



**KENYA INSTITUTE OF CURRICULUM  
DEVELOPMENT**

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

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## FOREWORD

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

Over the years, education in Kenya has been guided by the prevailing national goals identified through the establishment of various Education Commissions and situational analyses of the educational needs of the country. Currently, the sector seeks to align education to the Constitution of Kenya, 2010 and the Kenya Vision 2030 guided by national education policies and international agreements. These include the Sessional paper No 2 of 2015, National Education Sector Plan (NESP), Education for All (EFA) and the Sustainable Development Goals (SDGs). This Needs Assessment was carried out in order to ascertain the fundamental expectations of Kenyans as the basis for designing relevant and quality curricula for the levels of basic and tertiary education in tandem with the aspirations of the nation.

Specifically this needs assessment study provides the basis on which the Ministry of Education Science and Technology and policy-makers will make critical decisions to set the various learning areas as well as the relevant pathways. This will drive the education sector reforms that should lead the country to achieving the tenets of the Constitution of Kenya 2010 and the Kenya Vision 2030.

**ERASTUS P. KINYANJUI**  
**CHAIRMAN**  
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## ABSTRACT

This was a Needs Assessment Study for ECDE Curriculum reform. The specific objectives of the study were to: establish the desired general needs for curriculum reform in ECDE, determine the desired competencies for ECDE level of learning, determine the talent identification and nurturing strategies to be adopted at ECDE level of the curriculum, establish desired content/activity areas/pathways for competency based curriculum, identify resources suitable for competency based curriculum, determine desired pedagogical approaches for competency based curriculum and, establish formative and summative assessment modes for competency based curriculum. Relevant literature was reviewed that operationalized the key concepts, grounded the study within the discipline of curriculum studies, reviewed relevant theories and previous researches and provided a rationale for the study.

The study adopted the pragmatist research philosophy which draws its tenets from the realist – positivist /positivist paradigm on one hand, and the relativist – interpretivist/constructivist paradigm, on the other hand. This study therefore used a mixed methods design which involved both quantitative and qualitative approaches. The study was conceptualised as a survey therefore both questionnaires, observation schedules, interviews and submitted memoranda were used as data instruments. The study targeted all Early Childhood Development and Educational (ECDE) centres in Kenya, various Education Field officers and other stakeholders. Within the institutions, the study targeted all ECDE teachers in the ECDE centres. The target population size was 37,312 ECDE centres (Ministry of Education, 2011). The study employed a multi-stage sampling technique, which involved random selection of the respondents. The sample size determination formula was applied to compute the sample size at 1081 ECDE centres (Survey System, 2012). This represented the sample size at 5% level of significance, with an error of **2.5%**. Sampling for the qualitative phase was done using purposive techniques leading to identification of several participants, institutions and key informants. A total of 1400 participants took part in the study. The participants included ECDE teachers, workers in the informal sector and industry, education field officers and other stakeholders.

The study found that Kenyans would prefer societal needs like environmental protection, patriotism and social development to be fully embedded in the curriculum from the foundation level. Holistic development of learners and contemporary issues should also be addressed. Learners in ECDE should acquire the 21<sup>st</sup> century skills like communication skills, basic literacy, life skills as well as basic health and hygiene practices. Talents should be identified at the formative years of learners in different settings by parents, teachers and other professionals using an assessment tool that needs to be developed. Some of the learning areas preferred by Kenyans to be covered in the ECDE curriculum were language, life skills, creative arts, communication skills, numeracy and literacy skills; environmental awareness; health and nutrition, self-awareness, self-esteem, self-confidence, personal safety (security), emotional awareness and physical education. Child centred methods are the most appropriate pedagogical methods for delivery of the competence based curriculum. The resources required to implement ECDE competency based curriculum include print materials, quality teachers, enough classrooms, play materials and play fields. The study found that the most appropriate method for assessment in ECDE competency based learning was observation. Some of the suggested pertinent issues that should be addressed in the envisaged curriculum were drug and substance abuse, HIV and AIDs, religion, use and misuse of ICT, sexuality, environmental conservation, insecurity, gender issues, violence at family, health and nutrition. In addition, respondents proposed a curriculum structure that considers the ages and developmental stages

of the learners at all levels, that allows transition of all pupils from one level of learning to another.

Some of the major recommendations of the study were; education should promote holistic development of the learner physically, socially, psychologically, spiritually, intellectually, morally and in character formation; learners in ECD should acquire competencies like communication, health and good personal hygiene; numeracy and literacy skills; ECDE teachers should be trained on how to identify and nurture learners' talents; the National ECDE curriculum should have learning areas such as languages, mathematics, life skills, creative arts, communication skills, numeracy, literacy, nutrition and health; the ECD teachers should adopt learner centred methods for curriculum delivery and they should be provided with diverse resources; ECDE teachers should use observation method for assessing learners in competence based learning. Finally, the competence based ECDE curriculum should address pertinent issues like drug and substance abuse, HIV and AIDs, use and misuse of ICT, insecurity, violence at family level, health and nutrition.

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**ABBREVIATIONS AND ACRONYMS**

|                  |   |   |
|------------------|---|---|
| UNESCO           | - | United Nations Education Scientific Cultural Organization |
| NESP             | - | National Education Sector Plan                            |
| EFA              | - | Education for All   |
| MDGs             | - | Millennium Development Goals                              |
| SDGs             | - | Sustainable Development Goals                             |
| KICD             | - | Kenya Institute of Curriculum Development                 |
| EFA              | - | Education for All   |
| EAC              | - | East African Community                                    |
| HIV              | - | Human immunodeficiency virus                              |
| AIDs             | - | Acquired immune deficiency syndrome                       |
| ICT              | - | Information Communications Technology                     |
| MoEST            | - | Ministry of Education Science and Technology              |
| IBE              | - | International Bureau of Education                         |
| EARC             | - | Education Assessment Resource Centre                      |
| ECDE<br>Centres; | - | Early Childhood Development and Education                 |
| ABE              | - | Adult Basic Education                                     |
| NFE              | - | Non Formal Education Centres                              |
| ECD              | - | Early Childhood Development                               |
| KIE              | - | Kenya Institute of Education                              |
| ESD              | - | Education for Sustainable Development                     |
| TSC              | - | Teachers Service Commission                               |
| ESQAC            | - | Education Standards Quality Assurance Council             |
| KNEC             | - | Kenya National Examination Council                        |

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|        |   |  |
|--------|---|--|
| REAR   | - | Research Academic Reform   |
| NESP   | - | National Education Sector Plan   |
| GOK    | - | Government of Kenya  |
| UPE    | - | Universal Primary Education  |
| EFA    | - | Education for All  |
| SNE    | - | Special Needs Education  |
| STI    | - | Science, Technology, and Innovation  |
| TIMSS  | - | Trends in International Mathematics and Science Survey                       |
| SACMEQ | - | Southern and Eastern Africa Consortium for<br>Monitoring Educational Quality |
| CBE    | - | Competence Based Education   |
| SNE    | - | Special Needs Education  |
| TTC's  | - | Teachers Training Colleges   |
| SPSS   | - | Statistical Package for Social Sciences                                      |



## **BACKGROUND TO THE STUDY**

### **1.1 Introduction**

This is a report of the Needs Assessment research for Curriculum Reform in Kenya (NARCK) carried out by the Kenya Institute of Curriculum Development (KICD) 2016.

This chapter provides a background to the study which explains the context of the study, statement of the problem, research objectives, scope of the study, rationale for the study based on the context and a summary of the issues raised in the chapter.

### **1.2 Context of the study**

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

During the World Education Forum of Dakar 2000, in Senegal, 164 governments pledged to achieve Education for All (EFA) and the eight Millennium Development Goals (MDGS) by 2015. This resolution propelled provision of access to education in many

countries with high levels of enrolment being registered at both primary and secondary levels. The number of youth exiting school into the world of work has increased yet scientific and technological progress is making most training obsolete, in no time (World Bank, 2014). Hence, education systems everywhere face serious challenges and dilemmas, in the task of preparing current and future citizens in a rapidly changing world.

The overarching goal for the post 2015 agenda is to ensure equitable and inclusive quality education for all by 2030. Both developed and developing countries are currently at varying levels, devising strategies, developing curriculum and education pathways that enable learners to acquire the multi, flexible and diversified competencies for learning for life. In addition, sustainable development demands that every human being acquires the 21st Century skills which include the following presented in Table 1.1 below.

**Table 1.1: 21st Century Skills**

| <b>Learning &amp; Innovation Skills</b> | <b>Information, Media &amp; Technology Skills</b>         | <b>Life &amp; Career Skills - [Values &amp; EQ]</b> |
|---|---|---|
| • Critical Thinking & Problem Solving   | • Information Literacy                                    | • Flexibility & Adaptability                        |
| •                                       | • Media Literacy  | • Initiative & Self-Direction                       |
| • Creativity & Innovation               | • ICT (Information, Communications & technology) literacy | • Social & Cross-Cultural Skills                    |
| • Communication                         |   | • Productivity & Accountability                     |
| • Collaboration                         |   | • Leadership & Responsibility                       |

In the last two decades, investment in education in Sub-Saharan Africa has not translated into functional knowledge and skills that can transform individuals and economies in which they live (EFA Global Monitoring Report, 2012). The African Economic Outlook (2012) recognizes the pivotal importance of education and appropriate skills as the prevailing solution to mitigating unemployment and vulnerable employment among the youth. It calls for a review, and reform of curricular to prepare youth for knowledge intensive economies. This can be achieved by making provisions for curricula that intricately balances opportunities to pursue skills acquisition in academics, technical and vocational skills education.

The East African Community (EAC) treaty emphasizes cooperation and integrated investments especially in education and research. It aims at preparing citizens to operate and collaborate effectively in a globalized economy (EAC, 2013). The states propose to develop harmonized programmes for the primary, secondary and tertiary education cycles. The EAC Partner States anticipate that a common

framework will promote equal access to education opportunities, harmonized quality assurance and accreditation systems, whose benefits will include free movement of goods and services and people (EAC, 2014).

Kenya effected the last curriculum reform in 1985, when there was a shift from the 7-4-2-3 System to the 8-4-4 system. The purpose of this move was to provide a curriculum that would help learners to gain practical skills and competences to enable them become self-reliant. The curriculum was reformed from one that geared the learners towards white collar jobs, to a more practical oriented curriculum that would enable gradaunts of the system to generate jobs. Emphasis was laid on practical subjects such as art and craft, woodwork, home science, agriculture and music. An evaluation of the curriculum in 1995 revealed that the curriculum had a heavy workload across the various subjects in primary and secondary education. Based on the Report on “Total Integration of Quality Education and training” of 1999, a Needs Assessment was undertaken. However, the findings of the study indicated that the subjects at primary level were too many, the content in each subject for primary and secondary was too much, and there was also repetition of content in various subjects. The national curriculum for primary and secondary education was then reviewed in 2002 to remove the overloads and unnecessary overlaps within and across subjects, and to mainstream emerging issues.

The revision of the curriculum entailed refocusing the goals of education, the primary and secondary education level objectives, and the subjects’ general and specific objectives. The rationalization of the primary curriculum resulted in some new learning areas. Music, Art and Craft were integrated into one study area called Creative Arts. This incorporated aspects of Drama in the creative Arts

subjects. Home Science, Agriculture and Science were integrated into one study area called Science- which also include aspects of technology. Geography, History and Civics (GHC) – a combined course was renamed Social Studies and included environmental education, civic education and aspects of Business Studies. The English syllabus adopted a thematic approach to teach various language skills. The themes were derived from things and situations that learners are likely to interact with. The emerging issues mainstreamed included HIV and AIDs, child labour, environmental conservation and gender issues, among others (KIE, 2002).

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

Summative evaluation of primary and secondary education in 2009 indicated that the current curriculum content relegates practical skills necessary for economic development to non-examinable subjects, thus, most of the learners exiting the education system at secondary level did not have adequate skills and competences to be absorbed in the job market. Among the skills gaps identified were; agricultural skills, entrepreneurial skills, vocational and technical skills,

innovation and creativity and ICT skills, as learners opt not to learn these subjects. The cognitive domain, was over emphasized at the expense of affective and psychomotor domains rendering teaching and learning to be exam oriented. It was also indicated that the curriculum did not facilitate adequate acquisition of pre-requisite values such as nationalism and patriotism.

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

The Constitution of Kenya 2010 advocates for free and compulsory basic education. It also introduced the national and County Governments, which gave rise to changes in the administrative and organizational structures of various offices and services. Currently, ECDE education is under the County Governments. This had implications in education as this information needed to be incorporated in the curriculum to be tandem with the administration of both the County and National governments as well as other

fundamental institutions. Effort was made as a mitigating measure, to include some of the information in Social Studies at primary level and history and government at secondary level. However, the wider changes across the subjects have not been effected to date.

The task force on “Re-alignment of education and training to the Constitution of Kenya” was commissioned in 2010 to advise on how education would be reformed to cater for the aspirations of the Kenya Vision 2030, and be realigned to the Constitution of Kenya 2010. The task force report emphasized the need for the following:

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

Sessional Paper No. 2 of 2015, “Reforming Education and Training in Kenya”, recognizes that in order to realize the national development goals, relevant and quality education and training is required to meet the human development needs of a rapidly changing and a more diverse economy. The policy recommends reforming the education and training sector to provide for the development of individual potential in a holistic and integrated manner, while producing individuals who are intellectually, emotionally and physically balanced. It further recommends a competency based curriculum; establishment of a national learning assessment system; early identification and nurturing of talents; introduction of national

values, national cohesion and integration in the curriculum, ;integration of ICT in the education system and introduction of learning pathways that ensure every learner graduates from the education system with competencies that empower them to exploit their full potential (MoEST, 2015). In this regard therefore, the curriculum reform seeks to shift the Kenyan curriculum from a subject-based curriculum to a competence based curriculum The Needs Assessment study is a first step in informing the conceptualization of what the curricula for various levels should comprise in order to meet the needs and aspirations of learners and wider Kenyan community.

