools engenders competition and individualism; commercialization of assessment; need for new modes of assessment.

Kouwenhoven (2003) contends that the most significant impact on school curriculum since the 1960s has been the demand for assessed results. Kenyans echo this line of thought in the study as they sanctioned assessment. The respondents in particular argued that continuous assessment motivates learners, facilitates progressive assessment as opposed to a one-of assessment whose results may be affected by circumstantial interferences. Another plus in favour of continuous assessment is its flexibility, it can be administered regularly. According to Kellagan and Greaney (2001) regular, reliable and timely assessment is key to improving learning achievement.

Another argument brought forth by the respondents was that formative assessment is better adapted to assessing skills and abilities. They are considered a good tool for identification and

nurturing of talents. They are deemed appropriate for a more holistic assessment of learners' achievements.

The study highlighted the existing gap in assessment, that is, the apparent lack of appropriate tools to assess skills. The respondents noted that there should be standard continuous assessment measures which will focus on soft skills/life skills/social skills.

KI: I think we must develop a reasonable assessment tool that sometime should even be continuous because sometime you may not be able to evaluate skills that have been learned over long period of time in one instant, the competencies should be constantly evaluated and practiced given room to be summatively evaluated as well (**KI-SGKN NAI**)

Although the majority of the respondents rated continuous assessment highly on credibility a few dissenting voices raised the issue of subjectivity of the teachers performing the assessment. The issue of integrity was mostly directed to summative evaluation. These are high stakes examinations used for placement and advancement of learners to higher levels of education.

The first argument of the respondents against summative assessment was that it is too exam oriented. It is a narrative that Kenyans have been holding for some time now. Similar propositions can be found in the taskforce report (2012) and the Sessional Paper No. 2 of 2015 which also attest to the fact that there is too much emphasis on examination based certification at the end of each cycle of education. In tandem with the findings of this study, the Ministry of Education ,Science and technology's national education sector operational plan of 2015(pp. 64) categorically states that assessment should not be the driver of pedagogy. That is not its purpose.

Review of related literature on new trends in assessment show there are alternative assessment modes that focus on construction of knowledge rather than regurgitation of facts. These forms of assessment lay emphasis on thinking and collaborative skills. It is the researcher's view that assessment tools should be modeled along this line.

Disenchantment with the current national assessment mode was gauged in the light of the respondents' comments. A respondent in this study called for the abolition of ranking of schools for the simple reason that it intimidates learners and promotes individualism whereas we need cooperation and healthy competition.

Respondent: Stop child to child competition and ranking. We don't want to teach rivalry and individualism in Kenya, we want cooperation and friendship. Further, the respondent expressed the need to discontinue KCPE (**ASM-1S**).

Some respondents went as far as suggesting that the national examinations should be discontinued. At KCPE level the reason given is that it will enable a seamless transition from primary to secondary. In their view this is a way of affording opportunities for all and making sure no child is left behind. Only a minority proposed that KCSE be discontinued.

13.3.5 Tertiary Level Needs

13.3.5.1.1 Teacher Education

13.3.5.1.2 General Teacher Education Needs

Teacher education in this study cover institutions that train teachers that teach at all levels of learning apart from the universities. Societal needs are considered to be what the people who constitute the population of a country need for their lives to be productive and happy in the local context. This study sought to find out the needs of teacher education.

The findings indicate that the teacher education is having inadequate teachers, who lack the 21st century skills and there is need for a compressive in-serve programme to improve teachers' skills,

KI: The role of the teacher is so central and focuses to be given on the 21st century teacher we need. **(KI-FAWE-NAI)**

KI: Take these teachers for refresher courses at the end of the day **(KI- CDE- LAI)**

This concurs with Kiptoon, (1996) that there is concern that quality of teachers produced today is wanting .This also concur with sessional paper No 1 of 2015 and Kenya vision 2030 that there is need to review PTE curriculum with a view of making it globally competitive. This implies there is need for frequent in serving of teachers to embrace them with modern teaching approaches.

These findings also concur with MOE strategic plan 2006-2011(2006,2013) that teacher education should develop comprehensive training Programme for in servicing primary and secondary school teachers and institutionalize continuous in service training so as to upgrade teachers skills especially for those trained before the current reforms began .It's also in line with the recommendations made in the Sessional paper No. 1 of 2005 on A Policy Framework for Education, Training and Research, a breakthrough towards industrialization can only be achieved through application of technology. In addition it concurs with sessional paper NO 1 of 2012 on Kenya vision 2030 that Kenya needs to create a globally competitive and adaptive human

resource base to meet the requirements of a rapidly industrializing economy which will be done through life long training and education.

The desire to have in-service of teachers is similar to what happens in Uganda .In a World Bank documentary (Aidan Mulkeen and Danddan Chen, 2008) it was reported that Uganda provides in-service training, continuous professional programmes in instructional areas.

The finding indicates that there is need for innovative approaches in the pedagogy to enable learners to cope with dynamics of 21st century. This finding concurs with vision 2030 which places great emphasis on the link between education and the labour market, the need to create entrepreneurial skills and competences. The findings also concur with The NESP (2015) that makes it very clear that the curriculum is expected to empower the citizens with necessary knowledge and competencies to realize the national developmental goals.

In addition the findings indicate that basic qualifications for training of the primary and ECD teacher should be raised .This will attract teachers with very good qualifications who are able to deliver effectively and change name of teaching profession, not to be referred as the profession for these who didn't perform well in exams, and upgrade P1 certificate to diploma, because the teachers are not well prepared and lack modern technological skills,

Student: P1 certificate should be done away with, upgrade to Diploma. The P1 certificate costs 160 KSH while the diploma is less yet it's of higher value. (CS -FGD –TTCPKIL- KIL)

Student: The course should be elevated to diploma and duration to be increased to 3 years. (CS - FGD-TTCPMAC-MAC)

Upgrading of P1 certificate to diploma is in line with sessional paper NO 1 of 2005 and Kenya vision 2030 which has a strategy to develop new teacher training policy based on the current and projected needs whose long term is to have diploma as the lowest level for primary school teachers. This is also similar to teacher education in Singapore where the Primary teacher Education and Training is a degree Programme which was introduced in 1991(Lee Sing Kongel, 2008).

13.3.5.1.3 Teacher Education Competencies

Competency is a set of defined behaviors that provide a structured guide enabling the identification, evaluation and development of the behaviors in an individual, Competencies are outcomes that learners should have acquired by the end of their general education in order to

succeed in academic, in their self-development, to acquire employment and be successful in their jobs. Teachers need to be equipped with some competencies to teach effectively. This study sought to find out the competencies that teachers should acquired in teacher education. The competences identified for teacher education in this study are presented in Table 12.6.2 and Table 12.6.3

The findings indicate that respondents advocated for development of skills that enhance life in the 21st century, they want to be all round teachers who are embraced with skills in Creativity, innovation, entrepreneurship, analysis, research , decision making and critical thinking and problem solving skills and computer skills .

KI: Soft skills; 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness, and Teacher professionalization programmes through mentorship. (ME-CEMASTE).

Student: Being a teacher because this is a teacher training institution, I want to leave here as an all rounded person. He who can do everything...I should be the one who can deliver what I have learned and impact the values I have learned here in college to the young ones. Because I will deal more with the younger generation (SL- TTCP- MIG- MIG)

This implies that there is need for competencies in teacher education that are relevant to the needs of the modern society in the curriculum. These findings concur with vision 2030 that places great emphasis on the link between education and the labour market and, the need to create entrepreneurial skills and competences in human man power. It also concurs with sessional paper NO 1 of 2012 on Kenya vision 2030 which proposes intensified application of technology, innovation, science and research. The findings are in line with the NESP (2015) that makes it very clear that the curriculum is expected to empower the citizens with necessary knowledge and competencies to realize the national developmental goals.

This further concurs with UNESCO, 2000, 4 &14; Downs Perry, 1994, 97 that curriculum must be broadened beyond traditional knowledge-based education to facilitate the development of students' ability to think and act creatively and morally (and to successfully practice competencies (such as problem-solving, decision-making and negotiating) considered necessary for life in the 21st century (Dimmock & Walker, 1998, 4; Tien, Ven & Chou, 2003. Further the findings concur with UNESCO(2001) that teacher education should provide reflection,

assimilation, of new ideas ,develop capability for self-directed learning and the ability to think ,, be self-critical, creativity and innovation.

The findings agree with Republic of Kenya (2005) that education must nurture the entrepreneur skills, creativity skills and skills needed for interaction and harmonious relationships. The findings further concur with what happened in countries like Singapore and Malaysia with high technological development and have put great emphasis on mathematics and sciences as a foundational requirement for their technological advancement. The Malaysian education system, like others around the world, has emphasized the development of strong content knowledge in subjects such as science, mathematics, and language (Government of Malaysia, 2012)

The findings are also in line with studies carried out in Singapore (Soland et al., 2013: Voogt& Roblin, 2012) that emphasize on the features of their framework for 21st century which include creative and critical thinking, communication and collaboration, and social and cultural skills which were core values that the Singapore education system hoped to cultivate in all its students.

Likewise findings concur with Soland et al. (2013) and Voogt& Roblin (2012) who pointed out that in Japan, as in Singapore, the competencies and pedagogical moves associated with 21st Century competencies are seen as a central means of using education to ensure sustained economic prosperity in the years to come.

13.3.5.1.4 Content/Learning areas

The school curriculum defines learning areas as content to be taught and learned, by whom, when and where (UNESCO- IBE Korea – 2015). The study sought to find out the content that needs to be taught in TTC. The learning areas identified in this study for teacher education are presented in Table 12.6.4

The findings indicate that students want to learn a wide variety of things that are needed by the job market such as entrepreneurial ship. They want practical skills rather than academics that would enable them to engage in self-employment rather than became teachers since there are no job opportunities

Student: like introduction to business, entrepreneurship, I think it would be better as we wait for employed by the government. The schools are becoming at least they are creasing the private schools but still they are under paid as you can see if somebody had a business idea as he is awaiting this time, this period, this10

years in future I believe it might go up to 20 years to be employed we need to be diversified (**CSL – TTCP- BAR -BAR**)

They also want to be taught values that will enable them, live a health life and life skills. It implies that identified content areas must be included in the curriculum. The findings concur with Article 10 of the Constitution (GoK, 2010) which contains the national values and principles of governance that to be upheld by all Kenyans. It also concurs with Vision 2030 which indicates that Kenya's journey towards widespread prosperity involves building a just and cohesive society that enjoys equitable development in a clean and secure environment. The Sessional paper No. 2 of 2015 further indicates that the curriculum will provide knowledge skills and values, and competencies to enable learners to move seamlessly from the education system to either further education or to technical/vocational areas.

The findings also concurs with vision 2030 that lays importance on Agriculture as a major contributor to the country's GDP and lays emphasis on reading, quantitative reasoning and expository skills (GoK, 2007). The Vision further echoes the importance of mainstreaming science, technology, entrepreneurial ship and innovation in the school curriculum (Gok, 2007).Further the findings are similar to those of (GOK, 2007).similarly the Sessional paper No. 1 of 2005 on A Policy Framework for Education, Training and Research, indicates that a breakthrough towards industrialization can only be achieved through application of technology.

