

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

NATIONAL CURRICULUM POLICY

DECEMBER 2015

FOREWORD

The goal of education in Kenya is to provide Quality Education and Training policies to all her citizens. The government has therefore continued to put in place measures to address access, quality, relevance and equity in line with international, regional and national policies as well as legal commitments. The 2014 Education For All Review Report has demonstrated that significant gains have been made in all the EFA goals.

Kenya like other parts of the world has experienced the impact of globalization. More than ever before, education is being challenged to respond more to the growing personal, social, technological and economic demands. It is in appreciation of this fact that the Government through The Second Medium Term Plan of Kenya Vision 2030 has prioritized curriculum reform.

In 2014, the Government embarked on a consultative process of preparing a policy framework for curriculum review. A technical team was set up and immediately commenced its work. The team worked closely with The Curriculum Review Steering Committee set up at the Kenya Institute of Curriculum Development and a wide range of stakeholders in education. This policy document is a product of that process. When fully operationalised, this policy will ensure preparation of a relevant competency based curriculum which will ensure that all learners acquire competencies and qualifications capable of promoting national values, inspiring individual innovation and life-long learning. It will also ensure that learners are not unnecessarily delayed at any level of education.

This policy provides a clear framework for undertaking curriculum reform in Kenya. It is my expectation that this policy will enhance access to education, provide relevant pathways for transition of all learners and contribute to strengthened governance of education at various levels. The successful implementation of a new curricula will depend on the concerted efforts of all education providers, implementers and stakeholders. My belief is that the new curriculum provides opportunities for learners to realise their full potential.

It is imperative that all providers of education and training services read and understand this policy document so that they understand fully the intentions of government and what is expected of them.

Dr Fred Okeng'o Matiang'i

Cabinet Secretary

Ministry of Education Science and Technology

PREFACE

The Ministry of Education Science and Technology has a responsibility to ensure that quality and relevant education is provided to her citizens. The discussions on the Curriculum reform process began five years ago following the recommendations of the Taskforce on the realignment of the education sector to the new constitution. A Technical committee constituted by the Principal Secretary in 2014 further explored the modalities for undertaking the curriculum reform and came up with this curriculum reform policy. The reform policy is largely influenced by questions about the nature and kind of society and social system Kenya wants to become or remain. The policy thus defines the content of learning, the knowledge, skills and attitudes or a range of values and perspectives that the Kenyan society upholds and thus the relevant knowledge to be transmitted and applied daily and in the world of work in Kenya.

The policy is a flagship project of the Kenya Vision 2030, and is part of the Jubilee 2013-2017 manifesto. It is organized in various thematic areas. The first discusses the issue of leaners access to quality and relevant education. The second deals with a competency based curriculum and the third the pedagogical approach for all learners. The fourth deals with the issue of assessment while the fifth one dwells on resource mobilization and management. Each theme spells out the goal, the policy statement and strategies of implementation of the curriculum reform process.

The policy has formalized the responsibilities of various actors involved directly and indirectly in the curriculum reform, development and implementation process. The policy strategies herein become part of the daily tasks and responsibilities of actors within the education sector.

I wish to call upon all actors within the Ministry of Education, Science and Technology sector to ensure that activities and programs within their mandate embrace the provisions of this policy.

Dr. Belio Kipsang Principal Secretary, State Department of Education

ACKNOWLEDGEMENTS

The Education Sector policy on curriculum reform is a product of extensive consultation and collaboration with various Stakeholders and Institutions. The process of developing this policy began in the year 2013 when the Ministry constituted a technical team comprising officers from MOEST and KICD. The team has had a number of consultative meetings and workshops to develop the initial framework and first draft policy. The draft policy was then subjected to stakeholders review on 22nd and 23rd September, 2015.

I wish to acknowledge the leadership of the Cabinet Secretary, Professor Jacob Kaimenyi and the guidance from the Principal Secretaries, Dr. Belio Kipsang and Professor Colleta Suda, in the process of developing this policy.

I commend the efforts of the Directorate of Policy, Partnerships and East African Community Affairs, and the Director, Kenya Institute of Curriculum Development, who coordinated this exercise.

I also appreciate the contribution and commitment of the representatives of organizations that participated in this activity. Special thanks go to the technical committee that coordinated the policy development process.

I wish to appreciate the stakeholders for their inputs during the stakeholders' fora. Special gratitude go to UNICEF (Kenya Country Office) for financial and technical support in this process. The immense efforts put in by Professor Henry Kaane and Professor Laban Ayiro as consultants in developing the policy, are also highly appreciated

Leah Rotich (Mrs)
Director General

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ACRONYMS AND ABBREVIATIONS

APBE Alternative Provisions of Basic Education

DTE Diploma Teacher Education
EAC East Africa Community

EARCs Education Assessment Resource Centres
ECDE Early Childhood Development Education

EFA Education for All

EMIS Educational Management Information Systems

GER Gross Enrolment Rates GoK, Government of Kenya

IBE International Bureau of Education

ICT Information and Communication Technologies
KICD Kenya Institute of Curriculum Development

KNEC Kenya National Examination Council

MOEST Ministry of Education Science and Technology

NER National Enrolment Rates

NGO Non -Governmental Organisations

OECD Organisation for Economic Co-operation and Development

OVCs Orphans and Vulnerable Children

PBE Primary Basic Education
PTE Primary Teacher Education

STEM Science Technology And Mathematics

SNE Special Needs Education

SDG Sustainable Development Goals

TVET Technical & Vocation Education and Training

PREAMBLE

The vision and Mission of the Ministry of Education Science and Technology are:

Vision

To have a globally competitive education, training, research and innovation system for sustainable development

Mission

To provide, promote and coordinate quality education, training and research and enhance integration of Science, Technology and Innovation into national production systems for sustainable development.