### **1.3 Statement of the problem**

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

International standards set by International Bureau of Education (IBE) recommend that curricula should be reviewed every five years,



thus recognizing the dynamism of development of society. The Kenyan curricula for primary and secondary were last reviewed in 2002. Since then there has been numerous developments both on the national and international level. These include the inauguration of the Constitution of Kenya, 2010, the Kenya Vision 2030, the East African Protocol and most recently the Sustainable Development Goals. All these instruments have implications on the different levels of education and necessitate a more comprehensive alteration of the education sector. Thus, the urgent need for an education reform.

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

Primary education is intended to provide learners with foundational skills of literacy, numeracy and essential life skills, while secondary education is intended to develop transferable skills. Studies on global best practices show that at the primary school level, learners require shorter periods to acquire foundational skills. At Secondary school

level, learners require more time to nurture talent and acquire requisite competencies. In essence, such structures reduce wastage and make it possible for a country to leverage its development on the wide array of relevant skills and competencies inculcated through a well thought out and inclusive curricula. The Kenyan system has a long period (8years) for foundational skills and a very short period for secondary school (4 years) which is not sufficient for acquiring intended skills. This calls for a review of the education system to introduce a shorter ECDE and Primary Cycle and, a longer Secondary School Cycle.

The shift from a subject-based curriculum to a competence-based curriculum will provide the opportunity to set standards against which student learning can be assessed taking into consideration the individual learner's interests, abilities and talents. The reform also seeks to create different pathways to enable students have an opportunity to pursue different career pathways of their interest. The needs assessment study provides the basis on which the Ministry of Education Science and Technology and policy-makers will make critical decisions to set the various learning areas as well as the relevant pathways. This will drive the education sector reforms that should lead the country to achieving the tenets of the Constitution of Kenya 2010 and the Kenya Vision 2030.

#### **1.4 Research Objectives**

The specific objectives of the study were to:

1. Establish desired **general needs** for curriculum reform.
2. Determine desired **competencies** for all levels of learning.
3. Determine the **talent** identification and nurturing strategies to be adopted at different levels of the curriculum.

4. Establish desired **content/learning areas/pathways** for competency based curriculum to provide quality, relevant and accessible education.
5. Identify **resources** suitable for competency based curriculum.
6. Determine desired **pedagogical approaches** for competency based curriculum.
7. Establish formative and summative **assessment** modes for competency based curriculum.

### **1.5 Scope of the study**

This study was carried out for Early Childhood Development and Education (ECDE) level of education in Kenya for which KICD is mandated to develop curriculum.

### **1.6 Rationale for the study based on the Context**

The hallmark of relevance of any curriculum to society is the promptness with which the curriculum adapts to changing societal needs. The current primary and secondary school curriculum was reviewed in 2002, followed in 2004 by a review of the primary teacher education curriculum, the special needs education curriculum in 2006 and the diploma teacher education curriculum in 2007. It is, therefore, not in tandem with the current needs and aspirations of the nation as articulated in various policy documents. The Ministry of Education acknowledges the need to reform the secondary school curriculum with the emphasis shifting from knowledge reproduction to knowledge production and, to make ICT central to it. The proposed curriculum reform has to be in tandem with the Constitution of Kenya 2010, Kenya Vision 2030 and the East Africa Community Protocol.

The mandate to reform the curriculum lies with the KICD. This will include; reviewing of learning materials and orientating the serving teachers and other field education officers such as the quality

assurance officers, curriculum support officers and Education Assessment Resource Centre (EARC) officers. The Institute needed to undertake this Needs Assessment study in order to ascertain the actual needs of the various ECDE stakeholders and to inform policy decision-making on the various aspects of the reform.

### **1.7 Summary**

The global demand for quality education is leading countries to adapt new curriculum content, pedagogical skills and educational structures that emphasize on the importance of producing learners who can take initiative, and contribute to innovation of products and processes. Education should be seen as a basis for development or a means for improving life and this can be in technology, preventing disease, improving governance, agriculture and protecting the environment among others. It should enable people to understand local, regional and global contexts and shape their mindsets and actions in their daily life. Kenya's transformation into a newly industrialized country is hinged on the provision of a highly qualified human resource. The country, therefore, needs an education system that will foster innovation and facilitate the much needed social, economic and environmental development for sustainability in line SDG Goal No. 4.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 Introduction**

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

The core aspects of the study have been divided into themes or objectives that have guided the needs assessment survey. These include the general societal needs, competencies, values and attitudes, learning areas, nurturing of talents, resources, assessment and contemporary and emerging issues. Among the articles reviewed include journals, policy documents, books, grey areas such as circulars and other empirical studies.

#### **2.2 Definition of Key Concepts**

This section describes different understanding by scholars and other authors on meaning of key concepts that have been used in this study.

##### **2.2.1. Curriculum**

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

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

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

All curriculum decisions are defined in a framework that establishes the subjects, the time frame and particular content, teaching learning strategies to be adopted and assessment criteria to be used. Countries around the world organize education along curriculum framework. This defines the perimeters within which the curriculum must be developed. It has many components; among them are the underpinning principles and core values, general objectives, expected learning achievements, guidelines on teaching and learning process and assessment (UNESCO, 2013). Further the paper opines that it is the framework that provides coherence to the guidelines and national standards that enable and support the development of the school curriculum. This is affirmed by the intentions of KICD to develop a

curriculum framework after the engagement with the stakeholders during needs assessment.

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

### **2.2.2. Learning areas**

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

### **2.2.3. Competencies**

Competency is a set of defined behaviors that provide a structured guide enabling the identification, evaluation and development of the behaviors in an individual. Some scholars consider 'Competence' to mean a combination of theoretical and practical knowledge, cognitive skills, values and behavior used to improve performance; or a description of skills, knowledge, attitudes and behaviors required for effective performance of a real-world task or activity (Weddel, 2006).

Others define it as the ability to choose and use cohesive or integrated combination of knowledge, skills and attitudes with the

aim to realize a task in a certain context (Kouwenhoven, 2003).

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

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

#### **2.2.4. Values and attitudes**

The Needs Assessment survey not only defined competencies as abilities but also as values and attitudes to be acquired by the time learners leave an education cycle. Values are the principles and fundamental convictions which act as general guides to behavior, the standards by which particular actions are judged as good or desirable (Halstead, 2000). Other views indicate that values are the ideals that



give significance to our lives, reflected through the priorities that we choose and that we act on consistently and repeatedly (Brian, 2004). With the emphasis on technology, innovation and science as a means of attaining the Vision 2030 goals there is a tendency to pay less attention to moral and ethical issues which need to be given equal measure of attention in development.

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

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

#### **2.2.4 Pedagogy**

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

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

#### **2.2.5 Resources**

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

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

therefore selected and used to stimulate interest and motivate learning.

### **2.2.6 Assessment**

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

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

### **2.2.7 Contemporary and Emerging issues**

The cross-curricular issues are commonly areas which by their very nature, have a strong impact psychosocial behavior of learners. These are issues that touches on a number of different aspects of the society and affect learners at all levels. These issues otherwise

known as pertinent and emerging issues, encompasses core-social and human values which manifest themselves in more than one discipline: hence the term cross cutting. Issues that are considered pertinent and hence mainstreamed as study areas in the curriculum include Life Skills Education (LSE), HIV and AIDs Education, Gender Education, Drugs and substance Abuse (DSA) prevention, Child's Right Education, Child labour prevention, Integrity & Good Governance, Guidance and Counseling Service, Environmental Education and Health Education. Other issues that have been perceived to be pertinent in the recent past are; Peace Education, Values/Moral Education, Disaster Risk Reduction, Education for Sustainable Development (ESD) and National Values as enshrined in the Constitution, to mention but a few.

### **2.2.8 Talents**

There is no one universal definition of talented learners. In the United States of America, The No Child Left Behind Act (Elementary and Secondary Education Act, 2002) define Gifted and Talented as children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities. In Australia Gifted and talented learners at School are defined as those who demonstrate the potential for a high level of performance in different ability areas, when compared to others of similar age, background and experience such as intellectual; Creative; Artistic; Social; Physical; Spiritual (Department for Education and Children's Services, 1994).

In Korea, a gifted person is defined as one who possesses extraordinary innate abilities or visible talents requiring special education to nurture them. The purpose of gifted education is to

promote self-actualization of individuals and have them contribute to development of society and nation by scouting for gifted and talented persons and carrying out education suitable for ability and aptitude in accordance with regulations so they can develop innate potential.

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

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

### **2.3 Situating the study within the Field of Education and Discipline of Curriculum Studies**

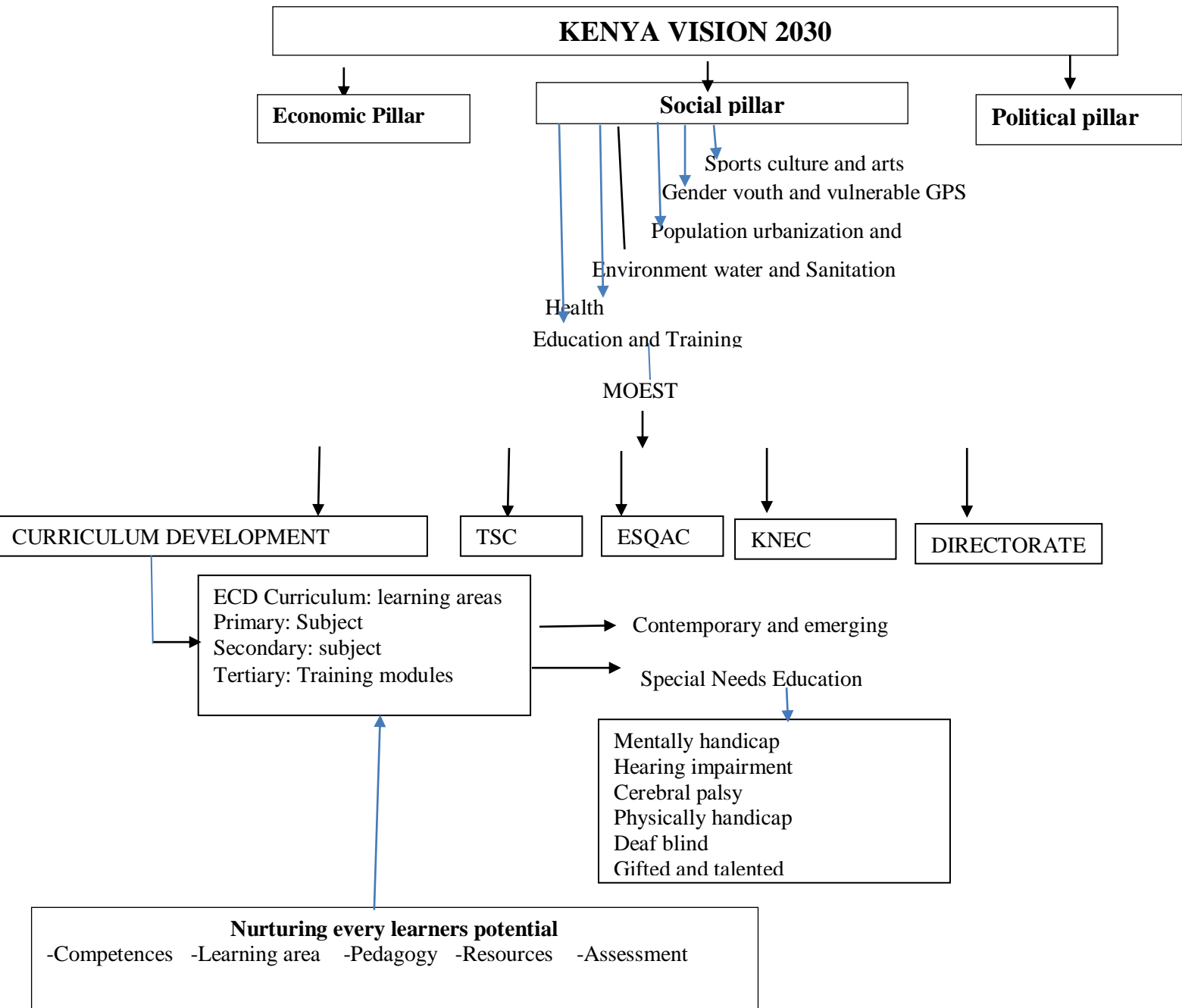
The aspect of curriculum development can be traced to the national aspirations as envisaged in the Kenya Vision 2030. The goal of curriculum reforms is to achieve the vision of *'Nurturing Every*

*Learners Potential*'. This seeks to elicit competencies and values, learning areas, pedagogy, resources, assessment and development of talents as will be guided by the Curriculum Framework for Basic Education.

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

Curriculum development is nested under the larger umbrella of the MOEST with the other arms of the Ministry, such as the TSC, education Directorates, ESQAC and KNEC. All these work together to fulfill aspirations of the Social Pillar of the Vision 2030 alongside other sectors. Situating the vision of the curriculum reforms to the Kenya Vision 2030 can be espoused illustrated as in Figure 2.1.

Figure 2. 1: KenyaVision2030



## **2.4 Review of Relevant Theories**

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

### **2.4.1. Curriculum theories**

The following theories related to curriculum studies were reviewed. This review was necessary to provide some insights into some of the approaches to curriculum reform and/or review. The review of theories also provides information that is used to discuss the findings in Chapter 13 of this report.