Learners added that they desire to learn foreign languages to enable them be competitive globally and be in a position to work in any country, This finding concur with the Sessional paper no. 2 of 2015 which expounds on the need to teach foreign language in our system of education for global competitiveness. It is also in line with KICD (2013) study on needs assessment on Chinese language which recommended Chinese language be introduced in schools

13.3.5. 1.5 Teaching and Learning Resources

Resources enhance learning, make it enjoyable and enhance understanding. This study sought to find out the resources that are needed in teacher education. An observation of the resource available in the learning intuitions was conducted, by the researchers. The findings show that

teacher education institutions do not have adequate resources and the students proposed to be supported by provision of adequate resources

Student: The classroom, the accommodation sites, food and so many other things require us to have more equipment like educational materials because it is the government ids the one that set the exam and regulates the curriculum so they know what we need SL-. **TTCP - MIG – MGR)**

Student: okay...basically we need more text books and some facilities like the library need to be bigger to accommodate number of students .the books are also old versions and we need new versions...equip the students with visual impairment with better Braille machines ...they also need enough interpreters. **(CSL-TTCP-MAC -MAC)**

This implies that some learners do not benefit from the resources hence a hindrance to effective teaching and learning which affects performance in the assessment. There is need for print materials non print and modern equipment like computers and laptops in TTC. The laptops would make student search for information in internet easily and aid in doing their assignments. When adequate resources are provided then implementation of the curriculum would be effective hence good performance. Provision of sports resources would ensure that learners would engage in extra curriculum activities hence promotion of a well-rounded student . In essence, unavailability and inadequacy of essential resources imply a radical turnaround for implementation of any curriculum. Competency based curriculum is not spared either, with the quality of education in mind. As Ngware, Wamukuru and Odebero (2006) observes, quality and adequacy of resources such as physical facilities have a direct bearing on quality as they determine how effectively the curriculum is implemented.

The findings concur with KIE (2010) that resources in DTE were generally available but inadequate and that ICT facilities and lectures were inadequate in teacher education institutions .The findings agree with McAliney (2009) who indicated that for effective teaching and learning, quality human and physical resources are required. The findings are in line with a study by Bauer, Brust and Hubbert (2002) which found out that investment in physical resources contribute directly to academic learning environment. He indicated that the other resources that may influence learning environment are well stocked libraries, well supplied and maintained classrooms with laboratories including computer labs and well maintained grounds. The findings concur with Deolika (1997), that inadequacy of school equipment is one of the most important factors adversely affecting the quality of education in Kenya.

13.3.5.1.6 Pedagogical Approaches

Pedagogical approaches are instructional strategies and techniques of carrying out instruction in the delivery of curriculum content. This study sought to find out the Pedagogical approaches that should be used in teacher education. The findings can be referred to in Table 12.6.5, 12.6.6, 12.6.7 and 12.6.8

The findings indicate that principles and lecturers want experiential learning, role play lecture method used in teaching

KI: teachers to use as many methodologies in their teaching. Not only lecturing and talking the whole day. They should understand their learners, they have different abilities we teach them to cover the syllabus so that their head teachers can commend them, and we are touching only a few children in a class, when this happens out of very many others. We are running so fast to cover the syllabus (KI CEE KIL)

Other methods identified were discussion groups, Laboratory demonstrations, experiments, research projects, peer teaching and field trip.

ME: Adopt child-centered approaches and pedagogies which promote critical thinking, reasoning, reflection, creativity and problem solving. Re-introduce and emphasize philosophy of education and other educational foundations courses in teachers training colleges for every subject there must be a competency, value and attitude to be acquired at the end of every course. This will make it easy to domesticate the skills. Facilitate and encourage research in teacher education issue (**ME-KCCB-RI**)

The students said there is need for subjects to be taught in both theory and practical

Student: most of the learning offered is in theory where by home science is a practical subject but given in theory only....so you find that when you want to go and implement on the field you find that you don't have that practical part. (**CS - FGD - TTCPCBAR - BAR**)

These findings shows that a wide variety of teaching approaches is needed in the teacher training colleges which should be learner centered which promote critical thinking, reasoning, reflection, creativity and problem solving. This will enable teacher trainees to be exposed to them and learn how to use them, so that they can be able to utilize them while they teach the learners. This will also make the learning interesting and interactive and not teacher center hence improve understanding and performance. Learners want a friendlier teaching approach.

This implies that the practical approaches need to be included in the curriculum reform which is learner centered. This finding concurs with report on teacher preparation and continuing professional development in Kenya (Bunyi w and Wangai 2013) who found that teacher training

used a combination of teaching approaches like lecture, and learner centered approaches need to be used. The findings are similar with KIE (2013), which indicates that for effective teaching to take place, a good method should be adopted by a teacher, and support that learner centered methods that enhance participation in the learning process and improve individual concentration

13.3.5.1.7 Talents Identification and Nurturing

Teachers need to be aware of the ways of identification of talents among the students and how they can be nurtured. This study sought to find out the talents learners have, their identification and how they can be nurtured. The findings indicate that respondents identified the following talents, music, reading, drawing, Writing, football swimming, drumming, art and craft

Student: if the child is talented in the drum thing we ensure that he or she performs to their level by establishing some talent academies (CSL TTP BAR BAR)

Findings on ways of nurturing talents can be referred to Table 12.6.9. The TTC principals and tutors rated highly the following strategies of nurturing learners' potential and talents; games and sports, curriculum enrichment, clubs and societies, cooperative learning, competition among and academic conference, ability grouping and mentorship. These findings are similar to those of college student, college student leaders, key informants and memoranda who found that the learners can nurture their talents by exposing them to activities where talents can be identified and provide materials e.g. Competing in Music Festivals and drama outside the school given adequate time for games and academic time, establishment of talent academies, competitions and rewards, set up recreational centers

Student: If the child is talented in the drum thing we ensure that he or she performs to their level by establishing some talent academies (CSL TTP BAR BAR)

Student: Maybe if you are talented in creative arts, that are the art and craft, I think the government should come up with a process that they make room for those who are talented. They go and participate in that drawing...and after each drawing (competition), the participants are rewarded...maybe in terms of money so that they can boost themselves. (CS FGD –TTCP – MAA – KAJ)

The findings indicate that there is a wide variety of talents in the students that need to be nurtured, which may benefit the learners after completion of education if well developed and earn a living from them. It implies there is need to have the talents included in teacher education curriculum. The findings concur with Kenya Vision 2030 that calls for curriculum that develop

learners' entrepreneurial skills, competencies and talents, the vision further adds that the government will identify and nurture talents, especially among the youth and support commercialization of talents in order to raise personal incomes and widen employment opportunities and provide the necessary infrastructure at national and county levels to nurture talents in sports and entertainment. Additionally, Sessional paper NO 2 of 2015 expounds on the need to develop and nurture talents for global competitiveness, while the Taskforce Report of 2010 mentions identification and advancement of talents among core curriculum competencies.

The findings are in line with the curriculum policy (2015) which indicates that since the curriculum as it is does not give linkage of talents to development of careers, further education or training, there is need to address the aspects of identifying, nurturing and developing talents among learners. The findings are similar with the ministry of education science and technology strategic plan 2013-2017 that advocates for Sports and recreation facilities that provide the youth with an opportunity to socialize and spend their time productively, strengthening and developing their character and talents

13.3.5.1.8 Assessment

Assessment is a means of measuring learning outcomes. In education context assessment is the process of ascertaining whether students have attained curricula goals. This study sought to find out the modes of assessments that can be used in Teacher education. It was found that a wide variety of ways of measuring learner's achievement other than paper exams be utilized in assessment of teachers. Teacher education assessment should be practical coupled with, theory assessment in writing, oral and include project, continuously during the learning process

Student: According to me, student teachers should be assessed in Practical teaching because this is what matters most in their course... theory assessment through written test, oral test and projects continuously during the learning process. (CS –FGD – TTCPMAC - MAC)

The findings further indicated that we do doing away with KNEC PTE exams. The study advocate for continuous assessment tests (CATs) at the end of every topic and eventually the marks from these CATs are compiled to make an average grade at the end of the year

Student: This is a tertiary institution- we should be tested immediately after every topic. The tests cover many topics. We need to be tested at the end of topic, and if you fail you resist immediately rather than have a referral at end of two years. I think we should do away with final PTE exam teachers can get the average of tests done and get a final grade. Thus CAT's can be used for grading students. (CS - FGD - TTCPKIL –

It therefore implies that assessment methods need to be changed to ensure that the learners do not have a heavy load to cover in the exams at the end of their two year training. Assessment should not only test the cognitive domain but also expose the learners to a lot of practical work. Assessment should not only be based on paper and pen because it is too narrow but be based on practical work. These findings concur with Heneman and Milanowski (2003) who argued that teacher evaluation system based on teacher competency framework is more valid. The desire for frequent assessment is in line with Kellagan and Greaney (2001) who advocated for regular, reliable and timely assessment as key to improving learning achievement and should therefore be a fundamental component of an effective teaching and learning process.

The findings are also in line with a study carried out by UNESCO which established that in formative assessment the teacher is able to understand how students are leaning, to identify problems the students may face in the learning process and to use feedback to ensure that all have the opportunity to learn (UNESC, IBE No. 15 – 2015)

The need to do away with paper based exams concurs with Grubb and Cox (2005) in their study who concluded that traditional paper based assessment teaching and learning practices are not relevant to the needs of the learners.

The need to have practical exams is similar to what happens in Rwanda, assessment focuses both on knowledge and understanding, aptitude and practical tests, attitudes and values (behavior) and generic competencies guided by specific indicators (Republic of Rwanda, 2015). Similarly the Kenya vision 2030 second medium term plan (2013) advocates for promotion of internship and industrial attachment programmes for students from all training institutions of gain practical skills relevant to the needs of the society. However it doesn't mention how it will be assessed .The idea of doing away with the national exams concurs with what is done in South Korea where there are no National assessments, though selected sample schools are assessed at grade 3 and Form 1 to ensure standards of teaching and learning are maintained (KICE, 2008).

13.3.5.1.9 Contemporary and Crosscutting Issues

Crosscutting issues are commonly defined as areas which, by their very nature, have a strong impact on psychosocial behavior of learners. These are issues that touch a number of different aspects of the crosscutting issues that are in our society that need to be included in the teacher education curriculum. The findings can be referred to in Table 12.6.11. The crosscutting issues mentioned by the respondents are technology, integrity, financial literacy, security and safety, health hygiene, gender issues, disabilities, environment, child rights, corruption, drug and substance abuse, HIV and AIDS, culture, early pregnancies, female genital mutilation

Student: Corruption, HIV & AIDS and it be as open as possible. Sexuality education and adolescence be given as early as from class 3. Safety, terrorism problems, substance and drug abuse, relationships (CS - FGD –TTCP –THO –KIA)

Student: When we talk about insecurity we have to let learners how to teach them what causes insecurity in our country and in case you are attacked how can you evade from such a scene (CSL – TTCP – BAR - BAR).

These findings indicate that there are very many issues that affect the learner in school which may affect the performance. There for the emerging issues need to be included in the curriculum to make the teachers aware of them so that they can enlighten their learner's on how to deal with them.

