

### MINISTRY OF EDUCATION

# NATIONAL CURRICULUM POLICY

DECEMBER, 2018

Email: nesp@education.go.ke www.education.go.ke



### **REPUBLIC OF KENYA**

### MINISTRY OF EDUCATION

### NATIONAL CURRICULUM POLICY

The Principal Secretary
Ministry of Education
Jogoo House "B", Harambee Avenue
P.O. Box 30040 – 00100, Nairobi – Kenya
Tel: +254 020 318581

**Email**: psecretary@education.go.ke
Website: www.education.go.ke

### **FOREWORD**

The Government of Kenya is committed to provide quality education and training for all and has put in place measures to address access, quality, relevance and equity in line with constitutional and statutory imperatives as well as international and regional obligations. The 2014 Education for All (EFA) Review Report has demonstrated that Kenya has made significant gains in all EFA goals and holds remarkable promise for the future.

Global trends dictate that education must respond to the emerging social, technological and economic demands of the work-place. As a result of these demands, the Government has prioritized curriculum reform to empower and skill young Kenyans to thrive in a competitive, industrializing and closely networked globalized world.

In 2014, the Government embarked on a consultative process to prepare a policy framework to guide the curriculum review process. This policy will guide the implementation of the Competency- Based Curriculum (CBC) which will ensure that all learners acquire competencies and qualifications to promote national values, inspire individual innovation, nurture life-long learning and provide opportunities for learners to realize their full potential. It will also enhance access to education, provide relevant pathways for transition of all learners and contribute to strengthened governance of the education sector at various levels.

The Ministry of Education will work closely with education providers and stakeholders to enhance efficiency and effectiveness in its full implementation.

Amb. (Dr.) Amina C. Mohamed, EGH, CAV Cabinet Secretary, Ministry of Education

### **PREFACE**

The Ministry of Education has a responsibility to ensure that quality and relevant education is provided to all citizens. The discussions on the Curriculum reform process began with the recommendations of the Taskforce on the Realignment of the Education and Training Sector to the Kenyan Constitution (2010). 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 policy is largely influenced by questions about the nature and kind of society and social system that Kenya wants to become or remain. It defines the content of learning, knowledge, skills, attitudes, values and perspectives that the Kenyan society upholds.

The curriculum reform is a flagship project of the Kenya Vision 2030. The policy is organized in five thematic areas. The first discusses the issue of access to quality and relevant education; the second deals with a competency- based curriculum; the third focuses on the pedagogical approach for all learners; the fourth deals with the issue of assessment while the fifth one dwells on resource mobilisation 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 to ensure that activities and programmes within their mandate embrace the provisions of this policy.

Dr/Belio R. Kipsang, PhD, CBS

Principal Secretary, State Department of Early Learning and Basic Education

### TABLE OF CONTENTS

FOREWORDj	
PREFACEjj	
TABLE OF CONTENTSiii	
ACRONYMS AND ABBREVIATIONSjv	
PREAMBLEV	
CHAPTER ONE: INTRODUCTION	
CHAPTER TWO: ACCESS TO QUALITY AND RELEVANT EDUCATION AND TRAINING	
CHAPTER THREE: COMPETENCY - BASED CURRICULUM	
CHAPTER FOUR: ACCESS TO CURRICULUM SUPPORT MATERIALS	
CHAPTER FIVE: PEDAGOGICAL APPROACHES	
CHAPTER SIX: ASSESSMENT IN COMPETENCY - BASED CURRICULUM	
CHAPTER SEVEN: RESOURCE MOBILISATION AND MANAGEMENT	
CHAPTER EIGHT: GOVERNANCE	
CHAPTER NINE: ENROLMENT AND GENDER EQUITY IN SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS	
CHAPTER TEN: PUBLIC PRIVATE PARTNERSHIP	
CHAPTER ELEVEN: INCLUSION AND EQUITY IN EDUCATION	
CHAPTER TWELVE: REGIONAL AND INTERNATIONAL BENCHMARKING AND HARMONISATION	
CHAPTER THIRTEEN: COUNTY-SPECIFIC DEVELOPMENT AGENDA	
CHAPTER FOURTEEN: RESEARCH AND DEVELOPMENT, MONITORING, EVALUATION AND REPORTING 25	
GLOSSARY	