#### **2.4.1.1 Humanist theory of Curriculum Studies**

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



#### **2.4.1.2 Social meliorism theory of curriculum**

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

#### **2.4.1.3 John Dewey's curriculum theory**

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

#### **2.4.1.4 Social efficiency of curriculum**

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

#### **2.4.1.5 Developmentalism theory**

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

### **2.4.2. *Curriculum Reform Theories***

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

#### **2.4.2.1. Instructional – Design Theory**

This theory offers explicit guidance towards a new curriculum that explains how to help students learn and develop in the wake of

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

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

### **Importance of Instructional Design Theory in Curriculum**

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

Hammer & Champy, 1993). This allows corporations to respond much more quickly and appropriately to their customers and clients' needs. The Institute aspires to engage stakeholders as well as parent participation in its advocacy for a competent based curriculum.

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

Visible Learning means an enhanced role for teachers as they become evaluators of their own teaching. According to John Hattie Visible Learning and Teaching occurs when teachers see learning through the eyes of students and help them become their own teachers. It refers to making student *learning* visible to teachers so that they can know whether they are having an impact on this learning that is an important component of becoming lifelong learners – something basic education wants students to value. The 'learning' part of visible learning is the need to think of teaching with *learning* in the forefront and with the idea that we should consider teaching primarily in terms of its *impact on student learning*. When the *teaching is visible* the student knows what to do and how to do it. When the *learning is visible* the teacher knows if learning is occurring or not. Teaching and learning are *visible* when the learning goal is not only challenging but is *explicit*. Furthermore, both the teacher and the student work *together* to attain the goal, provide feedback, and ascertain whether the student has attained the

goal. Evidence shows that the greatest effects on student learning come when not only the students become their own teachers (through self-monitoring, and self-assessment), but the teachers become learners of their own teaching. In successful classrooms, both the teaching and learning are visible. This way of learning is essential for criterion referenced assessment which seeks to make assessment part of learning, and is an essential component of the competence based curriculum.

## **2.5 Review of Relevant Policy Documents**

Education is the key to well-being and prosperity as it is impossible to attain high levels of economic development and high standard of living without a highly educated workforce. This is why education is well structured and guided by various national and international policy guidelines. Policy documents reviewed include the Kenya Vision 2030, the Kenya Constitution 2010, Sessional paper No. 2 of 2015, the Basic Education Act (2013), National Education Sector Plan (2015), Kenya Institute of Curriculum Development policy documents, EFA as well as the Sustainable Development Goals, among others. A review of policy documents is necessitated by the fact that it is a national priority to align the curriculum to address the aspirations of these policies as well as the EAC protocol. The government is fully committed to achieving its national and international policies in education.

### **2.5.1 Documents on Societal Needs**

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

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

During the National Conference on Education (2003), it was noted that there was need for the government to achieve Universal Primary Education (UPE) goal by 2015, with the overall goal of attaining EFA by 2015. The attainment of UPE would ensure that all Kenyan children eligible for primary schooling had opportunity to enroll and remain in school to learn and acquire quality education. However, various challenges with respect to access, equity, quality and relevance, continued to constrain the provision of quality education and services. One of the recommendations made was that the MOEST, through KIE, should rationalize the curriculum for primary education to incorporate health and nutrition learning and to place increased emphasis on Physical Education and sports.

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

introduction of many practical and vocational subjects was meant to prepare students for the world of work.

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

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

Education should prepare workers for the 21<sup>st</sup> century by teaching skills necessary for industry and commerce. Kenya Vision 2030 aims at making Kenya a newly industrialized, middle income country providing high quality life for all its citizens by the year 2030. The Vision is based on three pillars namely; the economic pillar, the

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

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

The content of the curriculum has increasingly been considered dated with regard to the skills and values needed to operate in the



current world full of both uncertainties and opportunities. Furthermore, a relevant curriculum is required to instill positive values, mould character, moral and spiritual formation of the learners. Aligning the curriculum to address the aspirations of Kenya Vision 2030, the Constitution of Kenya 2010 and the East African Community treaty is a priority of the National government (Republic of Kenya, 2012). The content for Basic Education would therefore need to be designed with the view of equipping the learners with relevant knowledge that emphasizes on technology, innovation and entrepreneurship (GOK, 2007). In addition, the learners would have an opportunity to develop their full capacities in order to live and work with dignity, enhance the quality of their lives, make informed decisions and continue with learning as a lifelong engagement.

### **2.5.2 Documents on Competencies**

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

This echoes what is also contained in NESP of 2015 which affirms that curriculum developed will be competence based. This will ensure that at each level, desired outcomes are achieved and learners can progress with diverse interests and abilities.

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

The Task force (2012) recommended core curriculum competencies to be used. These are presented in levels from pre primary to senior secondary and starts with very basic competencies. As learners move from lower to upper primary, the foundational competencies get enhanced and firmed up in secondary level. The Task Force recommended some core competencies that should be acquired by learners and include: communication skills, manipulation skills, social skills, environmental awareness, numeracy, writing, enquiry skills, ICT, talent potentials, observation skills, entrepreneurial skills, ethical skills, investigative skills among others.

### **2.5.3 Documents on Values and attitudes**

Article 10 of the Constitution of Kenya 2010 (GoK, 2010) contains the national values and principles of governance to be upheld by all

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

In addition, the Kenya Vision 2030 adds that the journey towards widespread prosperity involves building a just and cohesive society that enjoys equitable development in a clean and secure environment. Some of the related major issues that need to be addressed within education have to do with living together in a cohesive society, having healthy individuals and education that supports personal growth and development.

#### **2.5.4 Documents on Learning areas**

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

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

When the Constitution of Kenya 2010 was promulgation, the onus was on KICD to ensure that the curriculum was in line with the spirit of the Constitution even before the curriculum reforms. This necessitated amendment of some parts of the curriculum where deliberate effort was made to respond to the needs of the Constitution, while making the subjects relevant and meaningful. The reforms therefore will further address appropriate areas in the Constitution. Other areas to be developed should enable learners to acquire relevant skills, knowledge and attitudes.

Although current curriculum boasts of a wide spectrum of subjects, and learning areas for ECD, often the curriculum has been seen to lack flexibility, not cater for regional disparities and lacking in pathways to direct learners at the secondary levels. According to the Curriculum Policy (2015), the curriculum has no emphasis on accelerated or flexible modes of learning; neither does it permit entry

and re-entry at different levels. The learners are not able to make informed choices as they decide on career paths and areas of interest. The Sessional paper No. 2 of 2015 clearly states that the curriculum will provide knowledge skills and values, and competencies to enable learners to move seamlessly from the education system to either further education or to technical/vocational areas. The curriculum is also expected to apportion a certain percentage of the content to meet regional needs (Republic of Kenya, 2015).

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

#### **2.5.5. Documents on Assessment**

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

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

Due to the importance attached to the examinations and too much competition, assessment is no longer seen as part and parcel of the teaching learning process but as a gateway to determine who can proceed to the next level of education. The policies recommend that in the reformed curriculum, competencies and skills will be assessed and that the introduction of standardized assessment testing across the basic education cycle will address this need (Republic of Kenya, 2015). Further forms of assessment have been proposed for every level in the Taskforce Report (2012). They include observations, pupil profiling in core learning areas and social development as well as standardized assessment. Quality assessment therefore, will ensure competencies in the curriculum are attained. This is because assessments measure learner competencies and evaluates the learning that has taken place.

#### **2.5.6. Documents on Resources**

According to the Taskforce Report (2012) the implementation of Free Primary Education, though well intended had a broad curriculum requiring many textbooks and involved many other infrastructure and resources. Most schools lacked basic requirement such as teaching and learning materials, tuition equipment and

physical facilities. Teachers especially for the practical and vocational subjects were also inadequate.

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

#### **2.5.7. Documents on Contemporary and Emerging issues**

The various contemporary and emerging issues have been identified from different policy documents such as the Constitution, Vision 2030, Education for Sustainable development (ESD), Childrens Act (2001), Millennium Development Goals (MDG), Sustainable Development Goals (SDG), and NESP (2015) among others. Each of these policy documents emphasizes different aspects of the cross cutting issues and education has been identified as the wheel to nurture them among learners across all levels. These policy documents articulate that learners across all levels irrespective of their age are faced with contemporary lifestyles and challenges that necessitate decision making competencies. In particular, the Sessional paper no 2 of 2015, emphasizes that learners have issues ranging from sexuality, drug and substance abuse, media influence in these times of technological advancement, and political and social scenarios that influence their lives (Republic of Kenya,2015). Although the curriculum has Life Skills Education Curriculum as well as curriculum support materials, cross cutting issues remain a critical aspect of education, more so because emerging issues are not taught in most schools (KICD, 2014).

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

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

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



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

#### **2.5.8. Documents on Talent Nurturing and Development**

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

### **2.6 Review of Curriculum in other Contexts**

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

### **2.6.1 Societal needs**

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

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

Lovat and Smith (1995) argue that there is always an underlying social and politico-economic philosophy which impacts upon education and the curriculum. Brady and Kennedy, (1999) extend this argument by maintaining that curriculum is not an entity apart from society, it is firmly embedded in it and thus is a social construct. But it is also a personal construct, as curriculum represents a selection of societal ideas, skills, values and practices. Thus, the curriculum is constructed by people, for people and as such should

be relevant and all encompassing so as to address all the needs of the society. National development is multifaceted and goes beyond economic and material progress knowledge technology; equity and social justice are elements of national development.

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

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

The Kenya Education Commission of 1964 (The Ominde Commission) was formed to introduce changes that would reflect the nation's sovereignty. The commission focused on patriotism, identity and unity, which were critical issues at the time. The committee also

laid emphasis on an education that would foster social equality, preserve Kenya's cultural heritage and reduce poverty. Consequently, the content of History and Geography subjects were changed to reflect national cohesion. One of the recommendations was that Kenya adopts a unified national curriculum approach. This committee also laid emphasis on an education that was to promote unity and patriotism.

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

### **2.6.2 Competencies**

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

than being identified in its own right. The shift to competency based approach to curriculum and learning is an integrated and holistic understanding of what it is that we want our young people to learn, be able to do and to become.

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

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

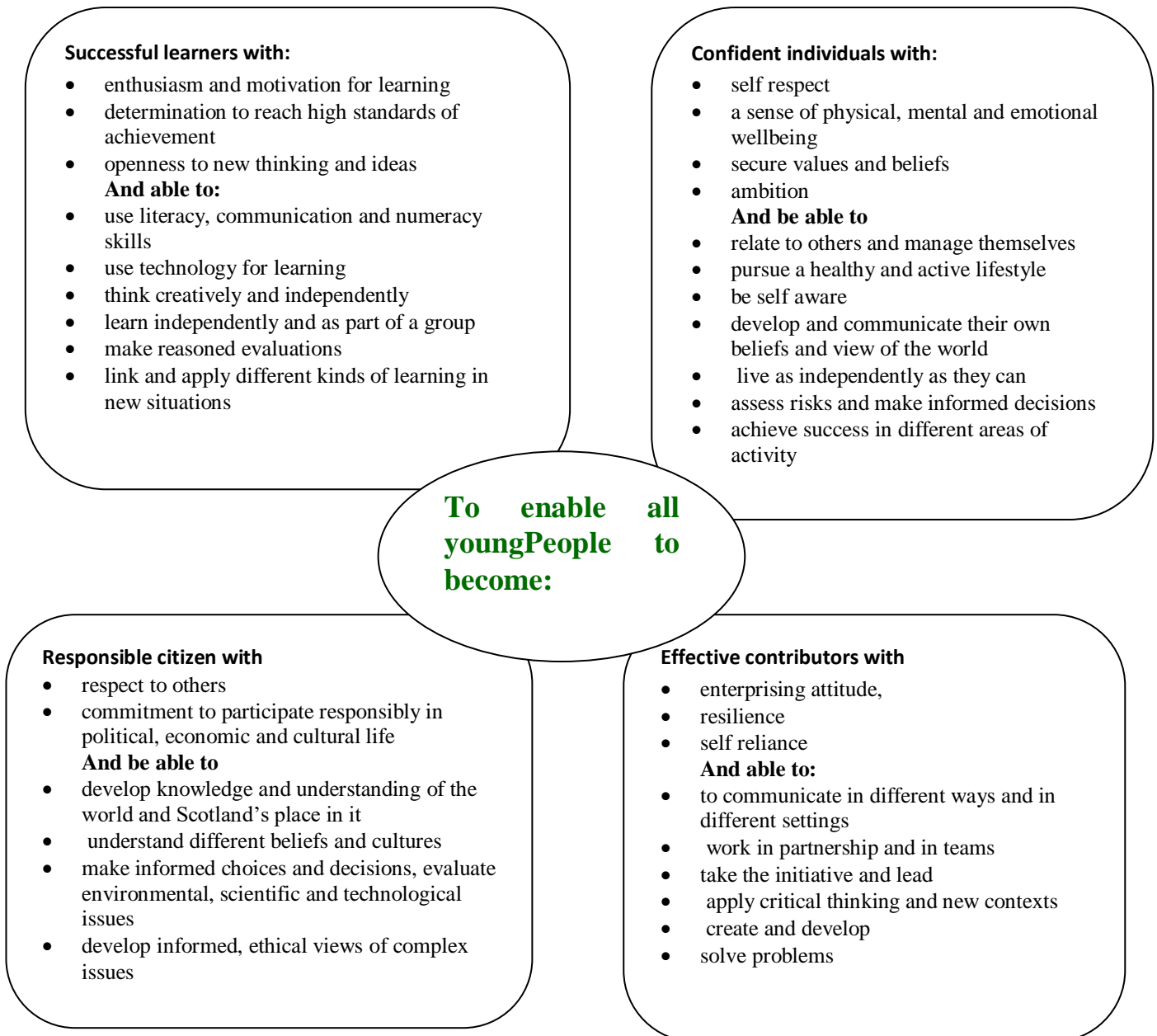
interdisciplinary studies and in all the contexts and settings where young people are learning. Scotland focuses on a number of overlapping clusters of skills:

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

The development of skills in Scotland is essential to learning and education to help young people to become successful learners, confident individuals, responsible citizens and effective contributors. The skills and attributes which learners develop should provide them with a sound basis for their development as lifelong learners in their adult, social and working lives, enabling them to reach their full potential. Every child and young person is entitled to support to enable them to gain as much as possible from the opportunities to develop their skills which Curriculum for Excellence can provide. Timely provision of support to meet individuals' needs will enable children and young people to effectively engage with opportunities for skills development.