These crosscutting issues mentioned are similar with those in report on assessment of mainstreaming of emerging issues in primary and secondary schools curriculum (KICD 2014) and the Sessional paper no 2 of 2015, which emphasizes that learners have issues ranging from sexuality, drug and substance abuse and media influence in these times of technological advancement, and political and social scenarios that influence their lives (Republic of Kenya, 2015).

This also concurs with the Constitution of Kenya in chapters 2 and 6 that deal with principles of governance, leadership and integrity; chapter 4 deals with bills of rights which include child rights; part 2 deals with environment; part 3 deals with specific application of rights like children rights; chapter 5 part 2 deals with environment and natural resources; chapter 12 deals with national security (GoK 2010). These emerging issues are similar to those found in the ministry of education science and technology strategic work plan 2013-2017 (MoE 2013).

In addition sessional paper NO 1 of 2012 on Kenya vision 2030 mentions the overall ambition for security under vision 2030 is a society free from danger and fear. Further the Kenya vision 2030 mention culture will be promoted in order to promote employment.

The issues of gender are included in the new constitution of Kenya 2010 and vision 2030. Similarly MOEST strategic plan 2013-2017 indicates the emerging issues that affect education, science and technology include HIV and AIDS; poverty; hunger; conflict and emergencies; guidance and counseling; integration of national social values, gender and youth

13.3.5.2 TVET Needs

13.3.5.2.1 General TVET Needs

According to Eidlin (1995), the term need is defined as the gap between a current and a desired state of being. He further argues that needs can be objective (measured) or subjective (perceived) and physical or psychological. Societal considerations are important in guiding the way content of curricula should be designed to inspire and enrich people's lives with the knowledge, skills and attitudes most helpful to them and their country (KIE, 2002).

From the qualitative data, the need for technological development, entrepreneurship, economic and industrial development came out strongly. This is in line with the ratings of TVET lecturers and principals. Lecturers at the Technical Training Institutes rated technological development highest at 94.80% followed by patriotism at 94.13%.

This is in line with Kenya Vision 2030 which dictates that by 2030 the country should mainstream Science, Technology and Innovation (STI) into the curriculum (Vok, 2007). TVET principals on the other hand emphasized on the need for economic and industrial development and gave it a rating of 97.40% followed by technological development at 95.30% (see table 12.6.12). The rating given to technological development by the principals of TVET and lecturers shows that the two groups of respondents are in agreement on the importance of technology in the modern world and hence the need to include it in the TVET curriculum. In line with this, some respondents articulated the need for inclusion of technology and entrepreneurship at TVET level of education. The following is an excerpt from one of the respondents.

Student: Due to the technology we are living with right now it is better to engage ourselves in Form one. Because the generations we are living with in like my little sister she knows everything in computer. Let us start it at class 6, with packages. Then computer studies when you go to secondary school. In colleges you do programming and packaging. All the levels should be provided with the adequate computers (**CS – FGD – ISTP - NIST - NYA**).

KI: The entrepreneurship component leaves a big gap. The element of ICT has not been incorporated in our TVET. If we could have ICT empowered students then they can be able to use ICT to look for new designs or marketing their work (**KI-CEE KWA**).

Furthermore, policy documents have articulated the direction the country needs to take in order to propel its development agenda. According to the recommendations made in the Sessional paper No. 1 of 2005 on a Policy Framework for Education, Training and Research, a breakthrough towards industrialization can only be achieved through application of technology.

13.3.5.2.2 TVET Competencies

According to Weddel (2006), competences refer to a combination of theoretical and practical knowledge, cognitive skills, values and behavior used to improve performance; or a description of skills, knowledge, attitudes and behaviors required for effective performance of a real-world task or activity. They are outcomes that learners should have acquired by the end of their general education in order to succeed in academic, in their self-development, to acquire employment and be successful in their jobs, and inclusion in a knowledge society. It is a combination of theoretical and practical knowledge, cognitive skills, values and behavior used to improve performance. They include all the related knowledge, skills, abilities and attributes that form a person's job. A competency based curriculum encourages mastery of the relevant content knowledge and of the associated skills; both cognitive and practical and includes also internalization by the learner of the associated values (UNESCO-IBE – 2015).

Lecturers in TVETs indicated that there is need for management skills to be incorporated in the TVET curriculum as a competence at 95.80%. In addition to this, mentoring and collaboration were highly rated by the lecturers and principals with both having ratings of 100%. By extension, this means that TVET curriculum should endeavor to equip the learners with competencies like mentoring, collaboration and management skills which form a certain proportion of the 21st century skills.

Their views are supported by Partnership for 21st Century Skills (2005) policy guidelines which stipulate that to help learners achieve proficiency in 21st century skills, teachers and administrators need education support systems that strengthen their instructional, leadership and management capacity. In addition to this, TVET learners should have entrepreneurial skills which will enable them create jobs for themselves and others. They should also have positive attitude towards work. This is an excerpt from one of the respondents.

KI: At technical level they need to be self-reliant by the time they complete their courses they need to be self-reliance or employability ...being able deliver and give, they should also have positive attitudes towards work ...they should also have entrepreneur skills because most of them should not expect to be employed but walk out and be entrepreneurs whereby they can earn and employ others. Again one other thing is innovation and creativity. (KI-CBE-KIT)

KI: Have adequate literacy and numeracy, should be employers not job seekers. Should address issues in the village. Greatest concentration should be put in TVET. Focus on self-reliance. (KI-FAWE-NAI)

The outcome of these findings is inline the global trends which require that any education system should aspire to equip its graduates with the 21st Century skills as pointed out in the Partnership for 21st Century Skills (2005) policy guidelines that, to be educated today requires mastery of core subjects, 21st century themes and 21st century skills. The findings concur with studies carried out in Singapore (Soland et al., 2013: Voogt& Roblin, 2012) that emphasize on the features of their framework for 21st century which include creative and critical thinking, communication and collaboration, and social and cultural skills which were core values that the Singapore education system hoped to cultivate in all its students.

Likewise findings agree with Soland et al. (2013) and Voogt& Roblin (2012) who pointed out that in Japan, as in Singapore, the competencies and pedagogical moves associated with 21st Century competencies are seen as a central means of using education to ensure sustained economic prosperity in the years to come.

The findings are in line with study carried out in Korea by IBE-UNESCO (2012) which revealed that a CBE is not in conflict with the existing curriculum and that specific subjects continue to provide a critical path in promoting acquisition of key competencies such as communication and efficient management.

The findings concur with a survey conducted in Ghana by COTVET (2009) that affirmed that Competency Based Training is an industry and demand driven education and training

programme, its products have a high demand on the job market. The findings are similar with Rychen and Salganik (2001) that a creative person should have divergent thinking, problem solving skills, originality, and ability to see or create new values. Considering the convergence on the need to nurture creativity in the curriculum and the literature encountered, constructs of problem solving, divergent thinking, research and innovation will find their place in the content of the proposed curriculum.

13.3.5.2.3 TVET Talent Identification and Development

The findings indicated that there is need for establishment of special schools for the gifted and talented, enriching the curriculum and promoting games and sports for easier identification and nurturing of talents. Some of the talents identified to be nurtured include performing arts, sports, pottery, fine arts, music and drama among others. This is in line with the curriculum policy (2015) indicates that since the curriculum as it is does not give linkage of talents to development of careers, further education or training, there is need to address the aspects of identifying, nurturing and developing talents among learners. Moreover, Kenya Vision 2030 emphasizes on the need to have a curriculum that develops learners' entrepreneurial skills, competencies and talents. There is need to address the aspects of identifying, nurturing and developing talents among learners at tertiary level. It was though pointed out by some learners that there is need to have their talents identified at the secondary level before they get to TVET Institutions.

Student: They should specify their talents in high school so that when they come out of the school they are useful. (STVET- TVETPRTI- UG)

Learners from a special institute for the blind wanted to be taught subjects that make them identify their talents such as music and physical education.

Students: Let me say, for example in the curriculum if there can be physical lesson, such subjects can help in nurturing the talents. (STVET- TVETPMAC- MAC)

Learners need to be presented with a wide variety of platforms or forums which can be used for identification of talents. Strategies which were suggested by respondents for the purposes of nurturing talents include establishment of talent academies, provision of adequate resources in institutions, creation of incubation centers for innovations, engaging learners in co-curricular activities such as science fairs, handcrafts exhibitions, IT demonstrations, sports, games, and drama and music festivals.

The findings concur with Sessional paper NO 2 of 2015 that expounds on the need to develop and nurture talents for global competitiveness, while the Taskforce Report of 2010 mentions identification and advancement of talents among core curriculum competencies. The findings are in line with the curriculum policy (2015) which indicates that since the curriculum as it is does not give linkage of talents to development of careers, further education or training, there is need to address the aspects of identifying, nurturing and developing talents among learners. The findings are similar with the ministry of education science and technology strategic plan 2013-2017 that advocates for Sports and recreation facilities that provide the youth with an opportunity to socialize and spend their time productively, strengthening and developing their character and talents

13.3.5.2.4 TVET Content / Learning Areas

Learning area refers to the content to be taught and learned by the learners. The curriculum seeks to encompass the dynamics of the development of knowledge and various discipline prevailing in the society and engage in periods of profound changes that modify the needs of learners, both for their personal performances and in the labor market as well as for their citizenship (IBE No 15, 2015).

On the issue of content areas, some learners suggested the need for courses like cattle rearing, pastoralism, ICT, dress making, entrepreneurship, tourism, masonry, marketing and entrepreneurship at the TVET level. On the other hand, TVET principals and lecturers indicated the need of including Design to Art and the two groups rated Design at 94.80% and 93.00% respectively. For TVET content /learning areas refer to Table 12.6.14. The education systems in the world are laying more emphasis on development of strong content knowledge in subjects such as sciences, mathematics, and languages (Government of Malaysia 2012).

The findings further concur with what happened in countries like Singapore and Malaysia with high technological development and have put great emphasis on mathematics and sciences as a foundational requirement for their technological advancement. The Malaysian education system, like others around the world, has emphasized the development of strong content knowledge in subjects such as science, mathematics, and language (Government of Malaysia, 2012)

The findings are also in line with Similar studies carried out in Singapore (Soland et al., 2013: Voogt& Roblin, 2012), which indicate that emphasize on the features of their framework for 21st century include creative and critical thinking, communication and collaboration, and social and cultural skills which were core values that the Singapore education system hoped to cultivate in all its students.

Likewise findings concur with Soland et al. (2013) and Voogt& Roblin (2012) who pointed out that in Japan, as in Singapore, the competencies and pedagogical moves associated with 21st Century competencies are seen as a central means of using education to ensure sustained economic prosperity in the years to come

It should also be noted that Vision 2030 puts emphasis on the importance of Agriculture, financial literacy and entrepreneurship as well as mainstreaming of science, technology and innovation in the school curriculum (Gok, 2007).

Besides this, it should also be noted that there is need for localized courses like tourism. Some respondents indicated that there is need for customized professional courses in technical institutions. The excerpt below articulates this.

Parent: Courses in Ukunda Polytechnic should be those courses of the needs of the local people in Kwale or Ukunda ... Kwale is a tourist place, so courses on tourism should be taught... The whole of Coast Province has no college on catering yet Coast depends on **tourism. (PA FGD TVETP UKU KWA)**

Student: In colleges you do programming and packaging. All the levels should be provided with the adequate computers (CS – FGD – ISTP - NIST - NYA).