VISION FOR CURRICULUM REFORM

The curriculum reform will be guided by the vision, "Nurturing every learners' potential"

To produce citizens equipped with relevant and quality knowledge with national values and social competencies (Kenya Constitution 2010) and to equip them with the 21st century skills and competencies (Vision 2030), Kenya is undertaking a major reform of the national curriculum

CHAPTER ONE: INTRODUCTION

1.1 Background

The nexus between the education system and curriculum is considered important for transforming people's education, training and work. It has profound implications on how education is conceptualized, organized, delivered and outcomes measured. Fundamental instruments for such education include flexible education pathways, modern and dynamic curriculum, basic foundational and transversal skills and new pedagogical approaches that utilize ICT. A robust learning infrastructure that takes cognizance of gender and special needs complements lifelong tangible careers and sustainable futures (GoK, 2015a). The challenge for educationalists worldwide is to prepare learners for current realities without limiting their ability to succeed in the larger community and the global realities of work and life in the 21st century (ICSU, ISSC (2015)). It is in this light that education systems are responding by providing quality and relevant education, and ensuring comprehensive assessment for learning outcomes at all levels.

The recent global economic downturn has further signaled an urgent need to deal with youth unemployment and inequality effectively. In an effort to reverse these effects, OECD (2012a) proposes a lifelong skills development strategy. The fast paced growth of the global economy requires competitive youths with relevant work skills that match the growing economy. It further implies that the future of achievements in education and training are anchored on curricula that are progressively reinforcing change to guarantee growing opportunities for the youth.

The overarching 4th goal for the post 2015 Sustainable Development Goals (SDGs) agenda is to ensure equitable and inclusive quality education for all by 2030. In addition, sustainable development demands that every human being acquires the 21st Century knowledge, skills, attitudes and values necessary to shape a sustainable future. 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 balance technical and vocational skills, while placing value on creative capital.

The East African Community (EAC) treaty emphasizes cooperation and integrated investments especially in education and research to prepare citizens to operate effectively in a globalized economy (EAC, 2013). Key issues include harmonization of curricula and education systems. The states propose to develop harmonized programmes for the primary, secondary and tertiary education cycles. They 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 (EAC, 2014).

Kenya faces increasing public demand for quality education and training both as a human right and as an essential investment for national development. The Kenya

Vision 2030 which is the country's blueprint considers education as a crucial driver to the country's realization of its social and economic development. The country realizes that science, technology and innovation are critical in wealth creation and economic growth (GoK, 2012b). Kenya lacks adequately skilled manpower to spur it towards economic development as envisioned in the Kenya Vision-2030, hence the need to produce graduates who are globally competitive through a reform in education.

Legal and policy context

The Kenya Government is committed to provide quality, relevant and accessible education and training to its citizens. The curriculum reforms will be undertaken within the national legislation informed by Article 53 of the Constitution which recognizes free and compulsory basic education as a right of every child. Article 43 on economic and social rights states that every person has a right to education. Among the functions of the National government in the fourth schedule, item 15 mandates the Ministry to undertake education policy, standards and curriculum.

To actualize these provisions various legal document have been developed. These include the Basic Education Act, 2013, Sessional Paper No. 2 of 2015, Kenya Institute of Curriculum Development Act, No. 4 of 2013 and the Kenya National Examinations Council Act 2012.In addition, the country's provisions for education are guided by international legislation such as the Sustainable Development Goals(MDGs) 2015. The highlights of these policies include the provision of free and compulsory basic education that is reformed to inculcate interest and skills in science, technology, and innovation as well as environmental concerns for a vibrant economy.

Status of curriculum reform

The current 8-4-4 curriculum was initiated in 1985. It was intended to inculcate self-reliance, increase access to education, enable learners to be mature physically and get better prepared for secondary education and the world of work. It also aimed at promoting acquisition of technical and vocational education and training and subsequent certification. In 2002, the curriculum was reviewed to address issues of overload and overlaps within and across subjects. As a result, the practical subjects were merged and integrated into other subjects at the primary level of education. At the secondary school level, there was a resource gap manifested in poorly equipped workshops that impeded the implementation of practical aspects of the curriculum. These resource requirements for the curriculum were also expensive for parents yet there was no added advantage during entry into the university for students who had done the technical subjects.

A Summative Evaluation conducted by KICD in 2009 on the primary and secondary school curriculum revealed gaps in achievement of national goals of education, curriculum objectives, capacity of the implementers, assessment and management structures that support curriculum implementation. The evaluation recommended that the curriculum should put more emphasis on practical and vocational education, nurturing of talents, inclusion of critical life skills and de-emphasize the focus on the cognitive domain. Further findings indicated that the curricula were not in tandem with the global trends with regards to competence based learning.