**Figure 2.2: Developmental Skills for Learning - Source; Scottish government**

(2009)



### 2.6.3. Global views on values and attitudes in education

The values included in the Australian curriculum include: cooperation, freedom, happiness, honesty, tolerance, unity, peace, respect, responsibility, simplicity, humility and love. In Singapore, the concept of a national ideology had an objective of preserving their Asian identity in an era of globalization where they would be

exposed to external influences. They outlined the essential tasks in developing the National Ideology, namely: to find common values which all can share; to preserve the heritage of the different communities; and to ensure that each community also appreciates and is sensitive to the traditions of others.

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

America has also implemented values and character education especially in the state of Georgia. Values are considered to be important to a child's character formation. This fact is particularly appropriate in the preschools and early school years. As students progress through schools, it is important that their education provide instructional opportunities, which help them develop their beliefs about what is right and good. The State Board of Education believes that there is a core list of values and character education concepts that should be taught in their schools such as presented in Table 2.1 below



**Table 2. 1: Character Education concepts to be included in a Curriculum**

|   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>• <u>accomplishment</u></li> <li>• <u>cheerfulness</u></li> <li>• <u>citizenship</u></li> <li>• <u>cleanliness</u></li> <li>• <u>commitment</u></li> <li>• <u>compassion</u></li> <li>• <u>cooperation</u></li> <li>• <u>courage</u></li> <li>• <u>courtesy</u></li> <li>• <u>creativity</u></li> <li>• <u>democracy</u></li> <li>• <u>dependability</u></li> <li>• <u>diligence</u></li> <li>• <u>equality</u></li> </ul> | <ul style="list-style-type: none"> <li>• <u>fairness</u></li> <li>• <u>frugality</u></li> <li>• <u>generosity</u></li> <li>• <u>honesty</u></li> <li>• <u>honor</u></li> <li>• <u>kindness</u></li> <li>• <u>knowledge</u></li> <li>• <u>loyalty</u></li> <li>• <u>moderation</u></li> <li>• <u>patience</u></li> <li>• <u>patriotism</u></li> <li>• <u>perseverance</u></li> <li>• <u>productivity</u></li> <li>• <u>punctuality</u></li> </ul> | <ul style="list-style-type: none"> <li>• <u>respect for authority</u></li> <li>• <u>respect for others</u></li> <li>• <u>respect for the Creator</u></li> <li>• <u>respect for environment</u></li> <li>• <u>respect for health</u></li> <li>• <u>school pride</u></li> <li>• <u>self-control</u></li> <li>• <u>self-respect</u></li> <li>• <u>sportsmanship</u></li> <li>• <u>trustworthiness</u></li> <li>• <u>truthfulness</u></li> <li>• <u>tolerance</u></li> <li>• <u>virtue</u></li> </ul> |
|---|--|---|

In the Kenyan context, the guiding principles have been developed from the *Values Education Study (2003)*. They recognize that in *all* contexts schools promote, foster and transmit values to all students and that education is as much about building character as it is about equipping students with specific skills. They also recognize that schools are not value-free or value-neutral zones of social and educational engagement. Although the curriculum in Kenya has addressed values like nationalism, patriotism, integrity and mutual respect, through integration and mainstreaming and education is structured to promote positive attitudes towards good health and environmental protection (KIE, 2006), much more needs to be done to inculcate this in learners and not teach for achievement of a mean score only.

The three countries in the East African region have developed a competence based curriculum. In Rwanda, the process began in

2014, and currently (2016), they are implementing it in phases starting in the early grade learning as well as form one (Republic of Rwanda, 2015). Just like Kenya, Rwanda is building a knowledge based economy driven by science and technology. Its curriculum framework translates the country's education vision into learning experiences and assessment. In view of the East African harmonized Curriculum Framework, it is imperative that Kenya as a partner state adopts the agreement made among the partners in the East African Protocol and revert to a competence based curriculum.

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

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

#### **2.6.4. Learning areas**

The curriculum in Kenya in the last century has been designed around the philosophy of subject matter content. The main tenets of this subject matter philosophy underlie 19<sup>th</sup> Century doctrines of classical psychology. According to the doctrines, the mind is compartmentalized into specific faculties which can be trained to

accomplish a given task. The end task is passing examinations which are taken after drills and learning through rote memorization. The learning environment is characterized by competition and detailed mastery of facts of the subject matter.

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

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

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

In Ghana, Children join education system at age 6 years (for grade 1 to 6). The stage transits to junior secondary school which comprises grade 7 to 9 and whose admission is open to any learner who completes grade 6 without the requirement of an examination. Junior secondary schools are therefore in the same compound with the primary schools. Senior secondary consist of 3 years starting

from grade 10 to 12. The subjects done at this level include a set of core subjects and a number of clusters of elective subjects (Keteku, 2008).

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

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

Often in many countries, the curriculum is too overloaded, overcrowded, "congested" and outdated. In some cases, there has been reduction of the basics curriculum to a very small number that people can focus on. The International Commission on Education for the Twenty-First Century, proposed to UNESCO an integrated vision of education based on the four pillars of "learning to know, to do, to be, and to live together." Some advocate for the "4Cs (Critical thinking, communication, collaboration and creativity) or the 7Cs (the 4Cs plus "computer, character and culture". Some speak of becoming "good capable and world-improving people". Others would say it is having people becoming "effective thinkers, effective actors, effective relators and effective accomplishers" (UNESCO,

2012). The aspect of the 21<sup>st</sup> Century skills is one which the curriculum cannot ignore in the development of its curriculum framework.

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

According to studies done by UNESCO, the early grades learning in recent past had to do with “learning to play and live with others”. The primary school supplements the skills learnt at ECD with an addition of the 3 Rs (reading, writing and arithmetic). The Vision 2030 urge for more infusion of content on Science, Technology, and

Innovation (STI) into the primary curriculum to develop prerequisite skills in the learners for further training in STI. Further, the ECDE curriculum should mainstream technological innovation and entrepreneurial skills in order to realign the Kenyan curriculum to the dictates and aspirations of Kenya Vision 2030 (KIE, 2010; GoK, 2007).

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

#### **2.6.5. Assessment**

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

with the success of the learners in mind as opposed to the success of a few as in the case with norm referenced assessment.

Countries have continually benchmarked with the best in the field of education in order to improve performance. The Japanese Government resolved to reform their education in order to catch up with the west through continued and aggressive research. Singapore has the best education indicators in the world in Mathematics and Science as measured in the Trends in International Mathematics and Science Survey (TIMSS). The Kenya Vision 2030 takes cognizance of the achievements of a number of countries in education as well in the economic indicators and makes mention of the rapid progress over a short time of South Korea, Malaysia, Finland, Ireland, China and Chile. PISA studies carried out in America and Europe have continued to inform policy on education and consequently testing.

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

Educational psychologist Benjamin Bloom categorized what and how we learn in three domains namely cognitive, psychomotor and affective. Although the curriculum in Kenya underscores the need for holistic development of the learners as suggested by Bloom's

approach, the KIE (2010) indicated that learning in Kenya mainly focuses on the cognitive domain or the aspect knowledge only. Attitudes a central component of competencies are never assessed. The emphasis has been on certification at the expense of learning. This often only fulfils a function of selection and as a regulation of opportunities for those who move ahead in the education system (UNESCO, 2015). It becomes an indicator of the institution one moves to in the next level of learning and the career path that is pursued.

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

Unlike Kenya, South Korea and Malaysia puts a lot of emphasis on school based assessment. In South Korea for example, there are no National assessments, though selected sample schools are assessed at grade 3 and Form 1 to ensure standards of teaching and learning are maintained (KICE, 2008). This means that transition from one level to another in basic education is seamless. Although the Malaysian education system has national examinations at the end of every level, the results, unlike Kenya, do not determine transition to the next level. At the end of Level 4, the assessment determines the career path of learners (MoEST, 2001).

The summative assessment at the end of both the primary and secondary school levels cuts off learners from proceeding to the next level of education. The competitiveness of the examinations leads to a situation where the focus of assessment is shifted from informing learning and improvement in performance. This is also cited in



Sessional Paper No 2 of 2015 on Reforming Education and Training Sector in Kenya and underscores the importance of developing the whole person and emphasizes the need for a balanced curriculum.

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

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

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

#### **2.6.6. Pedagogy**

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

### **2.6.7 Resources**

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

## **2.7 Review of Relevant Previous Research**

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

### **2.7.1 Societal needs**

Various studies have indicated existence of gaps in the curriculum as pertains to the societal needs. The Bessey Committee of 1972 pointed out that the curriculum did not achieve the national objectives because of the narrowness of scope and over emphasis on rote learning (Republic of Kenya, 1972). The study established that the curricula neglected practical and creative activities especially in agriculture and basic manual skills. The curriculum was also found to be unresponsive to Kenya's cultural heritage and the entire environment in which children as well as young people grew. By 1977 in Kenya, secondary school graduates surpassed the white collar jobs that were available aggravating the problem of unemployment in the country. The Report of the National Committee on Educational Objectives and Policies (Gachathi report of 1976) guided curriculum improvement during this period. The Gachathi Report (Republic of Kenya, 1976) raised the issue of unemployment in relation to 7-4-2-3 education system. In view of this, the committee proposed that the secondary school education

curriculum should be redefined to make it practical with more emphasis placed on the teaching of sciences, agriculture and vocational subjects. The 7-4-2-3 system of education lacked the capacity and flexibility to respond to the changing aspirations of individual Kenyans and the labour market needs. Consequently, there was an urgent need to change the curriculum to focus on the acquisition of relevant and practical knowledge and skills that would lead to quality employment. The rationale was that the existing system was too short and not rigorous enough to give graduates enough practical education to fit in the world of work.

The year 2002 saw a national revision and rationalization of the curriculum. The revision entailed refocusing the goals of education, the level objectives, subject general objectives and the specific objectives. The findings of the Summative Evaluation (KIE,2010) for the primary level stated that literacy, numeracy and communication skills had been achieved to a large extent but there were gaps in the achievement of objectives on appreciation of values and the use of leisure time; the curriculum content addressed nationalism, patriotism and national unity but social context impeded the embracing of these values; the implementation of the primary education curriculum content laid little emphasis on inculcation of practical skills necessary for economic development; the primary school education did not adequately equip the learners with the competencies to meet the demands of a knowledge based economy as per aspirations of Vision 2030 (KIE, 2010).

The summative evaluation of the secondary school curriculum made it apparent that the revised curriculum had gaps that needed to be addressed if education was to have the desired impact on the socio-economic and technological development of the country and specifically achievement contemporary needs of the of Vision 2030.

The key recommendation was re-alignment of the curriculum to meet the societal needs and viewing the curriculum as an outcome of a process reflecting a political and societal agreement about the what, why and how of education for the desired society of the future.

### **2.7.2 Competencies**

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

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

A study carried out in Korea by IBE-UNESCO(2012), revealed that a CBE is not in conflict with the existing curriculum and that specific subjects continue to provide a critical path in promoting acquisition of key competencies such as communication and efficient management. The study further shows that competency skills recommended for elementary level were; problem-solving skills, communication skills and cooperation skills. A survey

conducted in Ghana by COTVET (2009), it was affirmed that Competency Based Training is an industry and demand driven education and training programme, its products have a high demand on the job market.

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

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

### **2.7.3 Learning areas**

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

better chances to get employment as well as higher salary because of the skill set they possess.

The teaching and learning of Mathematics, Sciences and Languages is important to the assimilation and acquisition of the 21<sup>st</sup> century skills. Since, the country's Blue- print for economic development flags the teaching of Mathematics, Languages and Sciences as being vital to the country's development. Studies have also shown that countries like Singapore and Malaysia with high technological development have put great emphasis on mathematics and sciences as a foundational requirement for their technological advancement (Government of Malaysia, 2012). Similar studies carried out in Singapore indicate the emphasis on the 21<sup>st</sup> Century which include creative and critical thinking, communication and collaboration, and social and cultural skills. These are core values that the Singapore education system sets to cultivate in all its students ( Soland et al. (2013) and Voogt& Roblin (2012) pointed out that in Japan, as in Singapore, the competencies and pedagogical moves associated with 21<sup>st</sup> Century competencies are seen as a central means of using education to ensure sustained economic prosperity in the years to come. These 21<sup>st</sup> Century aspirations have been articulated in a New Growth Strategy ( 2010) announced by the Japanese government as well as in "The Future Vision on Career Education and Vocational Education at School," by the Ministry of Education, Culture, Sports, Science and Technology (2011). Further, the 21<sup>st</sup> century competencies in the Japanese classrooms were not dissimilar from Singapore: problem solving, communication, collaboration and use of Information Communications Technologies (ICT).