Some respondents were of the opinion that skills like cattle rearing, pastoralism, ICT, masonry courses, marketing and entrepreneurship be taught at TVET level.

KI: At TVET the learners should be taught skills like cattle rearing, pastoralism and entrepreneurship. **(KI-TCD-GAR)**

KI: The element of ICT has not been incorporated in TIVET. If we could have ICT empowered students then they can be able to use ICT to look for new designs of marketing their work. **(KI-CEE-KWA)**

These findings concur with vision 2030 that places great emphasis on the link between education and the labour market and, the need to create entrepreneurial skills and competences in human man power. It also concurs with sessional paper NO 1 of 2012 on Kenya vision 2030 which proposes intensified application of technology, innovation, science and research. The findings

are in line with the NESP (2015) that makes it very clear that the curriculum is expected to empower the citizens with necessary knowledge and competencies to realize the national developmental goals.

13.3.5.2.5 TVET Pedagogical Approaches

Pedagogy as a discipline deals with the theory and practice of education. There are various approaches that are used in teaching and learning.

From the findings of this study, it is important to consider the use of 21st century approaches while delivering the competence based curriculum. Discussion and brainstorming are some of the 21st Century learning approaches which were given high ratings by the respondents. Other pedagogical approaches which were highly preferred by the respondents include experimentation, demonstration method, experiential learning and project based learning.

The concept of 21st century learning approaches might be new in Kenya but in the developed countries it is not new. Teachers in this era need to be transformed into facilitators and mentors and their role will also change such that they will assume the role of creating a conducive environment for acquisition of knowledge, skills and attitudes to take place. Respondents indicated that learning should be interactive and that learners should be allowed to apply what they have learned. At the same time they were strongly opposed to the direct methods of teaching like lecture method.

KI: So there is need for strong interaction between the teacher and the students opposed to increased kind of lecture format of training and there must be a lot of practical work so that if for example, you are a journalist and you have been trained on feature writing the next thing that should happen is that you should be let out to go and write a feature several of them. **(KI-CEO-MCK-NAI)**

This implies that the practical approaches need to be included in the curriculum reform which is learner centered. The findings are similar with KIE (2013), which indicates that for effective teaching to take place, a good method should be adopted by a teacher, and support that learner centered methods that enhance participation in the learning process and improve individual concentration. Globally, emphasis is being put on the use of 21st Century approaches towards teaching and learning. The findings are similar to Republic Polytechnic (2016) which indicates that the 21st century approaches are based on the ideal of learning by doing which in recent decades is considered by many to be the way forward for a progressive education system. The

findings also concur with Ongondo (2010) that learning through collaboration is increasingly gaining support as a learning approach.

13.3.5.2.6 TVET Teaching and Learning Resources

The successful implementation of a curriculum requires the use of a variety of resources that enable the student to learn through a rich and varied selection of instructional materials. Resources enhance learning, make it enjoyable and enhance understanding (Clay, 2016). This study sought to find out the resources that are needed in TVET institutions. An observation on resources available was conducted in each institution and it was noted that technical institutions are ill equipped in terms of teaching and learning resources.

The findings show that art rooms, music rooms, technical subjects' rooms, home science rooms and science laboratories were mostly missing and the ratings on their unavailability were 92.00%, 90.80%, 86.50%, 84.80 and 63.00% respectively and this directly affects the instructional process. One of the TVET learners articulated the importance of instructional resources his words are captured in the following excerpt.

KI: You may need very good library, you need modern facility computers, for example if you are in media you need proper editing suites, you need ...studios, you know you need cameras you need ...still cameras, you need video cameras, and then you need ...Proper skills in terms of use of computers and designing desktop kind of skills you know so that people can be able to do desktop publishing and all that and ... more importantly also you need some better environment for learning with ample space well aerated, clean space, isolated from the pubs, the markets, **(KI-CEO-MCK-NAI)**

This finding agrees with an observation made by Deolika (1997) where he points out that inadequacy of school equipment is one of the most important factors adversely affecting the quality of education in Kenya. The findings agree with McAliney (2009) who indicated that for effective teaching and learning, quality human and physical resources are required.

The findings are in line with a study by Bauer, Brust and Hubbert (2002) which found out that investment in physical resources contribute directly to academic learning environment. He indicated that the other resources that may influence learning environment are well stocked libraries, well supplied and maintained classrooms with laboratories including computer labs and well maintained grounds.

13.3.5.2.7 TVET Assessment

Marion *et.al* (2014) define assessment as process that involves establishing goals for student learning, gathering qualitative and quantitative evidence for how well learners meet those goals and using the information to improve.

This study sought to find out the modes of assessment that can be used in TVET institutions. From the findings of this study, both TVET lecturers and principals preferred the use of formative assessment to summative assessment. TVET principals rated continuous assessment highest at 97.80% followed by Project work at 94.80%. However the students said the CATs should run across all years with the final marks contributing to final grade which will lead to elimination of exam cheating in KNEC exams and loss of marks due to irregularities. The following excerpts are in support of this.

SL: CAT or the general exams to be consider what the colleges are learning so that exams don't give you a hard time and you may have the issue of mwakenya (**SL TTIP BUM BUS**)

The emphasis put on practical assessment implies that assessment methods need not only test the cognitive domain but also expose the learners to a lot of practical work. Assessment should not only be based on paper and pen because it is too narrow but be based on practical work. The desire for formative assessment is in line with Kellagan and Greaney (2001) who advocated for regular, reliable and timely assessment as key to improving learning achievement and should therefore be a fundamental component of an effective teaching and learning process.

The need to have practical exams is similar to what happens in Rwanda, assessment focuses both on knowledge and understanding, aptitude and practical tests, attitudes and values (behavior) and generic competencies guided by specific indicators (Republic of Rwanda, 2015).

13.3.5.2 .8 TVET Crosscutting Issues

Crosscutting issues are areas which by their very nature have a strong impact on psychosocial behavior of learners. These are issues that touch a number of different aspects of the society and affect learners at all levels. According to Partnership for 21st Century Skills (2005), both learners and educators need learning environments that are conducive so as to realize good educational outcomes.

This study sought to find out the crosscutting issues that are in our society that need to be included in the TVET curriculum. Some of the issues which respondents thought should be

addressed include gender, insecurity, corruption, theft, tribalism, pollution, female genital mutilation, corruption, pornography, prostitution, career counseling, technology, drug and substance abuse. The following excerpts bring out the need of including these issues in the TVET curriculum.

Student: .Students should be sensitized on the negative effects of drugs since this has been a challenge to the youths of Kenya (CS - FGD –TTCP - KAG - NYE).

Student: Corruption, HIV & AIDS and it be as open as possible. Sexuality education and adolescence be given as early as from class 3. Safety, terrorism problems, substance and drug abuse, relationships (CS - FGD –TTCP –THO –KIA)

From these findings, it is evident that there are many issues that affect the learning process of a learner and therefore they need to be included in the technical training curriculum. The crosscutting issues suggested to be included in the TVET curriculum by respondents are similar to those in the report on assessment of mainstreaming of emerging issues in primary and secondary schools curricula (KICD, 2014) and the Sessional paper no 2 of 2015 which emphasizes that learners lives are affected by issues ranging from sexuality, drug and substance abuse, media influence in these times of technological advancement, political and social scenarios (Republic of Kenya, 2015).

The findings are also in line with the Constitution of Kenya which emphasizes the need for issues like integrity, child rights, environment and national security (GoK 2010).They are also found in the Ministry of Education Science and Technology strategic work plan 2013-2017 (MoE, 2013).

13.3.0 DISCUSSION (SNE)

13.3.1 Societal Needs

Every society has certain needs that must be fulfilled in order for it to succeed. The needs assessment study sought to establish the societal needs that should to be addressed by curriculum for learners with special needs. The findings identified the following as critical societal needs in order of preference; environmental protection, social development, patriotism, technological development, economic and industrial development. The findings indicated that education for learners with special needs should aim at imparting skills that will enable learners to achieve

economic independence and self-reliance. Similarly education should address societal issue such national cohesion, inequalities and discrimination against persons with special needs. For technological development, respondents advocated for introduction of digital literacy in the school curriculum.

Previous studies have revealed that society influences curriculum development because curriculum should to be relevant to the needs of the society. Consequently, as the needs of the society change, curriculum should also change in order to reflect those changes and make it relevant (Treadaway, 2003). The societal needs are clearly spelt out in the National Goals of Education which are embedded in the Vision 2030 (Republic of Kenya, 2012): (KIE, 2008). The NESP (2015) makes it very clear that the curriculum is expected to empower the citizens with necessary knowledge and competencies to realize the national developmental goals. However, there was need to develop and implement a dynamic competence based curriculum that would guide the country to achieve her aspirations as expressed in Kenya Vision 2030. (MoEST, 2015). The identified societal needs should therefore be emphasized in the school curriculum for learners with special needs at all levels of education.

13.3.2 Competencies

Scholars consider "competence" to mean a combination of theoretical and practical knowledge, cognitive skills, values and behavior used to improve performance. (Weddel, 2006,p2).

The needs assessment Survey sought to establish key competencies that should be addressed by curriculum for learners with special needs in Kenya. The key findings indicate high ratings of crucial competencies that need to be addressed in the curriculum. At primary level, key desired competencies include collaboration, communication, mentoring, networking, decision making, reflection and planning. Similarly respondents who provided qualitative data proposed competencies such as self care, communication, numeracy, information communication technology ICT, entrepreneurship, critical thinking, problem solving, research skills and socialization. The respondents were of the view that learners with special needs should acquire competencies that would help them be adaptable in the society, be employable and enhance their

capacity to actively participate in the society. They decried the unnecessary emphasis placed on academic performance and total disregard of acquisition of desired skills, values and attitudes. This is echoed by The Sessional Paper No.2 of 2015 which indicates that access and participation of learners with special needs is relatively low in Kenya. Their needs are not specifically addressed thus disadvantaging them. The situation is made worse by emphasis on academic performance and examinations. MoEST (2015)

From the findings special needs education in Kenya should therefore be designed to equip learners with relevant knowledge, skills, and values to enable them develop to their full potential. This will ensure that at each level, different categories of learners with special needs acquire desired outcomes and can progress with diverse interests and abilities. This echoes what is contained in NESP (2015) which affirms that curriculum developed should be competence based.

At the secondary school level the key competencies suggested in the findings include; innovation, creativity, entrepreneurship, problem solving analysis and research. These findings can be closely linked to a study carried out by Rychen D.S. and. Salganik L.H (eds.) (2001) which revealed that a creative person should have divergent thinking, problem solving skills, originality, and ability to see or create new values. Considering the need to nurture every learner's potential, creativity, problem solving, divergent thinking, research and innovation should find a place in the curriculum. This is supported by the practice in Scotland where the government places significant emphasis on five core and essential skills of communication, numeracy, problem solving, entrepreneurship, information technology and working with others that is, socialization. Scottish government (2009).

The findings indicated that entrepreneurship is a crucial competence for learners with special needs. This is in agreement with The Kenya Vision 2030 which places great emphasis on the link between education and the labour market and emphasizes the need to create entrepreneurial skills and competencies. Curriculum for learners with special needs should address these competencies in order to equip learners with 21st century skills.

13.3.3 Learning Areas

Learning areas are defined as the content to be taught and learned, by whom, when and where (UNESCO- IBE Korea – 2015).