There is need for curricular that address early identification of talents, mentoring and nurturing of learners. The quality of education is not clearly spelt out so that curriculum delivery can focus on development of specific expected competencies to be assessed, hence the need for curriculum reform to specify expected competencies at every level of learning. The design of the current curriculum does not facilitate accelerated learning and flexibility for diverse needs and characteristics of learners. Additionally, the curriculum does not provide for linkage of talents to careers and further education and training. There is no comprehensive curriculum reform policy framework for the education and training sector.

Rationale for the policy on reform

Global trends in education and training are shifting their focus towards programmes that encourage optimal development of human capital. Proponents for this change argue that unless young people's skills are developed for work, they will be ultimately excluded from active participation in their societies. In line with the global trends, Kenya needs to align itself to this paradigm shift in education.

Various policy documents developed after the summative evaluation of 2009 have indicated gaps in the current curriculum which include the following: the curriculum for basic education is not aligned to the requirements of Constitution of Kenya and Kenya Vision 2030; the curricula for some education levels is not appropriate for the age of the learners; the current curriculum does not provide for essential pathways and thus impedes pursuance of individual interest and development of talent; the education structure framework is rigid and does not facilitate entry and re-entry at different levels.

This implies the need to have defined competences at various education levels in order to adequately measure the learning achievements of learners. The Sessional Paper No.2 of 2015 affirms that the curriculum will be competence based in order to assure the desired outcomes at each level which would facilitate progression of learners with diverse interests and abilities. There is however, no comprehensive curriculum reform policy framework for the education and training sector.

This Policy document consolidates the various parameters that are essential for the envisaged education curriculum and also provides a framework for governance and management of the implementation of the reform process. The purpose of this policy is to guide the curriculum reform process at all levels of education in Kenya.

Objectives

The objectives of this Policy are to:

- i. Establish flexible curriculum delivery pathways to enhance access, retention and transition;
- ii. Establish a competency based curriculum for all levels of Education.
- iii. Establish new pedagogical approaches to implement a competency based curriculum;
- iv. Institutionalize formative assessment at all levels of basic education;
- v. Mobilize resources for curriculum development and implementation;
- vi. Strengthen curriculum governance and management;
- vii. Enhance and strengthen STEM in curriculum;
- viii. Enhance Public-Private Partnerships in curriculum development and delivery;
- ix. Establish mechanisms for enhancing access to curriculum delivery materials;
- x. Develop and implement curriculum friendly to SNE and vulnerable learners;
- xi. Harmonize national curriculum with regional and international standards; and
- xii. Provide for county-specific curriculum content.

CHAPTER TWO: ACCESS TO QUALITY AND RELEVANT EDUCATION AND TRAINING

2.1 Goal

To provide educational opportunities that allow learners to harness their potential for their personal development and empower them to be nationally and globally competitive.

2.2 Background

The Government has deliberately invested in increasing access to education for all learners through the policies and programmes of free primary and free day secondary education. As a result, the sector has witnessed an increase in: enrolment; parity index between girls and boys; and number of special needs learners. Despite this progress, there are challenges, including: a drop in primary completion rates, low gender parity in secondary, lower than national average GER and NER in some counties, lower than the national average NER and GER for special needs learners, high repetition rate in upper primary. Primary NER fluctuates from a national average of 87.4% to a high of 98.8% in Siaya to less than 20% in Wajir and Mandera. Eight counties have NER between 60 to 80%, and in another six counties it is below 60%. The proposed curriculum reform will address these challenges.

2.3 Policies

To enhance access to quality and relevant education, MOEST shall implement the following policies:

- Provide access and transition of all learners through interdisciplinary and flexible curriculum pathways that develop their abilities and talents; and
- Improve efficiency in provision of education and reduce wastage at all levels

2.4 Strategies

The following strategies shall be implemented to achieve the policy objectives:

2.4.1 Provide access and transition of all learners through interdisciplinary and flexible curriculum pathways that develop their abilities and talents

- i. Provide adequate infrastructure and personnel to cater for diverse needs, abilities and talents of learners;
- ii. Develop curriculum that nurtures creativity and innovation;
- iii. Develop a framework that enhances multi-entry and exit points in the education system;
- iv. Develop criteria and framework for early identification and nurturing of talents respectively;
- v. Encourage access to technical and vocational education and training; and
- vi. Strengthen EARCs to improve inclusion, progression, transition and completion rates of learners with special needs;

2.4.2 Improve the efficiency in provision of education and reduce wastage

- i. Develop a framework for progression of all learners from one level to the next;
- ii. Provide for age-appropriate, interdisciplinary and flexible curriculum;
- iii. Provide for relevant capacity building in delivery methods for the curriculum implementers;
- iv. Harmonize curriculum in tandem with regional and global trends;
- v. Improve supervision of curriculum delivery to enhance learning outcomes and
- vi. Develop foundational skills.

CHAPTER THREE: COMPETENCY BASED CURRICULUM

3.1 Goal

Improve quality of education at all levels through competency based curricula.