#### **2.7.4. Resources**

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

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

According to Twoli, Maundu, Muindi, Kii, and Kithinji (2007), Oluoch, (1990) and Beswick, (1975), the expanding scope of knowledge in many areas of education, necessitates the teacher to be aware of the diverse types of teaching resources available for use, as well as those that can be prepared using locally available materials. Twoli et al., (2007), recommend that the teacher should carefully prepare a wide spectrum of learning materials, and effectively use them during the teaching-learning process. Apart from teachers, field



officers and head teachers have a part to play in helping teachers to use teaching and learning resources. KICD (2014) study on educational resources indicated the need to sensitize head teachers and education field officers on the key role that teaching and learning resources plays in the teaching learning process. This will help the school administration to encourage and support teachers in their quest to develop teaching, learning and recreational resources.

### **2.7.5 Pedagogy**

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

### **2.7.6 Talents**

Every society has its specially gifted persons who need to be given opportunities to develop and exploit them to their full potential.

These people need to be identified early in life so that their talents can be nurtured for the benefit of themselves and the society (Kinyua, 2014).

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

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

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

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

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

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

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

contribute to the society. Special educational programmes for such children should be developed in the interest of national development. The committee proposed the establishment of “Centres of Excellence” as pacemakers for advanced knowledge and technology in order to meet the needs of the society.

According to Kang’ethe and Mugo (2010), from 1964-2005 several gaps existed which showed inconsistency in the implementation of educational policies and programmes. They also noted that children who are gifted and talented are not mentioned in most of the Education Policy documents in Kenya. According to them there has been no clear commitment and political strategy targeting gifted and talented persons. During the National Conference on Gifted and Talented Young Persons in Kenya (2010) it was noted that Kenyatta University and Kenya Institute of Special Education (KISE) train teachers for learners who are gifted and talented yet there are no programmes for learners who are gifted and talented in Kenya.

### **2.7.7 Identification methods of learners who are Gifted and talented**

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

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

### **2.7.7 Assessment**

An analysis of the assessment system in Kenya reveal that the high stake end of cycle assessment, namely KCPE/KCSE which asses over 1.3M children annually compromise the role of formative assist (Mugo & Asiago, 2015). Despite being national examinations, they do not improve learning as they act as sieves to determine certification and movement to higher levels. This encourages basic learning at the expense of deep and underlying issues in the content or the learning areas which produces extended analysis and application of the acquired knowledge.

The current system of assessment measures a narrow range of competences. Numeracy and literacy assessments are attempted by the national examinations which are not necessarily by the government such as UWEZO. At a time when the teaching of the 21<sup>st</sup> Century skills or competencies is coming to the fore,

measurement of competencies and other soft skills is important (Mugo & Asiago, 2015). These are currently not catered for by assessments in Kenya schools.

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

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

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

### **2.7.8. Contemporary and Emerging Issues**

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

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

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

## **2.8 Rationale of the Study Based on Literature Review**

Apart from the theoretical base, the study is anchored on policy documents and other literature in different contexts. In view of

recommendations for major curriculum reforms, the need to undertake curriculum reforms is clear and justifiable; more so because of the need to align it with the current trends, the Constitution and goals and aspirations of the national blue print of the Kenya Vision 2030. As early as 2007, the Kenya Vision 2030 stated that:

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

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

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

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





## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1. Introduction

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

#### 3.2. Research Paradigm

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

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

The third paradigm (pragmatist) informs the view that research is guided by the value for the knowledge being sought and not the distinctive worldviews about the world as being real or relative. Therefore, research could (and ought to) draw from both paradigms as long as this is necessary to get a complete understanding of the subject under investigation (Hammersley, 2013; Onwegbuzie, 2012; Schwandt, 2015).

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

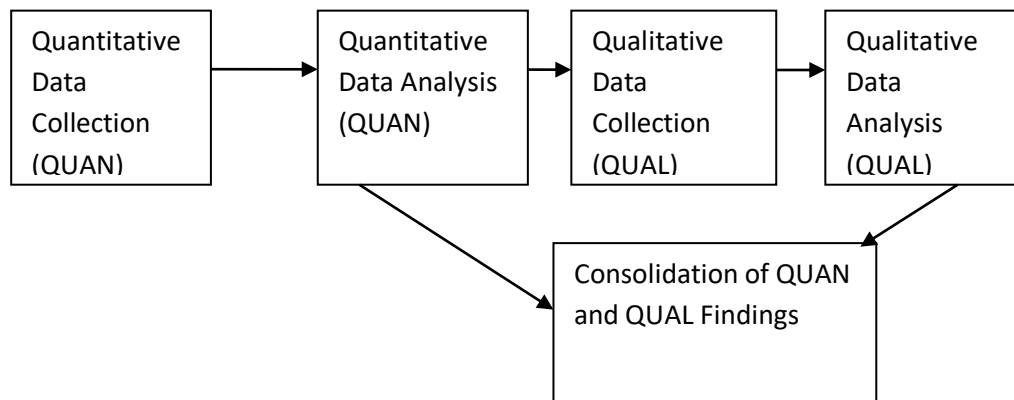
### **3.3. Research Approach**

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

naturalistic setting (Denzin and Lincoln, 2005; Lichtman, 2013; Yin, 2014; Jwan and Ong'ondo, 2011).

There are broadly two research designs within the Mixed Approach – Sequential or Concurrent and the weighting of the Quantitative and Qualitative approaches also varies (Creswell, 2009). In this study, the Concurrent Mixed Approach design was used where both the Quantitative and the Qualitative phases took place at the same time and they were weighted equally as illustrated in **Figure 3.1** below. Creswell (2009) posits that it is more manageable to collect both quantitative and qualitative data at roughly the same time, rather than to revisit the field multiple times for data collection (p.206).

**Figure 3. 1: Concurrent Mixed Approach Design**



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

- It provides strengths that offset the weaknesses of both quantitative and qualitative research. Quantitative research is weak in understanding the context or setting in which people talk, voices of the participants are not directly heard and researchers' are in the background. Qualitative research makes up for these weaknesses. On the other hand qualitative research is seen as deficient because of the personal interpretations made by the researcher and generalization of findings to a larger group.

- It provides comprehensive evidence as researchers are given permission to use all the tools of data collection available.
- It helps answer questions that cannot be answered by qualitative or quantitative approaches alone.
- It encourages researchers to collaborate across the sometimes adversarial relationship between quantitative and qualitative researchers in social, behavioural and human sciences.
- It is “practical” in the sense that the researcher is free to use all methods possible to address a research problem. Researchers are able to solve problems using both numbers and words and combining inductive and deductive thinking.

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

### **3.4. Research Method**

Cross sectional survey method was used to conduct this study.

#### **3.4.1. The Quantitative Survey Method**

This is because the survey allows for generation of relatively much from a large number of participants over a relatively short period of time. Consequently, it is the most widely used method in educational research and is useful in needs assessment and establishing views, experiences and attitudes of populations (Cohen et al, 2007).

In this study the needs of learners, teachers and head teachers at ECDE level were assessed in terms of the reforms they desire on the Kenyan Curriculum at the level. As stated in Chapter One, the survey sought to establish the general needs for curriculum reform, the desired competencies, learning areas, talent nurturing and development strategies, pedagogical approaches, learning resources, assessment and contemporary/ emerging issues.

### 3.4.1. The Qualitative Survey Method

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

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

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

researchers still used data generation techniques (see the subsection on data generation techniques) that elicited in-depth data that captured the voices of participants (Given, 2015; Stake, 2014).

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

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

### **3.5 Sampling**

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

#### **3.5.1. Target Population**

The study targeted all Early Childhood Development and Educational (ECDE) centres, various Education Field officers and

other stakeholders. Within the ECDE centres, the study targeted all the teachers. The target population size was **37,312** (Ministry of Education, 2011). **Table 3.1** illustrates the target population structure while **Table 3.2.** indicates other organizations that were targeted, especially as participants in the Key Informant Interviews.



Table 3. 1: The Target Population Structure

| REGION       | COUNTY   | ECDE          |
|--------------|--|---------------|
| Central      | Kiambu, Murang'a<br>Nyandarua, Nyeri<br>Kirinyaga, Laikipia  | 4,543         |
| Coast        | Mombasa, Kwale<br>Taita Taveta, Lamu<br>Kilifi, Tana River   | 2,882         |
| Eastern      | Machakos, Makueni<br>Kitui, Meru, Tharaka, Embu  | 6,656         |
| Nairobi      | Nairobi  | 1,553         |
| N. Eastern   | Garissa, Wajir, Mandera<br>Marsabit, Isiolo  | 468           |
| Nyanza       | Kisumu, Siaya, Homa bay<br>Migori, Kisii, Nyamira  | 5,500         |
| R. Valley    | Nakuru, Narok, Kericho<br>Bomet, Elgeyo Marakwet<br>Nandi, Uasin Gishu, Turkana<br>West Pokot, Trans Nzoia<br>Samburu, Kajiado | 11,565        |
| Western      | Kakamega, Vihiga, Bungoma<br>– Busia   | 4,145         |
| <b>Total</b> |  | <b>37,312</b> |

Source: MOEST (2011)

**Key:**

ECDE – Early Childhood Development and Education Centres;

Table 3. 2: Other Targetted Organizations

### 3.5.2. Sampling Technique

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

The study employed a multi-stage sampling technique (Mugenda and Mugenda, 2009), which involved random selection of the quantitative respondents and purposive sampling of the qualitative respondents. The target population size of ECDE was computed at 37,312 ECDE centres as stated above (MoE. 2011). In the Quantitative phase, the statistical procedure for sample size determination was applied, the researchers compute the sample size at **1504** institutions (Survey System, 2012). This represents the sample size at 5% level of significance, with an error of **2.5%**. The details of the sample design are set forth in Figure 2 and Table 3.3.

**Table 3. 3: Sample Size Determination**

|  |  |
|--|--|
| $\text{Sample size} = \frac{Z^2 \times (p) \times (1-p)}{c^2}$   | $\frac{(1.96)^2 \times (0.5) \times (1 - 0.5)}{0.025^2} = 1537$              |
| Where : <b>Z</b> = Z value (e.g. 1.96 for 95% confidence level)<br><b>p</b> = percentage picking a choice, expressed as decimal<br>(.5 used for sample size needed)<br><b>c</b> = confidence interval, expressed as decimal<br>(e.g., .04 = ±4)  |  |
| <b>Correction for Finite Population</b><br><br><div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <math display="block">\text{new ss} = \frac{\text{ss}}{1 + \frac{\text{ss}-1}{\text{pop}}}</math> </div> | $= \frac{(1.96)^2 \times (0.5) \times (1 - 0.5)}{(0.025)^2}$<br><br>$= 1504$ |
| Where: pop = population  |  |
| <b>NEW SAMPLE SIZE</b>   | <b>1504<br/>Educational<br/>Institutions</b>                                 |

### 3.5.3. Sampling Procedure for the Quantitative Phase

The Sampling was done through the following stages

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

#### ***3.5.4. Sampling for the Qualitative Phase***

Sampling was done using purposive techniques leading to identification of several participants, institutions and key informants. A total of **1400** participants took part in the study. The participants included primary school pupils, secondary and college students, parents, teachers, heads of school, workers in the informal sector and industry, Education field officers and various stakeholders. The list of participants is presented in **Table 3.2** below.

**Table 3. 4: List of participants in the Qualitative Phase**

| REGION       | ECDE | FLD/OF | INF/S | IND | KEY | TOTAL |
|--------------|------|--------|-------|-----|-----|-------|
| Aberdares    | 132  | 10     | 6     | 7   | 20  | 175   |
| Mombasa      | 83   | 9      | 5     | 7   | 19  | 123   |
| Northern     | 193  | 11     | 4     | 4   | 21  | 233   |
| Metropolitan | 45   | 14     | 6     | 9   | 24  | 98    |
| Garissa      | 14   | 6      | 5     | 3   | 8   | 36    |

|       |      |    |    |    |     |      |
|-------|------|----|----|----|-----|------|
| Lake  | 159  | 9  | 5  | 4  | 21  | 198  |
| Mau   | 335  | 12 | 5  | 6  | 18  | 376  |
| Nzoia | 120  | 12 | 4  | 6  | 19  | 161  |
| Total | 1081 | 83 | 40 | 46 | 150 | 1400 |

### ***3.5.6 Data Generation Instruments***

The Qualitative data were generated using questionnaires and observation schedules. These were administered mainly to teachers in ECDE centres. The Qualitative data were generated using In-depth interviews of pupil/student leaders, parents, head teachers, workers in the industry/informal sector and key informants. In addition memoranda were sought and received from individuals and institutions from across the country. In total, about 250 memoranda were received. Further qualitative data came from opinions in the print and social media.

### **3.5.7. Pilot Study**

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

In pilot testing of tools, one can be able to correct errors of omission or commission as well as provide information about deficiencies and suggestions for improvement (Gay et al, 2009). It

ensures common understanding and identifies any challenges a similar large number of respondents are likely to have and also provide a realistic sense of how long each tool will take to administer.

### **3.6. Data generation process**

KICD in collaboration with Ministry of Education, State Autonomous Government Agencies such as Kenya Educational Management Institute, Teachers Service Commission, Kenya Institute of Special Education, Universities and CEMASTEIA carried out the Needs Assessment in 2016. Generally, the reception by the respondents was quite warm. They welcomed and appreciated the fact that their views were being sought on what needed to be reformed in the Kenyan Curriculum for Schools and Colleges.

23 teams were dispatched to visit different regions. In total 120 participated in the research process and covered basically all the Kenyan Counties (See the Table below). In addition, a call was made for memoranda from all Kenyans in the Media and a total of **79** were received. Twenty five (25) teams, each comprising four officers were dispatched to the counties. Each team covered 47 learning institutions. A total of 1081 ECDE centres were visited countrywide. County Education offices was the entry points into the selected districts. One-on-one interview sessions with Faith based leaders, TTC principals was conducted. Their information was captured using digital voice recorders. Questionnaires for education officers and DQASOs were administered to the officers at the District Education Headquarters. Within the schools, the head teachers facilitated access to the teachers, parents and SMC members.