According to the findings of the survey, the following learning areas were identified as critical to be emphasized in the curriculum for learners with special needs; Design, Agriculture, Speech training, Orientation and mobility, Languages, Vocational and technical skills, Physical education, Homescience, Hygiene and sanitation, Environment , Health and nutrition, Mathematics, Sciences and activities of daily living skills. The findings established that, there is need to introduce various learning areas depending on different disabilities such as Braille for learners who are blind, sign language for those who are deaf, other languages, practical subjects, ICT and use of assistive technology to learners with visual impairments. According to the findings some learners with special needs can learn content learned by regular learner with specific modification to suit their needs. It was also noted that there are learners with autism who are exceptionally talented in specific areas who may require a curriculum that is geared towards nurturing and developing such talents without being subjected to other unrelated learning areas. It was felt that learners with cerebral palsy and those with dyslexia have unique learning needs that call for curriculum modification. Similarly the findings indicated that learners with special needs who may not excel in academic subjects require an alternate pathway and learning areas that will equip them with adaptive and vocational skills.

The Council for exceptional children (2009) points out that learners with special educational needs should be taught additional skills that help them mitigate the effect of disabilities. Persons with Disability Act 2003 section 18 states that “No person or learning institution shall deny admission to a person with disability to any course of study by reason only of such disability to acquire substantial learning in that course.” Hatlem (1996) observes that learners with Visual Impairment should be taught Braille, Social skills, activities of daily living, assistive technology, orientation, and mobility. In addition to being taught core subjects that develop literacy, numeracy and values, learners with special needs should be allowed to study subjects of their interest without conforming to prescribed subject groups. This is supported by Article 55 (a) of the constitution which states: “The state shall take measures including affirmative action

programmes, to ensure that the youth access relevant education and training.” Wolff; et al. (2002) further says that teaching academic subjects alone is not adequate to help children with special needs. The ideal situation would be for learners with special educational needs to study all content in the learning areas in the regular curriculum. However, some of this content may not be achievable due to the learners’ prevailing educational needs. Such content could be removed, replaced, or modified to suit the learner. This process of modification is referred to as curriculum adaptation Kochung Report (2003). The Ministry of Education therefore, has a task of ensuring that the curriculum is made suitable for all categories of learners with special needs. Hence the envisaged curriculum for learners with special needs should have a wide variety of learning areas to take care of all the learners with special needs at different levels of education.

13.3.4 Learning approaches

Learning approaches are instructional strategies and techniques of carrying out instructions in the delivery of curriculum content. The needs assessment survey sought to determine learning approaches suitable to deliver curriculum to learners with special needs. The findings indicated preference of the following approaches as suitable for teaching learners with special needs at all levels: dramatization, songs, dances, field excursions, experiments, demonstrations, Projects, and use of Individualized Education programme (IEP) or Differentiated Instructions. The findings further indicated that Learner centred, practical approaches should be emphasized and that methodologies need to be adapted to suit specific learning needs.

According to the SNE Policy Framework (2009) education should be based on a learner friendly curriculum and responsive learning systems and materials. Studies have shown that learners learn better in barrier free and child friendly environment. The implication is that any educational programme for learners with special needs must be based on the child’s best interest which is in line with the constitution.

According to the findings of the needs assessment, learning for learners with special needs should be practical, individualized and related to real life situation. The teacher should therefore be keen to observe and listen to the learner in order to provide differentiated instructions.

13.3.5 Assessment

Assessment is a key component of the learning process. It provides information on competencies acquired so that intervention measures can be identified to assist a learner who may not have acquired the required competencies.

The findings of the needs assessment indicated preference for formative assessment, continuous assessment, project and use of observation as appropriate assessment methods for learners with special needs. This was supported by qualitative data findings which affirmed that learners with special needs should be assessed continuously during the learning process and that KCPE should not be the sole determinant of promotion of learners to secondary schools. The findings revealed that learners with special needs should be examined when they are ready based on the competencies they have achieved and not at the end of the year. The findings also indicated that vocational skills should be examined through project work and underscored the use of observation to assess behavior. According to UNESCO, IBE 9 (No. 15 – 2015), formative approach supports the learning process, enable the teacher to understand how students are leaning, identify problems the students may face in the learning process and use feedback to ensure that all have the opportunity to learn .

The need to adapt assessment to suit different categories of learners with special needs, accommodation in form of timing, mode of response and scheduling were also key among the findings. Emphasis was made on the need to have special examinations for learners with special needs. This is supported by Kochung Report (2003) which states that examinations for learners with special needs should be presented in accessible formats and that time allowed should be commensurate with the nature and extent of individual needs.

Similarly findings posted by SNE secondary school teachers reveal a high preference for formative rather than summative mode of assessment. Continuous assessment was rated highest as compared to other forms of assessment. National examination was least preferred and was rated lowest. It was reported that learning is highly examination oriented and this encouraged cheating in examination. This is supported by the Sessional Paper No.2 of 2015: which states

that there is too much emphasis on examination based certification at the end of each cycle. (Republic of Kenya, 2015).

Concerning functional assessment, the findings of the study established lack of access to assessment services at the community level and advocated for establishment of necessary mechanisms to ensure a comprehensive health and educational assessment at the stage of starting schooling so as to ascertain type and severity of special needs and provide appropriate intervention measures including school placement. For learners who are already in school and are identified to be having special educational needs, the findings proposed functional assessment for appropriate intervention. Kojung, Report (2003) affirms this by stating that early identification and assessment would facilitate intervention of learners at age 0-5years.

Due to the importance attached to the examinations and too much competition, assessment is no longer seen as part and parcel of the teaching and learning process but as a gateway to determine who can proceed to the best institutions at the next level of education. in order to address challenges in assessment the Sessional Paper no. 2 of 2015 recommends that in the reformed curriculum, competencies and skills will be assessed and that the introduction of standardized assessment testing across the basic education cycle will address this need (Republic of Kenya, 2015).

13.3.6 Nurturing Talents

Identifying and nurturing of talents is key when targeting to harness learners special abilities. The curriculum should provide suitable ways of identifying and nurturing talents in individual learners.

Findings on nurturing talents of learners with special needs indicated preference of the following strategies: games and sports, ability grouping, mentorship programs, clubs and societies, curriculum enrichment, special schools for gifted and talented and special needs classes. Cooperative learning, competition among school, academic conferences, accelerated learning, advanced placement and early admission to schools were also preferred to some extent. These findings were in line with Sessional paper no. 2 of 2015 which expounds on the need to develop and nurture talents for global competitiveness and the Education Taskforce Report (2015) which mentions identification and advancement of talents among core curriculum competencies. (republic of Kenya 2015).

On the other hand qualitative data findings pointed out that, learners with special needs were talented in different ways and their talents could be identified and nurtured by teachers who are specially trained in talent development. Learners' talents can also be nurtured by availing enough time to practice in time tabled lessons and by rewarding those who do well to motivate them. The findings established that talents can also be identified and nurtured in carrier subjects such as physical education, creative arts, performing arts and also through talent search and by participating in music and drama. According to the findings teachers should use learning activities and re-introduce practical subjects like music and Arts to allow learners to express themselves and provide enough material from early years to stimulate creativity. Brown (2003) emphasizes edifying young people through fostering imagination and creativity, and a prime tool for doing this may be an arts education that includes Art and Music

According to the Curriculum Policy Framework (2016), the current curriculum does not give linkage of talents to development of careers. There is therefore need to address the aspects of identifying, nurturing and developing talents among learners in tandem with Kenya Vision 2030 which calls for a curriculum that develops learners' entrepreneurial skills, competencies and talents.

13.3.7 Resources

Educational resources are the key inputs that are used in the learning environment to effectively achieve the desired outcomes. The needs assessment survey sought to establish the availability

and adequacy of resources in learning institutions. The data provided indicated that SNE teaching and learning resources were either not available or inadequate. The study established inadequacy of adapted text books and learning materials, computer devices, assistive technologies, assistive devices, and workshop material and equipment for those who pursue vocational pathway. In addition, the study revealed that many learners with special needs have not been admitted to school due to lack of space in the existing special schools and Units. Further, physical infrastructures such as classrooms, laboratories, computer labs, studios and workshops are not friendly to learners with special needs. Special needs education teachers especially for the practical and vocational subjects are also inadequate. It was further established that caregivers and other support staff who give specialized support to learners with special needs are not trained. This is supported by the Taskforce Report (2012) which observed that most schools lacked basic requirements such as teachers, teaching and learning materials and physical facilities. Republic of Kenya (2012)

The needs assessment findings further indicated that assessment centres and personnel were not adequate which made it difficult for parents to access assessment services easily. It was also noted that assessment centres lack specialized equipment to carry out assessment of various categories of special needs. This is supported by Kochung, Report (2003) which pointed out that Educational Assessment and Resource Centres (EARCs) have inadequate specialized equipment and human resource; there is inadequate infrastructure and facilities, and additional costs for learners with disabilities which hinder progress in special needs education. (Republic of Kenya, 2015).

Attainment of quality education is dependent on how well the curriculum objectives and curriculum support materials are translated into activities through the utilization of the available resources. For the success of the envisaged competency based curriculum, there is an urgent need to provide adequate and suitable resource for learners with special needs.

13.3.8 Emerging and contemporary issues

This study sought to establish the key emerging issues that should be addressed by the curriculum of learners with special needs. From the findings, it is evident that issues such as integrity,

financial literacy, security and safety, health and hygiene, technology, sexuality and disability awareness are top among the most desired competencies to be included in the school curriculum. Of greatest concern was integrity which has been triggered by the extent of corruption in both the public and private sector. Need for security and emanates from emerging security threats posed by illegal and organized gangs, radicalization and frequent tribal conflicts. The need for Sexuality education especially for learners with special needs is a great concern especially by who parent asserts that sexuality education should be taught to the learners so that they may know how to relate with the opposite sex, how to manage their sexual feelings and how to guard themselves against sexual abuse by other people especially close family members.

These findings are in line with the Sessional paper no 2 of 2015, which emphasizes that learners have issues ranging from sexuality, drug and substance abuse, media influence in these times of technological advancement, and political and social scenarios that influence their lives (Republic of Kenya, 2015).

Other emerging issues already in the school curriculum such drug and substance abuse, HIV and AIDS, gender, and environment still rated highly for inclusion in the curriculum. Though these issues are already integrated in various subjects in the current curriculum, they fail to effectively yield desired results and remain a critical aspect of education as indicated in a research carried out by KICD which has shown that emerging issues are not taught in most schools. (KICD, 2014)

CHAPTER 14

RECOMMENDATIONS

14.2.2.3 EDCE LEVEL

14.2.2.3.1 General Societal ECDE Needs

In view of the findings it is highly recommended that education should promote:

- Holistic development of the learner physically, socially, psychologically, spiritually, intellectually, morally and in character formation.
- Respect for different people in Kenya
- Utilization, protection and conservation of the environment
- Positive values to deal with challenges facing Kenya such as corruption, radicalization, tribalism and youth apathy
- Globalization
- Entrepreneurship
- Patriotism

14.2.2.3.2 Competencies

Learners in ECD should acquire the following competencies;

- Creative thinking skills
- Critical thinking skills
- Problem solving skills
- Communication skills
- Financial and entrepreneurial skills
- Health and good personal hygiene practices
- Numeracy and literacy skills

14.2.2.3.3 Identification and Nurturing the Potential and Talents of Learners at ECDE

Based on the findings, the following recommendations are made;

- ECDE teachers should be trained on how to identify and nurture talents.