3.2 Background

The National curriculum revised in 2002 has majorly laid emphasis on achievement of stated objectives and subsequent evaluation of the curriculum has focused on the same. Whereas objectives are fundamental in all types of curricula, it is the resulting outcomes that are desired in terms of what the learner is able to do. The current curriculum envisaged that based on the designed objectives the learner would be able to exhibit behaviour commensurate with the aspects taught at each level. This has, however, not been the case as learners complete the levels yet they are do not display the expected level of competence. Results from SACMEQ-III show that Kenya's basic education system is failing to produce graduates with skills and competencies that satisfy the needs of a participatory society and the knowledge economy. SACMEQ-III shows that 40% of Standard 6 students cannot interpret information included in various part of a given text in association with external information, while only 6.4% are proficient in critical reading, i.e. can read from various parts of a given text and evaluate and make inference about the author's message. And 70% of those students are not numeracy competent, i.e. cannot translate verbal, graphic, or tabular information into an arithmetic form in order to solve a problem.

In this regard, the curriculum reform will shift to developing curricula that defines the minimum standards of achievement for every level to ensure that the learner is properly guided and given the opportunity to acquire the necessary competences to progress to a subsequent level. The rapid technological changes demand quality education that emphasizes the importance of producing learners who can take initiative and creatively innovate products and processes that spur talents and development of values. Competence based curriculum is the ideal option for achieving this objective.

3.3 Policies

To establish and entrench a competency based curriculum, MOEST will implement the following policies:

- Establish a competency based curriculum at all levels; and
- Utilize technology to enhance innovation in the implementation of competence based curriculum

3.4 Strategies

The following strategies will be implemented to achieve the policy objectives:

3.4.1 Establish a competence based curriculum at all levels

- i. Carry out a comprehensive needs assessment to inform development of competency based curriculum:
- ii. Develop a curriculum framework for competency based curriculum;
- iii. Design a curriculum that is reoriented towards learning outcomes;
- iv. Develop standards and indicators for competencies at each level;
- v. Develop and approve competency based curriculum syllabuses and curriculum support materials;
- vi. Create awareness among all stakeholders on the competency based curriculum; and
- vii. Ensure that an interdisciplinary and holistic learning is embedded in the curricular.

3.4.2 Utilize technology to enhance innovation in the implementation of competence based curriculum

- i. Design appropriate digital content for a competency based curriculum
- ii. Identify and procure appropriate technology for utilisation in the competency based curriculum; and
- iii. Build the capacity of curriculum implementers on digital instructional methods that cater for diverse learning styles.

CHAPTER FOUR: ACCESS TO CURRICULUM SUPPORT MATERIALS

4.1 Goal

Enhancing learner access to print and electronic books and other curriculum support materials.

4.2 Background

Access to low cost books (both print and electronic) is essential for learning and determines to a large degree the quality of learning outcomes. Currently, the book to pupil ratio stands at an average of 1:4. This cannot be sustained particularly in view of the adoption of modern teaching methodologies like in the case of TUSOME and the Early Grade Mathematics set to be launched in early grade classes which call for experiential, exploratory and discovery learning. This situation will become even more demanding when a competency based curriculum is implemented. Besides books other materials will be needed to support experiential learning and the requisite formative assessments. The cost of text books in Kenya is four times higher than the cost in countries with similar economic status. The curriculum reform process presents an ideal opportunity to reengineer the process of developing and producing curriculum support materials that allow local relevance.

4.3 Policy statement

The Government will mobilize resources and in partnership with private support and households to ensure that a book ratio of 1:1 is achieved at all levels in basic education in the medium term; the other curriculum support materials will be given the same treatment.

4.4 Strategies

The following strategies will be deployed to implement this policy:

- i. Liberalize the text book market and allow free market principles to apply;
- ii. Promote the manufacture of curriculum support materials locally; and
- iii. Take affirmative action to lower the cost of text books

CHAPTER FIVE: PEDAGOGICAL APPROACHES

5.1 Goal

To empower teachers with effective, efficient and sound instructional strategies, methodology and techniques that facilitate competency based learning.

5.2 Background

Provision of quality education is to a large extent determined by the capacity of teachers to interpret and implement the curriculum. This entails structuring the learning environment in accordance to the prevailing trends in education and learners' needs. The anticipated curriculum reforms will adopt a competency-based curriculum approach. Majority of teachers will require re-orientation on the delivery methods for the competency based approach. In order to encourage innovation, experiential learning and creativity, it is imperative that the use of technology for teaching and learning both within the classroom and through distance mode could be an option to improve access and quality, as many countries around the world have done. Many children who would prefer flexible learning at flexible hours because of various constraints could access quality upper primary and secondary education through an open schooling system. The same technology can be used to improve and upgrade teachers' skills and knowledge.

Therefore, pre-service and in-service training programmes will be designed to conform to the philosophical and theoretical approaches adopted in the envisaged school curriculum.

5.3 Policies

To enhance the pedagogical approaches, MOEST will pursue the following policies:

- Enhance pedagogical approaches that support creativity, innovation, critical thinking and sustainable development; and
- Enhance teacher quality for effective implementation to ensure acquisition of competencies that include life skills.