### ACRONYMS AND ABBREVIATIONS

ASALs Arid and Semi-Arid Lands

CBC Competency - Based Curriculum

CCSSO Council of Chief State School Officers

CEDFFOP European Center for the Development of Vocational Training

CWD Children with Disabilities

DTE Diploma Teacher Education

EAC East Africa Community

EARCs Education Assessment Resource Centres

ECD Early Childhood Development

ECDE Early Childhood Development Education

GDP Gross Domestic Product
GER Gross Enrolment Rates
GoK Government of Kenya

HELB Higher Education Loans Board

IBE International Bureau of Education

ICT Information, Communication and Technology

KICD Kenya Institute of Curriculum Development

MOE Ministry of Education

M&E Monitoring and Evaluation

NEMIS National Education Management Information System

NER National Enrolment Rates
PTE Primary Teacher Education
PWD Persons with Disabilities

SACMEQ Southern & Eastern Africa Consortium for Monitoring Educational Quality

SDGs Sustainable Development Goals

SNE Special Needs Education

STEM Science Technology Engineering and Mathematics

TVET Technical Vocational Education and Training

TVETA Technical, Vocational Education and Training Authority

UNESCO United Nations Educational, Scientific and Cultural Organization

UIS UNESCO Institute of Statistics

### **PREAMBLE**

Kenya is undertaking a major reform of the national curriculum, to produce citizens equipped with relevant and quality knowledge with national values and social competencies and to equip them with the 21<sup>st</sup> century skills and competencies in line with Kenya Vision 2030, Kenya Constitution 2010 and the Sustainable Development Goals (SDGs).

### THE VISION AND MISSION OF THE MINISTRY OF EDUCATION

#### Vision

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 AND MISSION OF THE CURRICULUM REFORM

#### Vision

Engaged, Empowered and Ethical Citizen.

#### Mission

Nurturing Every Learner's Potential.

### 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 Information and Communication Technology (ICT). A robust learning infrastructure that takes cognizance of gender and special needs complements lifelong tangible careers and sustainable futures. 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. It is in this light that education systems are responding by providing quality and relevant education and training, 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, a lifelong skills development strategy is necessary. 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 Sustainable Development Goal (SDG) No. 4 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. There have been consistent wastage rates reflected in the fact that only 30 percent of the age cohorts complete junior secondary education while only 12 percent 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 vulnerability among the youth. It calls for a review and reform of curricula 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 harmonisation of curricula and education systems. The states propose to develop harmonised 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 has inadequately 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 accessible, quality and relevant 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 documents have been developed. These include the Basic Education Act, 2013, Sessional Paper No. 14 of 2012, 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 pacts such as the Sustainable Development Goals (SDGs), 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 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.

An evaluation conducted by Kenya Institute of Curriculum Development (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, and 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 competency- based learning.

There is need for curricula 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 are 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 competencies at various education levels in order to adequately measure the learning achievements of learners. This Policy Framework 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 therefore 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 and training 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 and training.
- iii. Establish new pedagogical and andragogical approaches to implement a competency- based curriculum;
- iv. Institutionalise formative assessment at all levels of education and training;
- v. Mobilise resources for curriculum development and implementation;
- vi. Strengthen curriculum governance and management;
- vii. Enhance and strengthen Science Technology and Mathematics (STEM) in the curriculum;
- viii. Enhance Public-Private Partnership 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. Harmonise 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 various policies and programmes such as free primary education, free day secondary education, Technical and Vocation Education and Training (TVET) and Higher Education Loans Board (HELB) loans among others. As a result, the sector has witnessed an increase in enrolment and progress towards gender parity. Despite this progress, there are challenges which include: slow increase in primary school completion rates, regional disparities in enrolment, gender disparity, Gross Enrolment Rates (GER) and National Enrolment Rates (NER) in some counties are below the national average, low NER and GER for special needs learners and high repetition rate in upper primary. The proposed curriculum reform will address these challenges.

### 2.3 Policy Statement

To enhance access to quality and relevant education, Ministry of Education (MOE) shall implement the following policy objectives:

- 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 Education Assessment Resource Centres (EARCs) to enhance early identification, placement and interventions inclusions for learners and trainees with special needs and disabilities.

### 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. Harmonise curricula 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

To improve quality of education at all levels through competency- based curricula.