The following talents should be nurtured in the ECD centres;

- Visual and performing arts, culinary arts, sports, pottery, fine Arts, music and Drama.

- Talent academies or centres beset up

- Symposiums, science conferences, exhibitions and competitions be emphasized in identifying and nurturing talents

- Programmes and relevant opportunities should be provided to allow for talent identification and nurturing.

14.2.2.3.4 Activity Areas that should be included in the School Curriculum

The National ECDE curriculum should have the following learning areas;

Languages, mathematics, life skills, creative arts, communication skills, numeracy, literacy skills, creativity and manipulation, social, environmental awareness, nutrition and health, religion and ethics, national values, personal safety (security), ICT technology, patterns and classifications, physical education, natural and the physical world.

14.2.2.3.5 Learning Approaches

The ECD teachers should use learner centred methods of teaching which are participatory in nature. These methods includes role plays, songs, dance, drama, demonstrations, exploratory/discovery methods and field studies.

14.2.2.3.6 Resources

The institutions should be provided with diverse resources. These materials should be sourced within the locality to ensure relevance, and meaningful learning. ECDE teachers should be capacity built to be able to improvise and develop low cost materials. Teachers Advisory centres

to help equip teachers with skills. More qualified teachers should be employed to reduce the teacher pupil ratio.

14.2.2.3.7 Forms of Assessment

- There should be a major shift from emphasis on summative to formative form of assessment.
- Formative evaluation should be used in assessment of learning at ECDE level,
- It is critical to train teachers on a variety of assessment techniques appropriate for ECDE learners.
- Promotion and admission to class one should not only be based on written tests or cognitive development of learners but other domains of learning should also be considered.

14.2.2.3.8 Cross Cutting Issues

The ECDE curriculum should address the following pertinent issues:

Drug and substance abuse, HIV and AIDs, Religion, corruption, Citizenship, Use and misuse of ICT, peace building, leadership, Environment conservation, Social cultural norms, insecurity, gender issues, violence at family, the Constitution of Kenya, Health and nutrition, terrorism, regional integration and sexual orientation.

14.2.3. Primary Level Needs

14.2.3.1. Conclusions

14.2.3.1.1 Societal needs

Patriotism, environmental protection, social development, technological development, and economic and industrial development are the key needs of the society in Kenya. There is however a disconnect between societal needs and education that is offered in Kenya.

14.2.3.1.2 Competencies

There is a desire for primary school curriculum that incorporates competencies that create humans with capabilities for their real life contexts and the global community. The current

instructional practices and resource provisions are a hindrance to competence based curriculum which requires situations that can build the expected competencies.

14.2.3.1.3. Learning Areas

Curriculum at the Primary Level must embrace all types of learners and provide them with a rigorous, high-quality experience that readies them to successfully transit to the next level of education as well as ground them in knowledge, skills, values that lead to self-learning and social learning. The curriculum needs to prioritize vocational and practical subjects, foreign languages, as well as revamp Agriculture, Home Science, Music. Such a curriculum must first be envisioned, then developed, and then implemented.

14.2.3.1.4. Talents

The current curriculum seems not to have a framework of identifying and nurturing talent. Consequently, need arises for the curriculum to consider best ways of inclusion of this in order to respond to the uniqueness of each learner in the school community. This should be done within the context of supportive resources, both human and material, to enrich the experience.

14.2.3.1.5. Resources

For effective curriculum implementation, quality physical and human resources are required. Indeed, it is difficult to envisage learning without resources. The current scenario paints a picture of scarcity of resources. The poor physical infrastructure in most learning institutions, inadequate schools and teaching staff have immensely contributed to poor delivery of curriculum and access to quality education .

14.2.3.1.6. Learning Approaches

Based on the findings of this study the following conclusions were made:

Interactive pedagogical approaches that focus on the learner's active involvement are preferred for developing globally competitive learners. Quality teacher education and sufficient resources are key in supporting suitable pedagogical approaches.

14.2.3.1.7. Assessment

The shortcomings related to final examinations have contributed to mixed reactions towards using final examinations as the only way of assessment and means of qualification to the next level.

14.2.3.1.8. Emerging Issues

There are continuous occurrences of social issues that have a considerable influence on the well being of the society. The complexity of these emerging issues and magnitude of their impact cannot be handled without organized learning experiences in both formal and non-formal settings.

14.2.3.2. Implications for Curriculum Reforms

14.2.3.2.1 Societal Needs

More experiential situations in and out of school should be applied to create a peaceful and cohesive society.

14.2.3.2.2 Competencies

The findings show that curriculum in its current state could benefit from interventions that would enrich the content and processes, and make them engaging to create and transform the learner in tandem with the ever changing national and global contexts. This because in terms of conceptualization and implementation, the primary school curriculum does not embody the organizing principles outlined for competences. The theoretical nature of implementation (KIE, 2008) reduces the opportunities for creating the situations that enable graduates to exit and fit into real life or work.

Learners at the primary school level must be provided with suitable situations, to attain the proposed competencies as they exit into real-life, or work related situations. Learning contexts without sufficient resources and supportive activities identified before are likely to inhibit development of the envisaged competencies.

Teachers in Kenya's primary schools need to understand the theory and practice of a competence based curriculum. In analyzing the implementation of a competence-based curriculum,(Cardinet

,1982) maintains that without real transformation of pedagogical and didactic actions of teachers, it is unlikely that learners will develop actual competencies.

The findings show the need for comprehensive overview of the real life contexts to create futuristic curriculum programmes and adaptable learners. The outlined learning outcomes can be rendered invalid for the next level in instances where there is disharmony between the curriculum and the real life circumstances to which they are expected to exit.

Alternative assessment is needed for both summative and formative assessment to support the new way of learning. Competencies cannot be effectively be measured with multiple choice or paper-and-pencil tests (Resnick & Resnick, 1992; Quellmalz & Haertel, 2004; National Research Council, 2006, that are common practice in Kenyan primary schools

14.2.3.2.3 Learning Areas

Based on the expectations of the respondents, it is evident that the curriculum should be changed to provide for variety with regard to learning areas. The first step would be to develop solid, flexible, open curriculum factoring relevance to the needs of learners and the society. Inclusion of foreign languages may not be done at the lower primary level but at Primary 4. This recommendation is in line with studies carried out by KICD on foreign languages (KIE, 2009, KICD 2013, KICD 2015) that recommend the introduction of Arabic, Chinese, French and German as optional subjects.

Consequently, training and capacity building of teachers should be carried out to ensure quality delivery of curriculum in the new areas both during the pre- and in-service and provision of requisite teaching and learning resources.

14.2.3.2.4 Talents

Going by the foregoing therefore, it is imperative that the curriculum is reformed and fashioned around the needs, talents and abilities of learners. Additionally, the reform should seek to create a pathway to domicile talents. Given the key roles that both teachers and parents play, they should be equipped to enable them utilize appropriate strategies and infrastructure for identifying and nurturing talents. This is supported by recommendations by International Bureau of Education that calls for education to create space for personalised learning in and through the

curriculum. Personalised learning respects, understands and builds upon the uniqueness of each person within collaborative environments viewed as learning communities where all are needed and all support each other. (UN Ward, 1961; Hayes-Jacob, 1981;Maker, 1982; Tannenbaum, 1983). ESCO, 2015).

14.2.3.2.5 Resources

Synergy and concerted effort to provide requisite materials must be put in place. Adequate funds must be availed to schools not only to ensure that the learning resources are provided but also for purposes of improving infrastructure in schools in order to align it to the needs and contemporary issues. In order to address the high teacher pupil ratio, it is important for the government to train adequate teachers, since they are key in curriculum delivery. Publishers and other material developers should look into developing teaching and learning materials in varied formats for the various types of learners including new technologies.

14.2.3.2.6 Learning Approaches

Teachers are not well grounded in learning approaches that encourage participation of learners as they acquire desired competencies. This is mainly the traditional teacher- centred methodologies that focus on the teacher that pervade most classrooms. The implication for teacher capacity is for an ongoing teacher assessment programme that compares the teacher levels against their classroom needs. There is need for teacher training to inculcate in- depth knowledge regarding the theoretical and practical application of different pedagogical techniques.

The shift of focus from the teacher to the learners also means that planning for classroom interaction, execution of the plans and classroom assessment practices are constructed from the learners and their needs.

14.2.3.2.7 Assessment:

The findings in the survey show that assessment should reflect a more comprehensive and long term attainment of the learners. There should be teaching environments and teachers who can offer opportunities for a wide array of assessment that foster cognitive and non –cognitive competencies. The consideration of learners’ performance based on summative assessment alone, while excluding their individual and their’ diverse needs jeopardizes objective judgment of performance. This implies more targeted and relevant modes of assessment that provide a more balanced and holistic understanding of their progress in various abilities.

14.2.2.3. Recommendations

14.2.2.3.2. Competencies

Based on the findings of this study, following recommendations are made:

The curriculum conceptualization and implementation should create the situations that enable graduates to exit and fit into real life or work.

The learning environment should be well equipped and activity oriented to create supportive situations for real-life or work related situations.

Teachers in Kenyan schools need to be re-oriented to understand the theory and practice of a competence based curriculum.

Futuristic curriculum programmes and instruction needs to be created and continuously validated by creating linkages with real life contexts.

14.2.2.3.3. Learning Areas

There is need to include new learning areas in order to address foreign languages, technical and vocational areas as well as revamp neglected skills subjects like Agriculture, Music, Home Science and those that address talents.

The teachers need to be empowered so as to address the differing learning needs of all children and to use methods of active group and individual learning.

There is need to communicate to students existing links between relevant general education competencies and the learning outcomes of their majors and minors.

14.2.2.3.4.Talents

The capacities of teachers, parents and support staff should be built through training to facilitate identification and nurturing of talents. This will also enable them to provide requisite resources and support systems.

14.2.2.3.5.Resources

The government should provide a variety of teaching and learning resources in different formats including use of modern technology.

14.2.2.3.6.Learning Approaches

For the skills in 21st century to be developed there is need for effective learning management to support both learning outcomes and skills.

Appropriate pedagogical approaches should be encouraged through progressive government policies to help learners to discover, develop talents and consolidate their real life attributes such as exploration, self assessment and problem solving .

14.2.2.3.7. Assessment

Alternative assessment is needed for both summative and formative assessment to support the new way of learning, since such skills cannot be effectively measured with multiple choice or paper-and-pencil tests

There should be a deliberate effort to develop diverse set of assessment modes to enable learners to perceive learning as a way of demonstrating their potential. For instance, assessment can be tailored to level and needs of an individual students

14.2.2.3.7. Contemporary and Emerging Issues

Based on the foregoing, the government should set aside resources for ensure learners achieve the desired values.

There is need to strengthen partnership with community, private and business sectors. This will help to minimize the gap between education and society

14.2.4. Secondary Level Needs

14.2.4.1 *Conclusions*

The study set out to find the desired competencies that should be acquired by the learners at the secondary level education and the findings revealed that the 21st century skills are critical. These are the skills of communication, creativity, collaboration and critical thinking. Without these skills, the students will not be able to successfully participate in the global economy. These findings are new because the Kenyan secondary curriculum is not competency based.