5.4 Strategies

The following strategies shall be implemented to achieve the stated policy objectives:

5.4.1 Enhance pedagogical approaches that support creativity, innovation, critical thinking and sustainable development

- i. Reform pre-service teacher education training curricular at ECD Diploma, PTE, DTE and degree programmes to enable teachers to help learners acquire the minimum competencies for each level;
- ii. Build capacity of teacher trainers to enable them impart knowledge, skills, values and attitudes for implementation of the reformed curriculum;
- iii. Design a comprehensive programme for retooling all teachers to be innovative and use modern instructional approaches;
- iv. Develop, vet and approve ICT-based resources to support acquisition of required competencies;
- v. Assure quality of programmes offered by all non-state actors implementing any teacher capacity development by having them submitted to KICD for vetting, evaluation and approval;
- vi. Review teacher professional development programmes to align them to the reformed curriculum; and
- vii. Prepare teacher in-service programmes to equip them to handle children with special education needs, children in emergency situations, working children, children in nomadic communities in building resilience for schooling.

5.4.2 Enhance teacher quality for effective implementation of the competency based curriculum

- i. Develop and Implement a national teacher education policy;
- ii. Upgrade the PTE into a DTE programme;
- iii. Establish ICT-based resources for teachers on the competency-based curriculum approach;
- iv. Conduct continuous research on contemporary global trends in effective pedagogical approaches;
- v. Develop a framework for training persons engaged in teaching without requisite preservice teacher training;
- vi. Coordinate and harmonize the provision of in service teacher training; and
- vii. Promote transformative aspects of education.

CHAPTER SIX: ASSESSMENT IN COMPETENCY BASED CURRICULUM

6.1 Goal

Develop more complete and fair learner evaluation processes, focusing on both cognitive and non-cognitive attributes (different domains), with fair balance between formative and summative assessments, considering both assessment of and assessment for learning.

6.2 Background

Assessment forms are critical component of establishing how much learners have achieved. Curriculum assessment in Kenya has been summative. Curriculum implementation and assessment have been oriented towards the memorization of knowledge and facts. This means that what learners have acquired over many years is assessed within one sitting. This type of assessment cannot always measure learning outcome effectively. Most learners who have transited through the system are not graded using results from formative assessment to determine the learners' future success or failure. This further shows that a record of the learners' abilities cannot be made.

There is a need to develop and establish a strong formative student assessment system to help teachers and school principals evaluate and address the specific learning need of their students, and of a summative student assessment system to help education authorities and managers make informed decisions about resource allocation; curriculum update; and investments as well as improve pedagogical practices. Other area in need of support is the preparation and dissemination of reports at different levels of the system

6.3 Policies

To enhance comprehensive understanding of the progress made by learners at all levels, MOEST will pursue the following policies:

- Establish mechanisms for conducting both formative and summative evaluation as a means of achieving comprehensive results of learning outcomes;
- Create an enabling environment for performance based learning, and transform assessment to check knowledge, skills and abilities required for the performance of certain tasks; and
- Initiate organizational linkages and networks to promote adoption and implementation of competency based assessment.

6.4 Strategies

6.4.1 Establish mechanisms for conducting both formative and summative evaluation as a means of achieving comprehensive results of learning outcomes

To implement this policy, the following strategies shall be employed:

- i. Institutionalize formative assessment;
- ii. Incorporate a given percentage of the learners' formative assessment grades into the summative assessment grade;
- iii. Develop guidelines for standardization of formative assessment for all levels of education;
- iv. Monitor formative assessment of different curriculum content areas, using different instruments;
- v. Build the capacity of teachers to enable them utilize the feedback results from the formative assessment improve learning and professional practice;
- vi. Create awareness on the role of formative assessment in school management; instructional practice, resource utilization and teacher capacity improvement; and
- vii. Strengthen school based assessment to enable teachers identify challenges in learners' progress and provide appropriate interventions.

6.4.2 Create an enabling environment for performance based learning, and transform assessment to check knowledge, skills and abilities required for the performance of certain tasks.

To implement this policy, the following strategies shall be employed:

- i. Standardize pedagogical procedures and assessment of competencies across all levels of education;
- ii. Ensure the creation of longitudinal linkages for development of knowledge, skills and abilities, from the basic to the complex units;
- iii. Provide guidelines for a continuum of competences that build up systematically from basic education institutions and feeds into tertiary education and the labour market;
- iv. Develop assessment procedures that allow for mastery of skills and create learning experiences that encourage opportunities for remedial learning; and
- vii. Enforcement of performance based learning initiatives within all learning institutions through mobilization of stakeholders in education.

6.4.3 Initiate organizational linkages and networks to promote adoption and implementation of competency based assessment.

To implement this policy, the following strategies will be implemented:

- i. Set up functional units to coordinate competency based assessment and build bridges between government organizations in charge of curriculum development, implementation and assessment; and
- ii. Establish forums for continuous sharing of information, challenges and

dissemination of lessons learnt to ensure effective implementation of competency based assessment.

CHAPTER SEVEN: RESOURCE MOBILIZATION AND MANAGEMENT

7.1 Goal

To mobilise adequate resources for sustainability of the curriculum reform process and implementation.

7.2 Background

Successful implementation of the curriculum reform depends on availability and efficient utilization of resources. The resources are the inputs that will be used to efficiently and effectively achieve the targeted programmes identified in the curriculum reform process. The term resource here encompasses the social, human, infrastructure, natural and financial resources. Though the Government devotes 7.2% of its GDP on education, inadequacy of resources remains one of the main challenges that the curriculum reform process will have to grapple with. It is critical to work in partnerships with County Governments, private sector, Development Partners and other stakeholders to provide technical, material and financial support for the curriculum reforms.