Once the organization of the selected respondents was complete, respective data collection instruments were administered. Using the

observation schedule, available physical facilities were observed to establish their adequacy and appropriateness. All the established and accepted educational research ethical standards were adhered to during the administration of data collection tools.

### **3.7. Data Analysis**

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

#### **3.7.1 Quantitative data analysis**

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

#### **3.7.2 Qualitative data analysis**

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

The second step was to do a workshop for all the officers involved in the data analysis process using pilot data as dummies. This went on for about a week until the team were confirmed to be consistent with the coding process. Data were later analysed using the pre-determined themes consistent with the research objectives.

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

### **3.8. Trustworthiness of the Study**

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

#### **3.8.1. Validity of the Study**

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

The content validity is the degree to which a tool measures an intended content area. The items must be relevant to the measurement of the intended content. It therefore compares content of the tools to the variables being measured. The usual procedure in

assessing the content validity of a measure is to use professionals or experts in the particular field. The instrument was given to two groups of experts; one group was requested to assess what concept the instrument is trying to measure. The other group was asked to determine whether the set of items or checklist accurately represents the concept under study. Apart from being tested in schools, the tools were presented to a panel of experts and stakeholders for review prior to data collection. They commented on the wording of questions and statements and length of the instruments.

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

### **3.8.2 Reliability of the study**

This is extent to which a tool will consistently measure what it purports to measure (Gay et al, 2009). The reliability coefficient was established by using the split half reliability technique which involved the administration of ‘two’ similar tests. Two ‘halves’ of the same test were administered on the same sample. The data obtained were correlated using the Spearman Brown Prediction formula of  $Np_{xy} / 1 + (N-1)p_{xy}$ , where  $p_{xy}$  is the predicted reliability coefficient for the total test.



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

### **3.8.3. Trustworthiness of the Qualitative research process.**

Trustworthiness in Qualitative researcher is normally discussed within four main aspects (Lincoln and Guba, 2005; Lichtman, 2014). These are credibility, transferability, dependability and confirmability. These aspects are briefly explained below including how they were addressed in this study.

#### *3.8.3.1. Credibility*

Credibility is the extent to which the study actually investigated what it set out to investigate which was to assess the needs of Kenyans for curriculum reform. It is the equivalent of internal validity in quantitative approach. The credibility of the study was mainly ensured through *triangulation*, which basically means bringing together various perspectives. The study utilized three types of triangulation: triangulation of data collection techniques, triangulation of data sources, and triangulation of analysis (Rothbauer, 2008; Jwan & Ong'ondo, 2011). During the study, various data generation techniques (interviews, focused group discussions, analysis of content in print and social media and submissions in the form of memoranda).

In terms of data sources, the triangulation involved getting data from different participants (Jwan & Ong'ondo, 2011). Each set of participants yielded different evidence that provided different insights regarding curriculum reform. The different sources were learners, parents, education officers, various key informants/stakeholders and various corporate institutions. The findings of the Quantitative phase were triangulated with the results of the Qualitative phase so as to give a more complete picture of the needs for curriculum reform.

#### **3.8.3.2. *Transferability***

This is the extent to which the research findings may be transferable, relevant or generalisable to other cases or contexts. This the equivalent of external validity in quantitative research. In this study, the aim of the qualitative phase was not to be able to generalise the findings to other contexts. However, the participants, as explained above were selected purposively on the basis that they were able to provide the in-depth information required. This provides what is known in qualitative research as *naturalistic generalisation* (Stake, 1995; 2006). Given that the participants were representative of the voices of Kenyans from the whole country at various levels ranging from learners to teachers, County education officers, representatives of teachers unions, etc, it is expected that these findings are convincingly generalizable to all the stakeholders in Kenya. The strong point is that all Kenyans were given an opportunity to express their views on the kind of curriculum they want through many platforms: interviews, memoranda, social media and even newspaper opinions all of which were analysed.

#### **3.8.3.2. *Dependability***

Dependability in qualitative terms refers to the extent to which the research procedure is clear enough to readers e.g. to enable other researchers to

carry out similar studies in the same or other contexts. It is known as reliability in qualitative research. This aspect has been taken care of in this study by providing a rich detail of the entire research process. Any researcher interested in replicating this study in Kenya or any other country will have a clear road-map from the research problem, objectives, scope, rationale, literature and methodology to be able to successfully do so. The maintenance of a *thick description* and provide an *audit trail* that can be of relevance to any researcher interested in tracing the study from the beginning to the end (Yin, 2013).

#### **3.8.3.3. Confirmability**

This the question of how *neutral* the researcher(s) is/are and to what extent s/he/they influences the findings and is an important concern in qualitative research (Creswell, 2013; Silverman, 2013). With regards to this aspect, the study neutrality was ensured by involving teams of researchers from both KICD and other units within the mainstream MoEST who were sent to different regions in Kenya. This ensured that there was no *bias* during the research processs and that there was no collective influence on the findings. Indeed. Indeed even the compilation of different chapters in the report were done by various people who were only coordinated in terms of research report structure. This further ensured that no individual or set of individuals had the ability to direct the findings to serve any narrow interests.

### **3.9. Ethical Considerations**

The research team also ensured that attention was paid to relevant ethical considerations. Two key issues were addressed as explained further below.

#### **3.9.1 Access and Informed consent**

One of the mandates of KICD is to conduct research in relation to curriculum matters in Kenya. That notwithstanding all the heads of the institutions where data were generated were consulted in advance and their permission sought. Where they could not be reached, especially the heatdeatchers of some institutions, the relevant

Education officers were informed and in all cases permission was granted.

Once in the institutions, the objectives of the study were explained to the potential participants and their consent was sought before they were interviewed. It must be stated that overwhelming support was realised for this study from all over the country proving that all Kenyans were enthusiastic to discuss their desired curriculum.

### ***3.9.2 Confidentiality and Anonymity***

It is important to point out that all the data obtained from individuals and organizations was treated with utmost confidentiality. Absolute care has been taken not to reveal the identities of informants either as individuals and/or institutions. Pseudonyms have been used to identify the citations and any statements that could reveal their identities have been changed. Furthermore, the original data in both audio and transcribed forms have been securely kept and KICD and may only be available to the participants in case they seek to confirm that they have been cited accurately. This is a practice called *member-checking* in qualitative research.

### **3.10. Summary**

In this Chapter, the research process has been explained by pointing out that it was founded within the pragmatics philosophy, which postulates that the value of a research supersedes the need to align one-self to a particular viewpoint. Accordingly, a mixed approach was adopted with both quantitative and qualitative data being generated concurrently. The method adopted in both approaches was a survey and data were generated through a range of techniques including questionnaires, interviews, and observations and focused group discussions. Memoranda were received and submissions through the KICD website were also considered. The quantitative

data data were analysed using descriptive statistics while the qualitative data were analysed thematically. Relevant ethical considerations were attended to and care was taken to ensure that the findings are trustworthy.

## **CHAPTER FOUR**

### **PRESENTATION AND DISCUSSION OF FINDINGS**

#### **4.1 Introduction**

This chapter presents the research findings based on the objectives of the study. The study was guided by six themes derived from the objectives of the study. These included society needs, competencies, activity areas, learning approaches, assessment and cross cutting issues.

Responses were gathered from the ECDE teachers, parents and key informants while an observation schedule was used to observe resources.

#### **4.2 General Societal ECDE Needs**

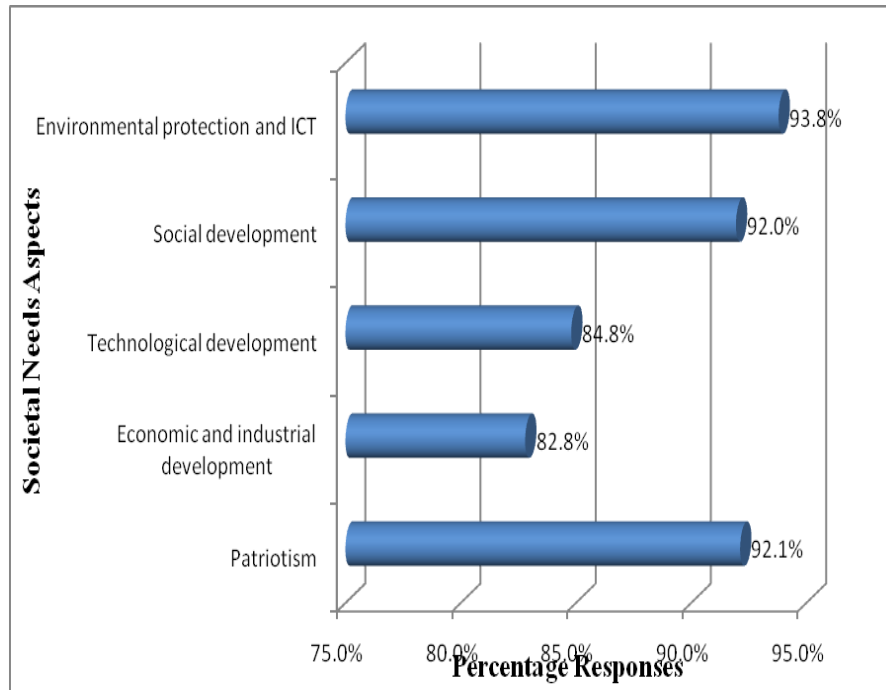
Societal needs are considered to be what the people who constitute the population of a country need for their lives to be productive and happy in the local context. The curriculum is a major factor determining the knowledge and skills that future citizens will possess, and hence their capacity to contribute productively to their society and governments in many countries. The greatest importance of education lies in its link with well-being and prosperity, as it is claimed that it is virtually impossible to attain high levels of economic development and have a productive economy and a high standard of living without a knowledgeable and skilled workforce.

Societal considerations suggest that the quality and appropriateness of schooling is very important in guiding the way content of the curricula should be designed to inspire and enrich people's lives with the knowledge, skills and attitudes most helpful to them and their country. Empirical evidence

has it that value education is essential for sustained social and economic development and the realization of human potential. Value education is a powerful force in shaping human beings in any society and plays a vital role in giving the youth, the training necessary to pursue their dreams and aspirations. The dreams of youth in a society can only be actualized if the curriculum is guided by the philosophical ideals of a societal aspects like nationalism, patriotism, national unity, economic and industrial development, technological development, social development, international consciousness, respect for all cultures, self-fulfillment, social equality, social responsibility, sound morals, good health, information communication and technology; and environmental protection are given due consideration. It is with the view of the aforementioned that the study sought the views of the stakeholders in reforming the ECDE curriculum. The findings with regard to the extent to which various aspects of societal needs should be emphasized are presented as follows;

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

**Figure 4.1: ECDE teachers' responses on emphasis of societal needs at ECDE Level**



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

Findings from the key informants were in support of the teachers' views. They indicated that education should enable learners to make informed decisions, and respect human life. Education should further address democracy, equality, self-reliance, patriotism, social, environmental conservation and individual development. The proposed curriculum should address the professional requirements for a functional society. In addition it should reflect on religious values, technological changes, conservation and moral values. Moral values should address issues such as corruption, radicalization, anti-



ethnic discrimination, religious tolerance, non-violence in conveying demands, tolerance, anti-criminal culture, anti-corruption culture, ethical practices, servant leadership, transparency, communications, etiquette and decorum, accountability, good governance in one-self, family, group as well as in the corporate. Education should prepare one to fit in the global village.

ME: Environmental conservation with use of real life examples and the consequences of environmental pollution when teaching mathematics and science subjects. Life skills and their survival value such as self – awareness and making informed decisions. Respect for human life through learning experiences that expose learners to appreciate life. Values (rationality, sacrifice, individuality, democracy, equality, self-reliance, and patriotism). Key competences should be determined by market demands and social needs. (CEMASTEVA).

The curriculum should incorporate the need for the society to sustain peace, develop law abiding citizens, independent thinkers, creative problem solvers, ability to use ICT, solve problems, create wealth and deliver service and serve to instill learners with humanity. It should also instill knowledge, attitudes, skills in patriotism and anti-radicalization,

The curriculum should be; Holistic in nature, ...Respects, reflects, and conforms to the Kenya constitutional affirmation that ours is a God-fearing nation;....., encourages reflection, critical thinking, problem-solving, innovation and creativity in their life situation; ..... (KCCB-RI).

ME: let's not be prejudiced by the multi-ethnicity of Kenya but how we can fit in the global village. (NM-IS).

The findings in terms of needs for social development are in line with (NESP, 2015) which points out that societal needs are considered to be what the people who constitute the population of a country need for their lives to be productive and happy in the local context. Further it indicates that the curriculum is a major factor determining the knowledge and skills that future citizens will possess, and hence their capacity to contribute productively to their society.

According to (KIE, 2002), societal considerations are important in guiding the way content of curricula should be designed to inspire and enrich peoples' lives with the knowledge, skills and attitudes most helpful to them and their country. Empirical evidence has it that value education is essential for sustained social and economic development and the realization of human potential. Value education is a powerful force in shaping human beings in any society and plays a vital role in giving the youth, the training necessary to pursue their dreams and aspirations. The dreams of the youth in a society can only be actualized if the curriculum is guided by the philosophical ideals of a societal aspects like nationalism, patriotism, national unity, economic and industrial development, technological development, social development, international consciousness, respect for all cultures, self-fulfillment, social equality, social responsibility, sound morals, good health, information, communication and technology and environmental protection are given due consideration. It is with the view of the aforementioned that the societal needs should be entrenched in the upcoming competency based curriculum.