### 3.2 Background

The National curriculum that was revised in 2002 laid emphasis on achievement of stated objectives. 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 8-4-4 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 do not display the expected level of competence. Results from SACMEQ-III (2011) 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 (2011) shows that 40 percent of Standard 6 learners cannot interpret information included in various parts of a given text in association with external information, while only 6.4 percent are proficient in critical reading, i.e. can read from various parts of a given text, evaluate and make inference about the author's message. Furthermore, 70 percent 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 competencies 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 Policy Statements

To establish and entrench a competency- based curriculum, MOE will implement the following:

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

#### 3.4 Strategies

The following strategies will be implemented to achieve the above

### 3.4.1 Establish a competency-based curriculum at all levels

i. Carry out a comprehensive needs assessment to inform development of competencybased curriculum;

- ii. Develop appropriate education structure for competency- based curriculum;
- iii. Develop a curriculum framework for competency- based curriculum;
- iv. Design a curriculum that is re-oriented towards learning outcomes;
- v. Develop standards and indicators for competencies at each level;
- vi. Develop mechanisms of including learners with disabilities in the CBC;
- vii. Develop and approve competency- based curriculum designs and curriculum support materials;
- viii. Create awareness among all stakeholders on the competency- based curriculum and;
- ix. Ensure that an interdisciplinary and holistic learning is embedded in the curricula.

### 3.4.2 Utilize technology to enhance innovation in the implementation of competency- based curriculum

- i. Design appropriate digital content for a competency- based curriculum taking cognizance of the needs of SNE learners;
- 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

To enhance 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 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 textbooks in Kenya is four times higher than the cost in countries with similar economic status. The curriculum reform process presents an ideal opportunity to re-engineer 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. For learners with special needs and disabilities, sufficiency and appropriateness of the materials shall be ensured.

### 4.4 Strategies

The following strategies will be deployed to implement this policy:

- i. Liberalize the textbook market and allow free market principles to apply;
- ii. Promote the manufacture of curriculum support materials locally;
- iii. Take affirmative action to lower the cost of text books;
- iv. Promote the development of affordable curriculum support materials for learners and trainees with special needs and disabilities; and
- v. Provide more opportunities for learners to access e-learning materials.

### 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 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 Policy Statement**

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

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

- Reform pre-service teacher education training curricular at Early Childhood Development (ECD) Diploma, Primary Teacher Education (PTE), Diploma Teacher Education (DTE) and degree programmes to enable teachers to help all 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 re-tooling 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 educational 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 pre- service 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

To 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 both of and for learning.

### 6.2 Background

Assessment forms are a 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 learner assessment system to help teachers and school principals evaluate and address the specific learning needs of their learners, and of a summative learner assessment system to help education authorities and managers make informed decisions about resource allocation, curriculum update and investments as well as improve pedagogical practices. Another area in need of support is the preparation and dissemination of reports at different levels of the system

#### **6.3** Policy Statement

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

- 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.
- Institute flexibility in assessment towards enhancing participation and appropriateness for learners and trainees with special learning needs.

### 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. Institutionalise formative assessment;
- ii. Incorporate a given percentage of the learners' formative assessment grades into the summative assessment grade;
- iii. Develop guidelines for standardisation 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 to improve learning and professional practice;
- vi. Create awareness on the role of formative assessment in school management; instructional practice, resource utilisation 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. Standardise 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;
- Provide guidelines for a continuum of competencies 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.

### 6.4.4 Institute flexibility in assessment towards enhancing participation and appropriateness for learners and trainees with special learning needs.

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

- i. Adjust timings for learners with special needs
- ii. Adapt assessment materials appropriately
- iii. Provide for support personnel where possible

### CHAPTER SEVEN RESOURCE MOBILISATION 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 5.1 percent 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 Policy Statement

To facilitate resource mobilisation and management, MOE 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 development and effective implementation of 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, private sector and other stakeholders to finance the curriculum reform process;
- iii. Establish a framework for engaging development partners and other stakeholders;
- iv. Engage stakeholders through partnership principles to fund curriculum reforms through a multi-sectoral approach;
- v. Lobby for increased grants from development partners to supplement government funding;
- vi. Establish networks for technical assistance on competency- based curriculum
- vii. Conduct outreach programmes for dissemination of the reformed curriculum;
- viii. Develop a framework for monitoring and evaluation of the efficiency in resource utilization:
- ix. Streamline the distribution and effective utilisation of resources;
- x. Undertake an audit to assess the capacity for implementing the competency-based curriculum;

- xi. Restructure basic education for 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 invests 29 percent of the domestic expenditure in education. The educational sector has continued to call for increased allocation. There is need to ensure all resources are utilised for the intended purposes by developing a clear Government and Accountability Framework. Significant progress has been achieved in setting up the institutional framework (rules, regulation 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 linkage points in programmes, 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 programmes 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 Policy Statement

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

- MOE 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 communication strategy.