7.3 Policies

To facilitate resource mobilisation and management, MoEST will pursue the following policy:

• Provide adequate financial resources for development and effective implementation of the competency based curriculum

7.4 Strategies

7.4.1 Provide adequate financial resources for effective implementation for competency based curriculum

To implement this policy, the following strategies shall be implemented:

- i. Provide a budgetary allocation for curriculum reform process;
- ii. Mobilise development partners, civil society and NGO, to finance the curriculum reform process;
- iii. Establish a framework for engaging development partners and other stakeholders;
- iv. Engage stakeholders through partnerships principles to fund curriculum reforms through a multi-sectoral approach
- v. Lobbying for increased grants from development partners to supplement government funding;
- vi. Establishing networks for technical assistance on competency based curriculum
- vii. Conduct outreach programmes for dissemination of reformed curriculum;

- viii. Develop a framework for monitoring and evaluation of the efficiency in resource utilization;
- ix. Streamline the distribution and effective utilization of resources;
- x. Undertake an audit to assess their capacity for implementing the competency based curriculum;
- xi. Rehabilitate secondary schools to offer competency based curriculum;
- xii. Establish Technical and Vocational Training Education facilities to accommodate the curriculum pathways; and
- xiii. Establish model schools and regional centres of expertise for training and capacity building.

CHAPTER EIGHT: GOVERNANCE

8.1 Goal

To provide strategic leadership and guidance on curriculum reform and implementation.

8.2 Background

The Government invest 29% of the domestic expenditure into education. The educational sector has continued to call for increased allocation. There is need to ensure all resources are utilized for the intended purposes by developing a clear Government and Accountability Framework. significant progress has been achieved in setting up the institutional framework (rules, regulations, and organizations) for better governance and accountability. Enormous work remains outstanding so as to; strengthen the capacity of central, local and school authorities for using reliable and timely evidence for decision making; enhance managerial and technical skills by thoughtful investments in expertise and skill building; achieve a close involvement and collaboration with the private sector; and achieve greater engagement and empowerment of citizens.

Good governance, sound management, accountability and transparency are essential for effective curriculum reforms and implementation. This is particularly so in financial systems. All revenues, budgets and disbursements need to be published in a form that all citizens and other stakeholders understand. A follow up approach can demonstrate all the leakage points in a program, from the budget decision to the point of delivery in learning institutions. There is need to prudently put mechanisms to monitor and supervise school infrastructure programme and curriculum delivery methods. Data is crucial for making informed decisions on implementation, assessment and management of curriculum, therefore clear systems should be put in place to supervise this task.

This policy shall provide a framework for the development, coordination and implementation of sound financing strategies to ensure returns on investment.

8.3 Policies

The following governance policies shall be adopted for the implementation of the curriculum reform:

- MOEST will strengthen and streamline governance structures to support the implementation of the curriculum reform;
- Establish mechanisms for effective consultation, coordination and evaluation of curriculum implementation including data management;
- Ensure effective management of development and implementation of the reformed curriculum;
- Ensure all curriculum providers adhere to the legal and regulatory framework for curriculum implementation and evaluation; and
- Develop a curriculum reform communication strategy for social-mobilization.

8.4 Strategies

8.4.1 MoEST will strengthen and streamline governance structures to support the implementation of the curriculum reform.

To implement this policy the government shall employ the following strategies:

- i. Provide for mapping and consultation of stakeholders on curriculum reform process;
- ii. Review and develop the roles of different stakeholders in the education sector at the national and county levels in the implementation of the curriculum reforms;
- iii. Liaise with TVET to strengthen its capacity to oversee technical education at school and tertiary level to implement the competency based curriculum;
- iv. Institute training for educational management bodies to develop their capacity for implementation of curriculum reforms;
- v. Strengthen Educational management information systems(EMIS) for data capture and processing;
- vi. Work closely National Education Boards and County education Boards to influence curriculum reform and implementation at national and county levels respectively to steer the process;
- vii. Institute an effective teacher deployment, management and development program to meet the expectations of the reform in regular, special needs schools and alternative provision of basic education (APBE) centres as well as tertiary institutions;
- viii. Strengthen accountability and transparency mechanisms in all education institutions; and
- ix. Institute programs to improve the capacity of quality assurance staff to assure quality, supervise and oversee curriculum implementation, conduct of examinations and assessment in schools.

8.4.2 Ensure effective management of development and implementation of the curriculum reform

To implement this policy the government shall employ the following strategies:

- i. Establish standards and benchmarks for the curriculum reform process for all levels of education;
- ii. Ensure maintenance of standards, quality and relevance for curriculum reform and implementation; and
- iii. Undertake an audit of schools to map facilities in former technical schools in order to establish talent and technical schools per region.

8.4.3 Establish mechanisms for effective consultation, coordination and evaluation of curriculum implementation

- i. Facilitate the implementation of the reforms in liaison with stakeholders;
- ii. Establish curriculum committees to ensure effective curriculum reform, implementation; and
- iii. Carry out periodic reviews of the curriculum and its implementation process in

consultation with key stakeholders affected by the changes.