### **4.3 Desired Competencies for Curricula Reforms**

Aligning the curriculum to address the aspirations of the Constitution of Kenya 2010, Kenya Vision 2030 and the East African Community treaty should be prioritized. It has been proposed that the content for basic education should be designed with a view of equipping the learners with relevant knowledge that emphasizes on technology, innovation and entrepreneurship (Vision 2030), the development of their full capacities, living and working in dignity, enhancing the

quality of their lives, making informed decisions and continuing with learning as a lifelong engagement.

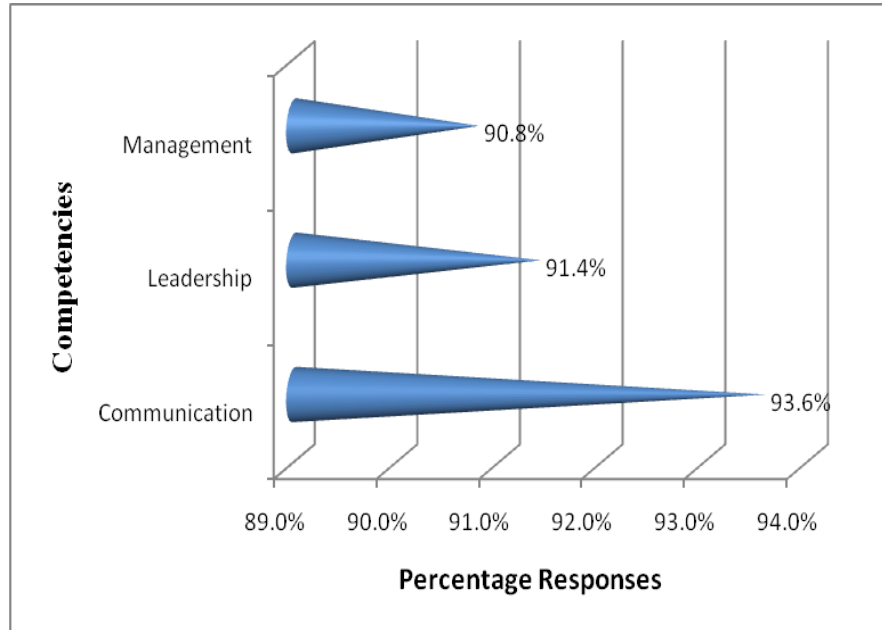
This was re-emphasized by Task Force which recommended major reforms of the curriculum to align it with the Constitution and to ensure that the aspirations of Vision 2030; structure the curriculum within skills and competences framework that identifies the knowledge, skills and competences all learners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

The survey sought to establish the extent to which 21<sup>st</sup> century competencies should be incorporated into the Curricula.

ECDE teachers were required to rate the skills, values, attitudes and knowledge that should be embedded into the curriculum. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=Some extent' and 'G=Great extent'. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. The ECDE preferred competencies were categorized as 21<sup>st</sup> century competencies, creativity competencies, collaboration and related competencies and; critical thinking and related competencies. Teachers responses on each identified 21<sup>st</sup> century competence which constituted the average percentage rating are presented in Figure 4.2.

**Figure 4. 2: Teachers' responses on Emphasis of 21st century competencies at ECD Level**

**N=156**



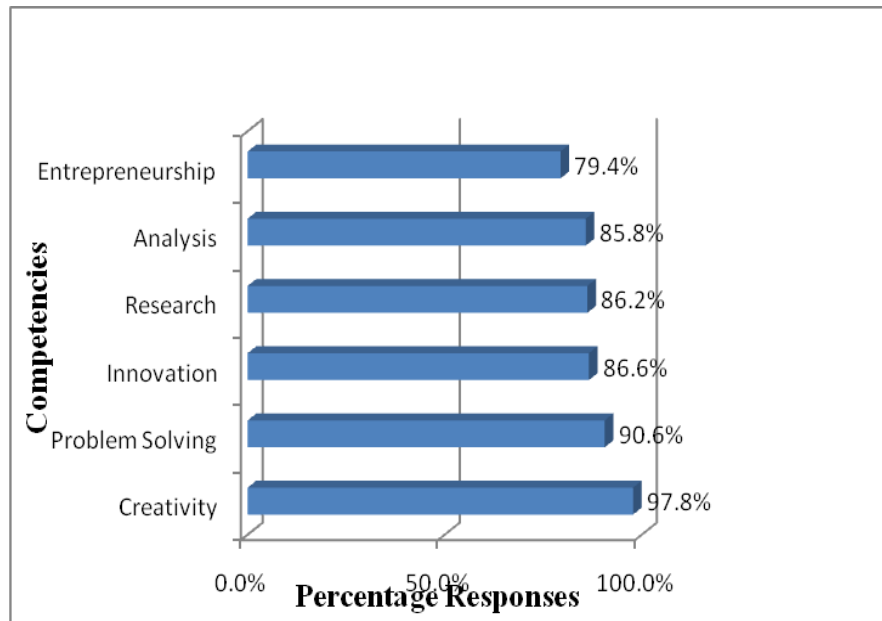
The study findings shows that communication competence was rated highly by majority (93.6%) of the ECD teachers followed by leadership at 91.4% and management at 90.8%. On average, majority (92%) of the ECDE teachers rated these competencies highly.

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

The study also sought to establish the extent to which creativity competencies should be emphasized at the ECD level. Figure 4.3

provides a summary of ECD teachers' responses with regard to emphasizes of creativity and related competences in the envisaged curriculum.

**Figure 4.3: ECDE Teachers responses on Emphasis of Creativity Competencies at ECDE Level**



Majority of the teachers (97.8%) indicated that creativity competencies should be emphasized in the ECD curriculum. Relatively to the other creativity competencies emphasis of entrepreneurship competencies in the ECDE curriculum was least preferred by 79.4% of the teachers though the preference was still high.

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

**Table 4. 1: Teachers Responses on emphasis of Collaboration and related competencies at ECDE Level**

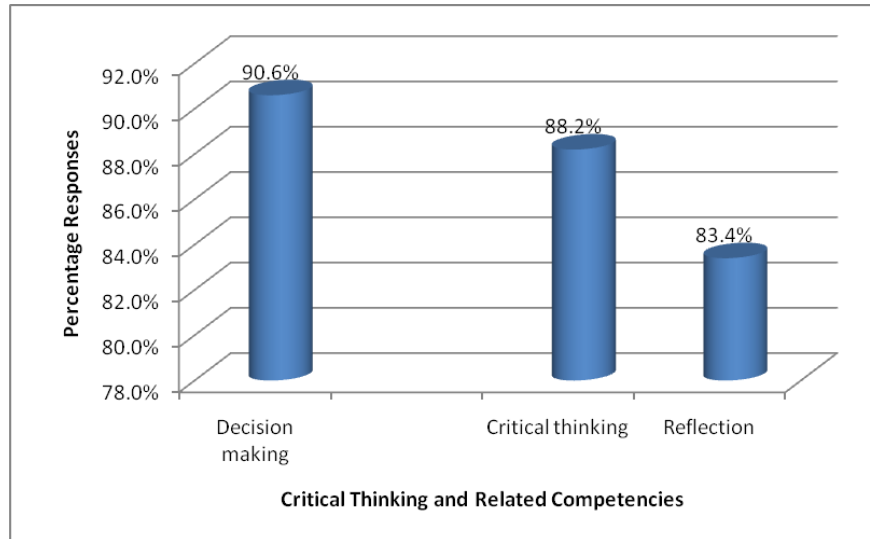
| Competencies N=156 | Percentage |
|--------------------|------------|
| Collaboration      | 87.6       |

|                            |              |
|----------------------------|--------------|
| Interpersonal relationship | 91.6         |
| Coordination               | 91           |
| Planning                   | 91.6         |
| Organizing                 | 92.2         |
| Mentoring                  | 88.8         |
| Coaching                   | 83           |
| Networking                 | 85.8         |
| Negotiation                | 87.4         |
| <b>Average %</b>           | <b>88.8%</b> |

Majority of the teachers (92.2%) indicated that organizing competence should be emphasized in the ECDE curriculum. Over 80% of the teachers indicated that all the other collaboration and related competencies should be emphasized in the ECDE curriculum. On average, 88.8% percentage of the ECDE teachers indicated that collaboration and related competencies should be emphasized in the ECDE curriculum. The high preference for emphasis of collaboration and related competencies in the ECDE curriculum is in line with the recommendation of Singapore elementary level which emphasizes basic skills such as communication and cooperation be highly emphasized in the curriculum.

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

**Figure 4. 4: ECDE teacher's responses on emphasis of critical thinking and related competencies at ECD level N=156**



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

ECDE teachers responses on the desired competencies were similar to those obtained from the key informants through interviews and focused group discussions which proposed that education should produce people who have hands on skills, rather than the current status where education seem to have focused more on the knowledge and cognitive development. It was also recommended that skills of critical thinking, creative thinking and innovation, problem solving, questioning and analysis, knowledge manipulation and application,

research, communication and cooperation should be emphasized in the curriculum.

Respondent: ....., , Decision making, Soft skills (empathy, emotional intelligence), Critical thinking, writing skills, public speaking. Skills to harness local resources for livelihood. This may be brought out through exposure of the learner to the existing environment. (ED-AC)

Respondent; ..... Civic education and citizenship have suffered at the expense of theory or intellectual development. (KCCB-RI).

At ECDE level, it was indicated that sensory responses, spiritual element, social and intellectual capacities should be developed. It is at this level that a child should acquire basic literacy and numeracy skills and develop interest in school to be able to continue with education.

Respondents noted that innovation, creativity, teamwork and virtues such as hard work and honesty be nurtured in the learners at all levels. These must be demonstrated and not taught theoretically. Teachers should be good role models to the learners.

It was also indicated that ECDE learners be equipped with practical skills such as cleanliness and social skills. These social skills should enable the child to recognize when they are in danger and take appropriate action. It was stated that young children should develop language of communication. They should play and associate with others, be conscious of the things around them and have a sense of relating with God. Expression in music and play was noted to be of great importance. It was further indicated that a child should enjoy going to school, learn through play within one's experiences, socialize and appreciate others, be inquisitive in order to develop discovery skills. Curriculum should consider the whole concept of the society.



**KI:** .... I would want a child to be able to enjoy to go school; play as an element of learning, discovery, exploration;.....solets teach our children the values that help us dignity, respect, kindness, honesty; **(KI- BA-)**

A concern was expressed that creativity is being killed at the preschool level because of people's perception that, the best ECD centres are those in which children are able to read, write and do arithmetic and are praised yet what they are doing is simply copying what the teacher has written. It was proposed that children be taught to manipulate resources, make choices and understand the consequence.

**KI:** ..... even in ECE we teach kids to solve problems, we teach them to pose problem, we teach them to create and appreciate their creations then by the time they get into primary school it is just a continuation of that creativity but we finish the creativity right from ECE and start pigeoning them into some poles that is why the good ECD centres are those ones that teach children how read how to do basic arithmetic in ECD and we praise them when that writing is basically copying what the teacher has written. **(CEB - NYA)**

**KI:** Probably at Early Childhood development the greatest competency should to manipulate objects, toys ..... I like saying NACECE people talk about manipulative in whatever, the question is what they are manipulating. We narrow it down to just objects. A child can manipulate total environment, including a person, and they do that. The most important thing in choices and manipulation is the consequences. Our education doesn't look at the consequences of choices made. .... **(CEB – DR. CHARLES NYANDIGIRISI – NYAMIRA)**

**KI:** ...in Kenya like in the kindergartens you see when you go ... learn how you to start writing spellings but in most developed countries they don't begin by learning words and spellings and all that. ..There are different equipments to play around with there are cars, there are bows, everything so pupils or children are placed there and then you see someone will start engaging him or herself with something that he or she likes so from that point will identify what this person wants and you start developing from that point. **(KI STU KAU)**

**I:** At ECD – this is the formation and yet we do not address it. At this level children have ability to communicate feelings, needs, be able to interact with fellow learners. At this level we want children to go the best ECD where teachers have their own values where now children start to learn about differences. **(KI – VC – KIB - BUN)**

**KI:** At ECD the bible says bend a tree while it's young, teach a child in the way they should go. Instil competences of what is right and what is wrong by appreciating a child when they do right, and when wrong correct them. Values such as honesty should be taught by parents. They should also be taught how to speak and learn the competence of doing through the little games they play. **(KI-EAC-NAI)**

**KI ...** ECD they should be taught; love, sharing, respect, listening and hard work. **(KI-FAWE-NAI)**

**KI:** .....Life skills are very important to a child. There are so any risks now that are encountered by students going home back from school. Life skill is really something very important and maybe should be introduced. In fact it needs to also be put in the syllabus.....actually before a child joins class one I would like a child going from preschool to class one to be able to write competently and to be able to read. That is really something that is missing now in most of our public..... **(KI – CEC - SAMB)**

**KI:** Life has changed and parents are doing so much to their children for me my child should come out of the ECD speaking fluent English so that as they go to primary they should be competent in language (English Kiswahili, Mother tongue) and numerical numbers. I also in that we need to have this kids be courteous, integrity honest. Also I would like to say this issues of sex education this kids need to know there body parts including their sex organs. We should not shy away from this. **(KI – PAS. JM)**

**KI:** At ECD – this is the formation and yet we do not address it. At this level children have ability to communicate feelings, needs, be able to interact with fellow learners. At this level we want children to go the best ECD where teachers have their own values where now children start to learn about differences. **(KI – VC – KIB - BUN )**

**KI:** I think these are children who have come out of their mother care from breast feeding and all that requires from these one is self-expression, they can express themselves, ..they can say am sorry, they can also tell who they are, they can say am a girl am a

boy, also life skills, they also needs to acquire life skills like proper mannerism in eating, dressing, and so on. So life skills is a competence that they need to have also literacy and numeracy readiness for numeracy and literacy in the primary section, that is also a competency that they should have when they are going to class one. . (KI-CBE-KIT)

Most respondents suggested that the curriculum should be designed to develop in the learner critical mindedness, analytical and communication skills; innovation, entrepreneurial and financial literacy skills. This is because learners display little knowledge for solving problems whenever they arise.