### 8.4 Strategies

### 8.4.1 MOE 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 TVETA 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 National Educational management information systems (NEMIS) for data capture and processing;
- vi. Work closely with 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 programme to meet the expectations of the reform in regular, special needs schools and tertiary institutions;
- viii. Strengthen accountability and transparency mechanisms in all education institutions and;
- ix. Institute programmes 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 the curriculum reform process

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 curriculum in collaboration with stakeholders;
- ii. Establish relevant committees to ensure effective implementation of curriculum and;
- iii. Carry out periodic reviews of the curriculum implementation in consultation with key stakeholders.

### 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 set standards are maintained.

### 8.4.5 Develop a communication strategy

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 MOE 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 EQUITY 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 high rate of 30 percent and TVET showing similar trend except at a slower pace, the enrolment of students in STEM is about 20 percent in Kenyan tertiary education. Worse still, women account for less than 5 percent of the total enrolment in STEM. This is largely attributed to the school curriculum, the approach and methodologies used for teaching mathematics, science and technical subjects. Equally, the percentage of participation of learners with disabilities in STEM subjects is even lower. On the other hand, industrialization, global competitiveness and progress towards attaining middle income country status demand 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 balanced 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 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;
- iii. Equip universities and colleges with appropriate learning material, assistive devices and technologies for learners and trainees with disabilities.

### 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 the private sector and individuals to the development and implementation of curriculum. The Government will work together with private sector, industry, employers, civil society, county governments and the community to develop, implement and review the national curriculum.

### 10.4 Strategies

- i. Deploy monetary and fiscal incentives to encourage private investments in education and curriculum delivery;
- ii. Strengthen industry-institutional linkages and partnerships and;
- iii. Facilitate application of research, innovation and development in the assessment of curriculum delivery.

### 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 may not benefited much from recent Government policies including free primary and free day secondary education. These groups include: learners with disability who participate in special needs education; learners in slums/informal settlements; those in ASAL counties; those in nomadic communities; and orphans and children living in extreme poverty. It is essential that curriculum development takes cognizance of these vulnerable groups and in particular the environments under which they learn. This will ensure that Children with Disabilities/Persons with Disabilities (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 co-existence.

### 11.3 Policy Statement

The Government is committed to providing every citizen an equal opportunity to access education. The Government will therefore ensure that all vulnerable groups achieve 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;
- iv. Design and implement curricula specific to learners in ASAL regions;
- v. Ensure all institutions of learning and training are accessible by learners with various forms of disabilities;
- vi. Undertake appropriate adaptations in curriculum and evaluation to increase participation for learners with special needs and disabilities;
- vii. Provide qualified personnel to handle learners with special needs and disabilities;
- viii. Promote advocacy and awareness creation on mainstreaming disability in education and training.

# CHAPTER TWELVE REGIONAL AND INTERNATIONAL BENCHMARKING AND HARMONISATION

#### 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 herself to harmonize curriculum standards within the East African Community (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

- Cooperating with EAC member states to develop harmonized 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 as 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 centres and Vocational Training Centres have been devolved. Besides, the national Government is 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 allow 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 that such contribution does not exceed 10 percent 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

### RESEARCH DEVELOPMENT, MONITORING, EVALUATION AND REPORTING

#### 14.1 Goal

To monitor and evaluate curriculum development and implementation process.

### 14.2 Background

Monitoring and evaluation is critical in informing evidence-based decision making and ensuring successful implementation of the curriculum. It also forms a basis for improvement and further research. 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

In order to effectively implement the curriculum, the Government will develop and mainstream standard M&E system at the national, county and institutional level. Both the National and County Government structures will undertake frequent Curriculum Implementation review missions (every five years), develop reports and address changing concerns as appropriate. In particular, the Government will employ the following strategies:

- i. Develop a national Monitoring and Evaluation (M&E) strategy for curriculum implementation;
- ii. Develop a Monitoring and Evaluation framework;
- iii. Develop and implement a score card system on key curriculum implementation indicators;
- iv. Establish a sustainable M&E funding mechanism;
- v. Establish an accurate baseline upon which to measure changes in learning outcomes;
- vi. Build capacity of personnel at national, county and institutional level to carry out monitoring and evaluation of curriculum delivery;
- vii. Conduct mid-term and end term evaluation on curriculum implementation and;
- viii. Conduct Rapid Annual Assessments.

### **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 standardised 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 behaviors 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 behaviors, 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. However, it does not necessarily involve formal testing or examinations. Summative assessment is most commonly used for ranking, grading and/or promoting learners, and for certification purposes (UNESCO IBE, 2011).