8.4.4 Ensure all curriculum providers adhere to the legal and regulatory framework for curriculum implementation and evaluation

To implement this policy, the government shall employ the following strategies

- i. Define roles and responsibilities for curriculum reform, implementation, evaluation; and
- ii. Undertake monitoring and supervision of curriculum reform and implementation to incorporate emerging issues to ensure standards

8.4.5 Develop a curriculum reform communication strategy for social-mobilization

To implement this policy the following strategies shall be used:

- i. Develop and print curriculum reform communication booklets
- ii. Establish a manned desk at both MoEST and KICD for receiving updates on the reform process; and
- iii. Develop and use public media programmes for informing the public

CHAPTER NINE: ENROLMENT AND GENDER DISPARITY IN SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS

9.1 Goal

To increase enrolment in Science, Technology, Engineering and Mathematics(STEM) related programmes and courses and enhance gender parity in these areas

9.2 Background

Although enrolment in universities is growing at alarming 30% and TVET showing similar trend except at a slower pace, the enrolment of students in STEM is below 20% in Kenyan tertiary education. Worse still women account for less than 5% of the total enrolment in STEM. This unfortunate state is largely attributed to the school curriculum and the approach and methodologies used for teaching mathematics, science and technical subjects. On the other hand, industrialization, global competitiveness and ascending to middle income country status demands that STEM be the core area of education, training and research. The rapid technological changes at the work place call for competence in ICT which is underpinned by good grounding in STEM. Training Women in STEM will contribute heavily to availing a balance human capital needed for wealth creation and human development.

9.3 Policy statement

The national curriculum will be used as a driver for promoting enrolment in STEM to make it the largest area of enrolment in the education system, and in addition ensure gender parity in these professions

9.4 Strategies

The following strategies shall be deployed to implement this policy:

- i. Build capacity of teachers of STEM supporting subjects; and
- ii. Ensure adequate laboratories and other curriculum support materials are made available in schools

CHAPTER TEN: PUBLIC PRIVATE PARTNERSHIP

10.1 Goal

To promote public private partnerships in curriculum development, implementation and delivery.

10.2 Background

There is evidence that the skills and competencies imparted in the education system are not always meeting the expectation of employers and industry. Employers know the skills needs of the work place and are therefore better placed to guide curriculum design. National values and social competencies are also key to national development and peaceful co-existence. The curriculum reform will address these challenges.

10.3 Policy statement

The Government fully supports the contribution of private firms and individuals to the development and implementation of curriculum. Employers, society and Government will work together to develop and implement national curriculum

10.4 Strategies

- i. Deploy monetary and fiscal incentives to encourage private investments in education and curriculum delivery; and
- ii. Strengthen industry-institutional linkages and partnerships.

CHAPTER ELEVEN: INCLUSION AND EQUITY IN EDUCATION

11.1 Goal

Promote inclusive education and ensure equity in education and training to address the needs of learners with disabilities and vulnerable groups in nomadic and ASAL counties and those living in extreme poverty and informal settlements

11.2 Background

Kenya has made tremendous progress in enhancing enrolment at all levels in education. However, there are groups of vulnerable learners who have not benefited so much from recent Government policies including free primary and free day secondary education. These groups include: leaners with disability who participate in special needs education; learners in slums/informal settlements; those in ASAL counties, those in nomadic communities; and orphans and extreme poverty groups. It is essential that curriculum development takes cognisance of these vulnerable groups and in particular the environments under which they learn. Well educated CWD / PWD are an asset for development and cease to be a burden to society and individual families. Ensuring equity in education will eventually close the widening gap between the poor and those who have. This will contribute to reduced conflicts and promote peaceful coexistence.

11.3 Policy Statement

The Government is committed to giving every citizen an equal opportunity to access education. The Government will therefore ensure that all vulnerable groups achieve nationally set National Enrolment Rates (NER) and attain a minimum standard in learning outcomes at all levels of education.

11.4 Strategies

- i. Facilitate CWD to access learning infrastructure and technologies that support their learning and training;
- ii. Building capacity of EARCs to get all CWD to receive education;
- iii. Use affirmative action to get all the children in slums to access education, including provision of special enhanced grants to vulnerable groups to improve learning outcomes; and
- iv. Design and implement curricula specific to learners in ASAL regions.

CHAPTER TWELVE: REGIONAL AND INTERNATIONAL BENCHMARKING AND HARMONIZATION

12.1 Goal

To promote regional and international curriculum benchmarking and harmonization

12.2 Background

It is the policy of the government to foster regional and international mobility of workers. This is a strategy of the Government to enhance employment opportunities outside Kenya, as long as such employment does not adversely affect national interests like is the case of brain drain. Besides, Kenya benefits from international experts deployed to support different sectors of the economy. In addition, Kenya has committed itself to harmonize curriculum standards within the EAC. Benchmarking national curriculum to international best practice would go a long way to support Government objectives in regional and international cooperation.

12.3 Policy statement:

The Government will work with the other EAC member states to harmonize curriculum standards and where feasible the national curriculum will be aligned to international education trends and standards

12.4 Strategies

- i. Cooperating with EAC member states to develop regional curriculum standards:
- ii. Harmonize the Kenya National Qualifications Framework with those of the EAC member states;
- iii. Cooperate with other states within the auspices of UNESCO to align to the IBE as far it serves national interests; and
- iv. Benchmark with other international curriculum development centres.