The study set out to find the strategies of identifying and nurturing the potential and talents of learners at the secondary education curriculum. The findings brought out the need for establishing special schools for the gifted and talented. This is a new concept in Kenya because our education system doesn't have special schools for the gifted and talented. These are critical education institutions for nurturing talents which Kenya should embrace.

Nurturing potential and talent should be a major area of focus in the intended new curriculum. The new curriculum and by extension schools will have to embed within them strategies that will enable every learner to harness their potential through well-developed learning activities that will lead to the identification and subsequent development of these areas of potential and talent.

The preferred learning areas are those inclined towards equipping learners with practical skills and that can help the learner in life after school. The learning areas should produce all round student economically, socially, politically as well as technologically. From the findings, the respondents preferred early specialization and orientation to specific pathways.

Availability, adequacy and relevance of resources in schools contribute to achievement of educational objectives and goals. Resources that are key in implementation of competency based

curriculum were not available in most schools. As such, the resources were not equitably distributed.

For effective implementation of Competency Based Curriculum, there is need for the use of interactive and activity based approaches that are geared towards the acquisition of practical skills. The success of the implementation of the curriculum is therefore hinged on the teacher quality. Improving teacher quality is expected to revolutionize classroom practices.

From the foregoing discussion, the role of assessment in education needs to be re-defined. More emphasis needs to be on formative assessment as opposed to summative assessment.

14.2.4.2: Implications

The implication from these findings is that Kenyans need a Competency Based Curriculum loaded with competencies needed by all individuals for personal fulfillment and development, active citizenship, social inclusion and employment and for lifelong learning. This further implies that adequate resources should be put in place to train teachers on competencies and appropriate approaches for instruction. Relevant and quality teaching and learning resources will be key in the implementation of the curriculum.

The findings from Kenyans on nurturing talents means the government has to put resources to establish talents education institutions and training of teachers to teach in those institutions.

Findings on pedagogical approaches imply there is need to bridge the gap between theory and practice in instructional practices by encouraging and supporting the teachers as well as in -servicing the teachers on the Competency Based Methodologies.

On the learning areas, there is need to redefine the values attached to different disciplines and the resource requirement.

Embracing the teaching of practical skills implies allocation of sufficient time for teaching by minimizing all types of constraints (rules, regulations) that do not encourage experimentation, innovation and creativity in the teaching and learning process.

The mindset of teachers needs to be changed to adopt the formative assessment strategies with the integrity that they deserve.

14.2.4.3: Recommendations

- The envisaged new curriculum should be competency based where the competencies cut across all the disciplines. This will make the curriculum to conform to the global trends in curriculum designs. The competences should comprise of those which all individuals need for personal fulfillment and development, active citizenship, social inclusion and employment and for lifelong learning.
- The envisaged secondary education curriculum to incorporate the 21st century skills
- The new secondary level education curriculum to embed potential and talents
- The government to establish talents education institutions
- The curriculum should be flexible to allow for orientation to different pathways.
- KICD should orient teachers on the implementation of the new curriculum
- KICD in collaboration with ESQAC should build a network of pedagogical counselors for each learning area and create regional networks for a more effective monitoring of classroom practices.
- The government should ensure that relevant and adequate resources are availed to all learning institutions.
- Instruction should be modeled to provoke critical thinking and problem solving skills as opposed to rote learning.

14.2.5 Tertiary Level Needs

14.2.5.1 Teacher Education

14.2.5.1.1 Conclusion on Teacher Education

Teachers need to be equipped with the 21st century skills and competences, so as to be able to embrace the technological changes and innovations in the modern society and be able to impart relevant skills and competences among the learners effectively. The 21st century environment demands a highly flexible labour force and this flexibility is demonstrated in the application of technical and soft skills. Teacher education must prepare a competitive teacher and a functional individuals that goes beyond traditional role of imparting knowledge skills and attitudes. Teacher education has to nurture the entrepreneurial, innovative, creativity; analytical thinking skills for interactive and harmonious relationship with others.

Teacher training and education need to make use of mixed teaching and learning approaches. Teachers need frequent in-servicing programs in order to be kept conversant with changes going on in education. There is need for a longer period of teaching practice and marks awarded in it be raised. Continuous assessment tests marks should contribute to the final grade in teacher education. KNEC exam be conducted at the end of each year like in the universities to reduce the revision that the teacher trainees have after two years. Relevant adequate teaching and learning resources be provided to all the teacher training institutions. All content/learning areas covered in the primary curriculum as well as values, talents and crosscutting issues be included in teacher education curriculum.

14.2.5.1.2 Implications for Curriculum Reform

The current curriculum does not meet the needs to develop 21st century skills and competencies in teachers. There is need for curriculum reform in order to ensure the 21st century skills and competences in the teacher education curriculum. These competences are in line with the national development, constitution of Kenya and the vision 2030 aim of making Kenya an industrialized country and providing a high quality life which can only be achieved through reform in teacher education.

Vision 2030 aim of making the Teachers at par with the technological changes in the society therefore call for a new competency based curriculum. The publishers and government of Kenya would need to invest a lot of financial resource in teacher education for development of new curriculum support materials both print and none print. The government would have to supply

adequate modern resource including computers in all TTC to enable the institutions cope with the technological changes in the society. The teachers, teacher trainers and curriculum support officers in the field would have to attend a comprehensive training on implementation of competency based curriculum.

14.2.5.1.3 Recommendations

- KICD should include the 21st century skills and competences in Teacher education curriculum.
- Continuous assessment tests in teacher education should be conducted in a variety of methods and contribute to student final grade.
- KICD should include psychometrics skills in teacher education curriculum, which will enhance teacher skills in setting exams and avoid buying exams
- Teachers should be taught importance of talents, ways of identification and how to nurture them among the learners and crosscutting issues
- MOEST should provide adequate resource to all teacher Training institutions
- The government should provide frequent in-serving programmes for teachers after every three years.
- MOEST should lengthen the teaching practice period and the marks awarded for it be raised
- Talent academies should be established by MoEST where talented teachers can acquire skills on talents that they can impart on learners
- MOEST should upgrade teacher education P1 certificate course to a diploma course

14.2.5.2. TVET

14.2.5.2.1 TVET conclusion

From the findings of this study it is important to transform training at tertiary level for it to be more practical-oriented. By doing so, trainees will be graduating from these institutions with the competencies that are required by the industry. During their training also, learners should be equipped with entrepreneurial and managerial skills for them to be self-reliant and be in a position to create job opportunities.

In addition to this, trainers at this level should adopt 21st Century learning approaches which engage the learner and ensure that they acquire the competencies required by the industry so as to strengthen the training – industrial links. This re-alignment is required due to technological advancement which leverages entirely on ICT skills and digital literacy in general. This is envisaged to increase their employability and make them globally competitive. Another important aspect is that of identification and nurturing of talents is a necessary process which should be carried out in all technical training institutes. Relevant and appropriate strategies need to be put in place to ensure that learners' talents are identified and nurtured effectively.

Teaching and learning resources are key in any instructional process and they need to be availed in every TVET institution so as to ensure teaching and learning takes place as expected. In line with this, the way we assess our learners has to be transformed completely with its trend moving more towards formative assessment. This can be achieved by ensuring that assessment of learners is practical oriented and that it is carried out through out during the teaching and learning process. It is worth noting that marks from this assessment should contribute to the final scores of the trainees .Climate change, global warming, insecurity and radicalization are important aspects which TVET trainees should be made aware of in the attempt of conserving our environment and ensuring there is adequate security in our country and the world at large.

14.2.5.2.2 Implications for Curriculum Reform

The following implications are drawn from the conclusions made out of this study:

- i. There is need to increase the grants given to these institutions so as to enable them procure the much needed teaching and learning resources
- ii. Lecturers at this level need refresher courses to enable them make use of 21st century approaches while delivering the curriculum
- iii. The TVET curriculum should take cognizant of emerging and contemporary issues
- iv. Formative modes of assessment should be strengthened in these institutions while assessing transfer of knowledge, skills and attitudes at the technical level of education
- v. Emerging issues should be included in TVET curriculum by the curriculum developers

- vi. There should be more emphasis on the co – curricular activities at the technical training curriculum. This can be done by ensuring that the TVET curriculum has an aspect of this in-built in it
- vii. ICT needs to be part of the TVET curriculum to ensure that our technical graduates are digitally literate.

14.2.5.2.3 Recommendations

The following recommendations are drawn from the stated conclusions:

- There is need for the National Government to increase the grants given to TVET institutions so as to enable them procure the necessary resources for teaching and learning
- KNEC should increase flexibility in assessment by allowing multiple attempts and choice of when to be assessed, while expanding examination and testing methods to go beyond the written test for the purposes of covering more higher-order competences
- KNEC needs to adopt assessment modes which strike a meaningful balance between formative and summative assessment.
- TSC should train trainers on assessment modes to enable them assesses the competence based curriculum effectively.
- Talent academies should be established by MoEST in conjunction with the National Government in every TVET institutions so as to nurture talents of their trainees.
- MoEST should make TVET course flexible so that we can have part time learning and distance learning.
- MoEST should consider grade test mode of assessment for TVET

14.0 CONCLUSION AND RECOMMENDATIONS (SNE)

Societal Needs

Conclusion

The study findings reveal that the curriculum does not adequately address the following societal needs: environmental protection, social development, patriotism, technological development,

economic and industrial development, national cohesion, inequalities and discrimination against persons with special needs

Implications for Curriculum Reforms

Curriculum should be informed by the needs of the society. Therefore there is need to reform the curriculum to comprehensively address the evolving societal needs.

Recommendation

The curriculum reforms should address the societal needs highlighted in the findings of this study.

Competencies

Conclusion

The study findings indicate that learners with special needs require the following competencies: collaboration, communication, mentoring, networking, decision making, reflection, planning self care, communication, numeracy, information communication technology ICT, entrepreneurship, critical thinking, problem solving, research skills and socialization. The current curriculum does not purpose to develop these competencies to learners with special needs.

Implications for Curriculum Reforms

There is need to have a paradigm shift to a competency based curriculum.

Recommendation

Curriculum for learners with special needs should promote the following 21st century competencies; collaboration, communication, mentoring, networking, decision making, reflection, planning self care, communication, numeracy, information communication technology ICT, entrepreneurship, critical thinking, problem solving, research skills and socialization.

Learning areas

Conclusion

According to the findings of the study, the following learning areas were identified as critical to be emphasized in the curriculum for learners with special needs; literacy skills, languages, numeracy skills, speech training, orientation and mobility, sign language, vocational and technical skills, health and hygiene, activities of daily living skills, use of assistive technology and Braille skills for learners with visual impairments. Some learners with special needs can learn academic subjects learned by regular learner with specific modification to suit their needs while those who may not excel in academic subjects may pursue an alternate pathway geared towards equipping them with adaptive and vocational skills. Learners with cerebral palsy, dyslexia and those with autism who have specific talents have not been catered for by the current curriculum.