CHAPTER THIRTEEN: COUNTY-SPECIFIC DEVELOPMENT AGENDA

13.1 **Goal**

To promote county participation in setting the curriculum agenda and contributing countyspecific content that will spur development in the respective counties

13.2 Background

Kenya has embraced a devolved Government system where some ECDE and Youth Polytechnics have been devolved. Besides, the national Government id decentralizing education and empowering county offices, through the County Education Boards, to take charge of education matters in their respective counties. Given this capacity, it is prudent to all counties to contribute to curriculum content. For example, those along Lake Victoria may want to include fishing and fishing supporting systems included in their curriculum. The nomadic communities may wish to include subjects on nomadic life styles and how to modernize and improve their living standards.

13.3 Policy Statement

County Governments in cooperation with other stakeholders may contribute content to national curriculum provided such contribution may not exceed 10% of the content.

13.4 Strategies

- i. County Education Boards will research into and propose content that will relate the national curriculum to the local needs; and
- ii. County Government will be encouraged to facilitate the delivery of content specific to their County.

CHAPTER FOURTEEN: MONITORING AND EVALUATION

14.1 Goal

To monitor and evaluate curriculum development and implementation process.

14.2 Background

To provide for continuous improvement and ensuring that the curriculum is being implemented as planned and address emerging concerns. The curriculum development and implementation process will be monitored and evaluated appropriately.

14.3 Policy Statement

The government will Monitor and evaluate the curriculum development and implementation process as appropriate.

14.4 Strategies

Both the national government and the County Government structures will undertake frequent Curriculum Implementation review missions (every five years), develop reports and address changing concerns as appropriate,

GLOSSARY

Assessment for learning - Assessment of learner's progress and achievement, the primary purpose of which is to support and enhance learning by adapting the educational process to meet the learner's needs. Learners are made aware of their strengths and weaknesses while being provided with adequate support to overcome learning difficulties (UNESCO IBE 2011).

Assessment of learning - Assessment of learner's achievement the primary purpose of which is to provide information about what has been learned at a particular point in time. This process often involves the use of standardized tests or examinations. It is often, though not always, used for the purpose of promotion and/or graduation (UNESCO IBE 2011).

Assessment of learning outcomes - Assessment of an individual's achievement of stated learning outcomes, using a variety of methods (written, oral and practical tests/examinations, projects and portfolios) during or at the end of an education programme or a defined part of that programme, (UIS 2012)

Attitude - A learned tendency or readiness to evaluate things or react to some ideas, persons or situations in certain ways, either consciously or unconsciously. Attitudes are underpinned by values and beliefs and have an influence on behavior.

Competency-based curriculum - A curriculum that emphasizes the complex outcomes of a learning process (i.e. Knowledge, skills and attitudes to be applied by learners) rather than mainly focusing on what learners are expected to learn about in terms of traditionally-defined subject content. In principle such a curriculum is learner-centred and adaptive to the changing needs of students, teachers and society. It implies that learning activities and environments are chosen so that learners can acquire and apply the knowledge, skills and attitudes to situations they encounter in everyday life. Competency-based curricula are usually designed around a set of key competences/competencies that can be cross-curricular and/or subject-bound (UNESCO IBE 2011).

Curriculum framework - An overarching document that fulfils some or all of the following: places national statements of vision, economic development and education policy in a curriculum context; sets out broad aims and objectives of the curriculum at the various stages of schooling; explains the educational philosophy underlying the curriculum and approaches to teaching, learning and assessment that are fundamental to that philosophy; outlines the curriculum structure, its subjects or learning areas and the rationale for the inclusion of each in the curriculum; allocates time to various subjects and/or learning areas in each grade or stage; provides guidelines to subject curricula developers, teacher trainers and textbook writers; prescribes requirements for curriculum implementation, monitoring and evaluation. (UNESCO IBE 2011).

Curriculum policy - Formal decisions made by government or education authorities that have a direct or significant effect on the curriculum, its development and implementation. These decisions are normally recorded in a range of official documents (UNESCO IBE 2011).

Formative assessment - Assessment conducted throughout the educational process with a view to enhancing student learning. It implies: eliciting evidence about learning to close the gap between current and desired performance (so that action can be taken to close the gap); providing feedback to students; and involving students in the assessment and learning process (CCSSO 2008).

Learning outcomes - The totality of information, knowledge, understanding, attitudes, values, skills, competencies or behaviours a learner has mastered upon the successful completion of an education programme (UIS 2012).

Pedagogy - The art and science of teaching, as a professional practice and as a field of academic study. It encompasses not only the practical application of teaching but also curriculum issues and the body of theory relating to how and why learning takes place. Because it derives from a Greek expression referring to the education of the young, pedagogy is sometimes taken to be specifically about the education of children and young people. The more recently coined term 'andragogy' is used in relation to the education of adults (Wallace 2009).

Skill -The ability to perform tasks and solve problems. It is the ability, proficiency or dexterity to carry out tasks that come from education, training, practice or experience. It can enable the practical application of theoretical knowledge to particular tasks or situations. It is applied more broadly to include behaviours, attitudes and personal attributes that make individuals more effective in particular contexts such as education and training, employment and social engagement (CEDEFOP 2011).

Summative assessment - Assessment of learner's achievement at the end of a term, stage, course or programme usually, although not necessarily, involving formal testing or examinations. Summative assessment is most commonly used for ranking, grading and/or promoting students, and for certification purposes (UNESCO IBE 2011).