Implications for Curriculum Reforms

Specialized learning areas for learners with special needs are currently not addressed by the curriculum. Hence, the curriculum needs to be reformed to ensure that learning areas that are specific for learners with special needs are adequately addressed. In addition the regular curriculum needs to be adapted to suit different categories of special needs. There is need to develop curriculum for vocational training and talent development.

Recommendations

- The reformed curriculum should include the following key learning areas for learners with special needs depending on category of special needs: ; literacy skills, languages, numeracy skills, Speech training, orientation and mobility, sign language, , health and Hygiene, activities of daily living skills, use of assistive technology and Braille skills.
- Vocational and talented curricula for learners with special needs should be developed.
- Regular curriculum should be adapted for learners with specific learning needs.

Learning approaches

Conclusion

The findings of the study indicated preference of the following practical and learner centred approaches as suitable for teaching learners with special needs at all levels: dramatization, songs, dances, field excursions, experiments, demonstrations, Projects, and use of Individualized

Education programme (IEP) or Differentiated Instructions (DI). The need to modify instructional strategies to address learning difficulties in an inclusive setting was echoed.

Implications for Curriculum Reforms

There is need to have a paradigm shift from teacher centred theoretical approaches to curriculum delivery to learner centred, individualized and differentiated approaches.

Recommendation

Curriculum delivery approaches used to teach learners with special needs should be learner centred, differentiated, practical and individualized.

Assessment

Conclusion

The findings of the needs assessment indicated preference for formative assessment, continuous assessment, project and use of observation as appropriate assessment methods for learners with special needs. The need to adapt assessment to suit different categories of learners with special needs or develop special examinations for learners with special needs was underscored. There is also need to carry out early functional assessment for early intervention.

Implications for Curriculum Reforms

There is need to reform the current cognitive based assessment methods to more holistic and practical oriented assessment modes that cater for learners' diversity.

Recommendations

1. The reformed curriculum should adopt formative assessment where all the aspects of learning are continuously assessed.
2. Assessment should be adapted to suit learners with special needs.
3. Assessment of practical work should be assessed through projects and not through theory papers.
4. Special examinations should be developed for learners with special needs depending on specific needs.

5. Functional assessment should be carried out at an early age to facilitate early intervention,

Nurturing talents

Conclusion

Findings on nurturing talents of learners with special needs indicated preference of the following strategies: games and sports, ability grouping, mentorship programs, clubs and societies, curriculum enrichment, Cooperative learning, accelerated learning, advanced placement, special schools for gifted and talented and special needs classes. Learners with autism who are known to have special talents in specific areas and have challenges in all other learning areas need a curriculum that is geared to nurturing the talents. The current curriculum does not clearly define specific ways of identifying and nurturing talents.

Implications for Curriculum Reforms

Strategies need to put in place for identifying, nurturing and developing talents of SNE learners.

Recommendations

- The curriculum should employ the following strategies for identification and nurturing talents of learners with special needs: games and sports, ability grouping, mentorship programs, clubs and societies, curriculum enrichment, Cooperative learning, accelerated learning, advanced placement, special schools for gifted and talented and special needs classes.
- A talent curriculum should be developed.

Resources

Conclusion

The findings of the study established that the following resources were either lacking or inadequate in institutions for learners with special needs: adapted text books and learning materials, computer devices, assistive technologies, assistive devices, and workshop material and equipment for those who pursue vocational pathway. In addition there was lack of space in the existing special schools and Units for admission of learners with severe disabilities. Further,

physical infrastructures were not friendly to learners with special needs. The findings also indicated shortage of trained Special needs education teachers, technical teachers for vocational centres and support staff.

Implications for Curriculum Reforms

There is an acute shortage of SNE resources to implement the envisaged competency based curriculum.

Recommendations

1. The following resources should be availed to facilitate implementation of curriculum for learners with special needs: adapted text books and learning materials, computer devices, assistive technologies, assistive devices.
2. More teachers should be trained in special needs education.
3. Special needs teachers should be trained in vocational skills
4. Care givers and specialized support staff should be adequately trained.

Emerging and contemporary issues

Conclusion

From the findings, it is evident that issues such as integrity, financial literacy, security and safety, health and hygiene, technology, sexuality and disability mainstreaming are top among the most desired competencies to be included in the school curriculum. There was special emphasis on the need to carry out awareness campaigns among parents and members of the community on special needs education. Though some of these issues are already integrated in various subjects in the current curriculum, they fail to effectively yield desired results and remain a critical aspect of education.

Implications for Curriculum Reforms

There is need to mainstream emerging issues in the school curriculum.

Recommendation

- Pertinent emerging and contemporary issues should be mainstreamed in various learning areas.
- Awareness programmes for special needs and education should be developed and implemented.

REFERENCES

- Buhere K (2016) why textbooks matter in Education. Wednesday, March 9, 2016
Standard Newspaper.
- Browder, Diane M(2001): Curriculum and assessment for students with moderate and severe disabilities. The Gullford press.
- Department for Education and Children's Services, S. A. (1994). *Understanding giftedness: a guide to policy implementation*.
- Drew, C., Hardman, M. & Hosp, J., (2008). Designing and conducting research in education. California, USA: Sage publication inc.
- Evan, T., Haughey, M. & Murphy, D. (2008). International Handbook of distance education. Bingley, UK: Emerald Group Publishing Ltd.
- Farrant, J. S., (2004). Principles and practice of education. (18thed). England, UK: Pearson education Ltd.
- Gagné's F. (2003) Differentiated Model of Giftedness and Talent (DMGT)
- Gachathi, P. J. (1976). Report of the National Committee on Educational Objectives and Policies, Ministry of Education. Nairobi: Government Printer
- GoK, (2007). Kenya Vision 2010. Ministry of Planning and National Development and the National Economic and Social Council (NESC), Office of the President. Nairobi. Kenya.
- Huitt, W.(1996). Measurement and Evaluation: Criterion-versus norm-referenced testing. Educational Psychology Interactive. Valdosta, GA: Valdosta State University. Retrieved from <http://www.edpsycinteractive.org/topics/measval/crnhref/html/>
- www.pacwcbt@pill.edu.(2002) Child and Adolescent Development Resource Book University of Pittsburg
- KIE (1990): Formative Evaluation of the Secondary Education Curriculum. KIE Research Report Series No.22. Nairobi. Kenya
- KIE (2010a): Summative Evaluation of the Primary School Education Curriculum Nairobi. Kenya
- KIE (2010b): Summative Evaluation of the secondary School Education Curriculum. Nairobi. Kenya
- Kenya Institute of Education Handbook: Silver Jubilee Edition; (1957-1982)
- Kabiru, M. (1997). The status of Early Childhood Education in Kenya. Nairobi: NACEC
- Republic of Kenya. (2007). Government of Kenya, Vision 2030. Nairobi: Government Printers.

Sifuna, D.N. and Karugu, A.M. (1988). *Contemporary Issues in Education*. Nairobi: Kenyatta University.

Treadaway, J. (2003). *Education for what? revisited*. Paper presented at the SICHE Education Conference, Panatina, Honiara, 23-25 September, 2003.

Assessment: Challenges.<http://www.cdio.org/implementation-cdio-your-i>

Kellagan T. and Greany V.(2001): *Using Assessment to improve quality of education*. UNESCO. International Institute for Educational Planning. Paris

Ministry of Education (1997): *Towards Thinking Schools*, Singapore

Kang'ethe, R. W. (2004). *A Comparative Study of Measures used in the identification of Gifted and Talented children in Two Provinces of Kenya*. Nairobi. Unpublished Ph.D Thesis. Kenyatta University.

Kang'ethe, R. W. & Mugo J. (2010) "Gifted and Talented Children and Policy in Kenya: A Ride through Post Independence History". A paper presented during the National Conference of The Gifted and talented in Kenya. Kenyatta University (July 27th to 30th July 2010).

Kinyua, P. M. (2014) *Exploring Giftedness among Learners with juvenile Delinquency in elected Rehabilitation schools In Kenya* . Nairobi. Unpublished Ph.D Thesis. Kenyatta University.

Kochung E, (2003) *A Report of the task Force on special Needs education.Appraisal Exercise Republic of Kenya*. Ministry of Education.

Koech, D. K. (1999). *Totally Integrated Quality Education (TIQET)*. Nairobi, Government Press.

MoEST(2012): *Sessional Paper No 14 of 2012: Reforming education and Training Sector in Kenya*

NEXT(2010):Japan Ministry of Education, Culture, Sports Science and Technology, *Education Reform for the 21st Century*, National Council of Education Reform and Process of its Reform, Tokyo, Japan.

SalteryD(1989): *Assessment in Schools*. Basil Blackwall Ltd.

Swaffield, S. (2008): *unlocking Assessment*, A David Fulton Book

Republic of Kenya (2009). *National Youth Situation Analysis Report* . Government Press. Nairobi.

Richert, E.S. (1991)*Rampant Problems and proising practices in identification*. In N.

Colangel o& G. A. Davis (Eds), Handbook of Gifted Education 9pp 81-96).
Boston:Allyn& Bacon.

Republic of Kenya (2011). A teacher competency framework for the Kenya primary school teacher. Ministry of education

Republic of Kenya (2010). Task force report on the re-alignment of the education sector to the constitution of Kenya 2010: towards a globally competitive quality education for sustainable development

Ross, A. (2000). Curriculum: Construction and Critique; masters classes in education series. New York: Routledge Falmer Garland inc.

The Scottish Government (2009). Curriculum for excellence building the curriculum 4 skills for learning, skills for life and skills for work. Edinburgh: Scottish government

Wedell, M. (2009). Planning for Educational Change. Putting People and their Contexts First. Continuum International Publishing Group. London.

KICD (2013) Rapid Assessment Of Utilization Of Educational Resources (Prototypes) In Learning Institutions In Kenya. Nairobi. Kenya.

Twoli, N., Maundu, J., Muindi, D., Kiio, M, Kithinji, C., (2007). Instrumental Methods in Education, Kenya Institute of Education, Nairobi

Ministry of Education Australia, (2013). The Australian Curriculum. Retrieved June 7, 2014, from The Australian Curriculum v6.0.: www.australiancurriculum.edu.au

Barrow, M. (2013). Woodland Resources. Retrieved June 7, 2014, from Mandy Barrow Woodlands Resources: www.mandybarrow.com

Exchange, S. A. (2012). High School Exchange in South Africa. Retrieved June 7, 2014, from Experience a High School Exchange in South Africa: www.jcr.co.za/sastudent.htm

Japan MOFA. (2014). Web Japan MOFA. Retrieved June 6, 2014, from Schools-Explore Japan-Kids Web Japan-Web Japan: <http://web-japan.org>

Keteku, N. W. (2008). Education Reform Ghana. Retrieved June 7, 2014, from Education Reform in Ghana: Senior Secondary School: www.bibl.u-szeged.hu/oseas.../ghana.htm

Ministry of Education Malasia (2014). Malaysian Guide. Retrieved June 7, 2014, from Malaysia Guide: Public, State Education in Malaysia.: www.justlanded.com

Mugo and Asigo (2015). From Assessment of Learning to Assessment for Learning in Kenya's primary Education post 2015. A policy brief by the Learning Outcome Network.

UNESCO-IBE (2015). Repositioning and Reconceptualizing the curriculum for effective realization of Sustainable development Goals Four, for Holistic

Voogt, J & Roblin, N.P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of Curriculum Studies*. Volume 44, Issue 3.