**KI:** A better curriculum should enable people to be enterprising. That entrepreneurial skill is lacking. Even those who have business related subjects are not entrepreneurial in their thinking. (KI-CEB-BUS)

Respondents further noted that the current ECDE curriculum is devoid of necessary skills that support learners in their day to day living. According to key informants, certain subjects that were removed from the curriculum had a role in assisting people to become responsible adults. They suggested that, learners should be taught basic hygiene, life skills, communication skills, basic arithmetic and responsibility.

**KI:** This child even at the ECD level should be made in such a way that he is self-reliant...but you see a form 4 coming cannot even spread a bed which means that was not part of the education at school. We, when we were at school, home science was compulsory it is a lesson you must have. Why is it important? The girls at the end of the story will be mothers. They will be mothers, and they will be caretakers of other people. But because they lack that totally now, that is a necessary. So what am I saying? Some of the practical subjects that were removed if need be should be reviewed to come back to the curriculum. (KI-CEB-MIG)

**KI:** .....can the child have basic skills of hygiene, tidiness, can that child, be trained to even wipe their noses, okay, can that child be trained how to dress up, not that, there is a maid who will always be saying come here, no turn around and you are tucking in, so the what we call life skill at that level, the child being able to manage basic hygiene like brushing their teeth,

the child being able to keep time..... so training for basic life skills, hygiene, time management, living within the realities and also the communal, being able to live with others, so that now communication skills becomes become very key at that level, so these are the early child hood level.....at primary school and if you are talking about competencies, if really you have to be able to live within your means, you have to start knowing, you have to be able to manage numbers, so basic skills of being able to do a bit of arithmetic. ....Secondary school, now, at secondary school that is when we train for responsibility, even at primary is responsible living, so irresponsible living and leadership, **(KI-PWA-UNI)**

**KI:** ... I think these are children who have come out of their mother care from breast feeding and all that requires from these one is self expression, they can express themselves, ..they can say am sorry, they can also tell who they are, they can say am a girl am a boy, also life skills, they also needs to acquire life skills like proper mannerism in eating, dressing, and so on. So life skills is a competence that they need to have also literacy and numeracy readiness for numeracy and literacy in the primary section, that is also a competency that they should have when they are going to class one. . **(KI-CBE-KIT)**

The key informants expressed the need for learners to be given exploration skills coupled with the right learning materials. These will enable them gain competencies, learned behaviour as the learning is practical in nature.

**KI:** ...At the ECD level there should be discovery, hiimanenoyakuchangamtotokwa class moja, kufunzanakuimbawimbo, I have visited ECD, and I believe the children love to play and like all colours, we need such an environment akiingadarasaanawezakushikaunampatia time to explore, but when you take that child to a bare classroom with nothing, you see in environment jioniakiendaanaendakwamsitu, ana explore kulikohukohapatikitu, and the issue, of KISERT, kuna document to test ECD to go to primary, it is a document that should be administered to find whether the child is suitable to enter class 1, **(KI-CDE-MAK)**

**KI:** ....at ECD generally it is trying to know how people are behaving, they would want to know how thing are getting on..to teach a child at ECD, it is more practical oriented.. they imagine how is this chair modeled, they see a vehicle moving they want to know how it is modeled, at ECD they play with something that is able to make them learn, if you are teaching them about number you should model something of what they see and then they model it., **(KI-UNESCO-NAI)**

The respondents recommended that ECDE teachers shift focus from examinations and concentrate on inculcating values during the teaching and learning process. This can only be made possible if they are able to put in more time on subjects that are not externally examined. At ECDE, respondents expressed the need for children to acquire discipline, social skills, taking care of the environment and knowing God. The respondents explained that at the ECDE level, children need to express themselves freely. They further said that children at this level should have the following social values such as respect, justice, love for one another sharing, justice, honesty, diligence, caring, compassion, patriotism and morals and harmonious coexistence and interpersonal relations.

**KI:** ECDE should now have values of sharing, justice, coexistence and love neighbours. **(KI – FBO - BUN)**

**KI:** When you look at an ECD child I would like to see a socialised child, the social part of the child. The child is able to interact with the others. It should be more of knowing how to live with the other children other than being able to do a lot of mathematics and such **(KI-MCDE-NYA)**.

**Respondent...**so they must be taught when you want to assist somebody just assist up to the last minute, **(WEL-INF-NAR)**.

Respondent: Values are eroded in our contemporary society. There is need for a curriculum that emphasizes on reviving values like honesty, kindness, love, unity, trustworthy in young children. Such values will uproot corruption which is the cancer of the nation. **(DBK-IS)**

The respondents expressed the need for the curriculum to include the national values as enshrined in the constitution, and the 21<sup>st</sup> century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness.

Respondent: The curricula at different levels should aim to enhance Accountability, Integrity, Responsibility, Peace, Commitment to work, Negotiation, Acceptance and environmental preservation. This can be achieved by involving learners in community service at all levels during holidays hence inculcating Nationhood in learners. **(OCO-IS)**.

Respondent 1: Soft skills; 21st century skills such as problem solving, creativity, critical thinking and emotional intelligence, creativity and logical thinking; Computer and Digital literacy; Innovativeness, and Teacher professionalization programmes through mentorship. (CEMASTE A).

Respondent 2: Competencies related to lifeskills development in areas of negotiations, communication, relating to strangers are crucial for young children. For those who are training as their teachers need to be more careful to exhibit the very values desired of the children. (DBK-IS).

**Respondent:** One, they should have discipline...discipline for life....Sometimes it happen, they have discipline in school. But when they come out, they steal and conflict with others, abuse people. Discipline means they are humbly and obedient and conform to everyone's expectations. (SHOP-INF-NYE)

**Respondent:** Discipline....they should learn social discipline....Girls these days are coming from school but move about carelessly. This can be boosted alongside schooling but also at home by parents. There should be a subject to teach them good conduct, both boys and girls, about conduct ...There should be a subject to teach them good conduct, both boys and girls, about conduct (SHOP- INF-NYE).

**Respondent:** ...should be able to respect... value of respect and obedience. If she leaves ECD she should be able to have those. (CARW-INF-UG)

**Respondent:** ...they should be able to differentiate between good and bad habits, and stand out for good habits. Also let them be able to socialize normally with peers; (BUS.MAN-INF-NAI)

**Industrialist...**Education should first all liberate the mind of ...any person who goes through the education system. It should also be able to expose the learner to utilize what they learnt in school for their own personal growth (MAN-IND-BAR)

Kenya  
inahitajielimuyamanufaaambayoinawezakuwafanyawatotowetu  
waendembali.(CEO-IND-GAR)

It was also indicated that curriculum puts a lot of emphasis on content and not on other aspects of life such as humanity, dignity and values. The curriculum should address aspects like caring and love.

**KI:** The value of the education is not just the degree. There is the other aspect of our life, the humanity, the dignity, the value, you know? Basic things that are in us. And all the other things we used to see in international schools, we used to see at KCCL. The first thing we look for is a happy child. While really, this child can cheat to cover content can do manner, all manner of

things. So our curriculum doesn't teach us to care, you know. It doesn't teach us to care, or to love, or. I mean, it's, I don't know, it's strange. **(KI CITAM NRB)**

The respondent further explained that values should be inculcated into our children very early during their formative years of development

**KI: ...** is like that we are giving wrong values along the line it will be like that at the end so we should start with the right values and best thing you mentioned already where others are using the method of radicalization the best thing you should understand is that you are too late already to educate a child when he you are starting to educate at 4 years its too late. Education to a child should start before birth. **(KIT - BIS. ONYUKA – HOM).**

Key informants indicated that values such as good behaviour, relationship between gender and attitudes character, patriotism, integrity good morals, general social etiquette, appreciation of their environment and consciousness on how to better their lives.

**KI: ...** have some values to have in the ECD level like good behaviour, character, moral at that level.. **(KI-CDE-KIT)**

**Industrialist** .....so character formation is everything...We should focus on developing the child as a whole **(MAN-IND-BAR)**

**Industrialist...**what needs to be calculated from an early age the fear of God and honesty hard work living in harmony with other people **(MAN-IND-BAR)**

The findings on creativity and innovations are in line with the Education for All (EFA) initiatives, Millennium Development Goals (MDG's), Sustainable Development Goals (SDG), Education for Sustainable Development (ESD), the Constitution of 2010, Sessional paper No. 1 of 2015, and Kenya's Vision 2030 of providing a globally competitive quality Education, Training and Research for Development. This observation is also in line with a study carried out in Korea by IBE-UNESCO (2012) which indicated that competency skills recommended for elementary level should be problem-solving skills, communication skills and cooperation skills.

These will enable students to be prepared to face these challenges and seize the opportunities brought about by new forces locally and internationally. Similar studies carried out in Singapore by Soland et al., 2013 and Voogt and Roblin, 2012) indicates that emphasize on the features of their framework for 21<sup>st</sup> C including creative and critical thinking, communication and collaboration, and social and cultural skills were core values that the Singapore education system hoped to cultivate in all its students. This is critical because if knowledge is learned to support the performance of skills then learners will satisfactorily excel in aspects of knowledge, skills and values (Soland et al., 2013 and Voogt and Roblin, 2012).

These findings are in line with the tenets of the Kenya Vision 2030 which calls for curriculum that develop learners' entrepreneurial skills, competencies and talents (Republic of Kenya, 2007). The Sessional paper no. 2 of 2015 expounds on the need to develop and nurture talents for global competitiveness while the Taskforce Report mentions identification and advancement of talents among core curriculum competencies (RoK, 2012). The curriculum policy (2015), indicates that since the curriculum as it is does not give linkage of talents to development of careers, further education or training, there is need to address the aspects of identifying, nurturing and developing talents among learners. This therefore implies that identification and nurturing of talents should be highly considered in the envisaged curriculum.

#### **4.4 Learning Areas that should be included in the ECDE Curriculum**

The study sought to establish the extent to which activity areas identified should be emphasized in the ECDE curriculum. Responses were obtained from the ECDE teachers. The respondents were asked to indicate the extent to which the identified learning areas should be

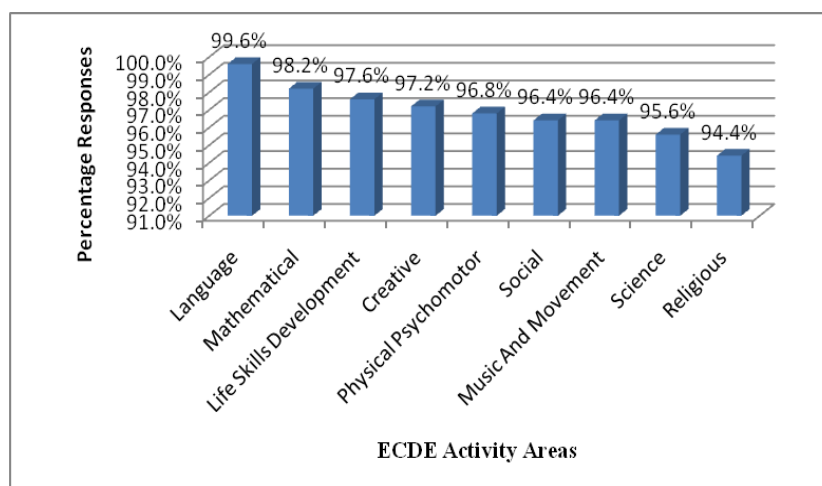


emphasized in the school curriculum using a five-pointer likert scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=Some extent’ and ‘G= Great extent’.

#### ***4.4.1 Extent to which ECDE Learning Areas should be emphasized in the School Curriculum***

ECDE teachers were asked to indicate the extent to which various activity areas should be emphasized in the school curriculum using a five-pointer likert scale. They were required to indicate their choices by selecting ‘N=Not at all’, ‘VL=very little extent’, ‘NS=Not sure’, ‘S=Some extent’ and ‘G= Great extent’. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings were further derived. Teachers responses based on percentage mean ratings are presented in Figure 4.5.

**Figure 4. 5: ECDE Teachers Responses on emphasis of Activity Areas in the School Curriculum (N=153)**



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

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

The key informants proposed that ECDE learners should be taught toileting in baby class and at age four, they should be taught simple letters of the alphabet and in the fifth year they should be taught social relationships and basic writing skills. At age five and six, they should be taught social relations in a family, writing skills, alphabets and physical knowledge.

**Parent:** I want to suggest the following one at ECD, the first year... they should just sit and be taught about toilet training, then about four they can learn numerous skills and simple letters of alphabets if, but that should not be done in the fifth year, at sixth year I propose this child is made to know communal relations society expectations what a father does what a mother does, basics and writing skills, and ... alphabets...there is need for physical knowledge... that the children will grow natural children **(PA-FGD-MOIGP-S-UG)**

**Parent:** To interact with other children. Learning basic like communicating, writing, reading. That interaction and socializing level will help attain their goals. To be able to talk and values like going to church, attitudes which are positive **(PA-FGD-NYAKI-S-NYA)**

Several respondents were of the opinion that at ECDE, the child should learn mother tongue, followed by Kiswahili for easy communication as well as writing, communication, play, modeling, drawing, creative arts, singing, dancing, life skills, counting and reading skills in addition to cleaning themselves.

**Parent:** I would like to say that, because the child is still young ... it would be good if that child first learns mother tongue ... this will help that child to talk and communicate with others, even at home he/she can communicate with the parents even when in need of something, the child can express him/herself, and, if possible, for those who will learn faster can be introduced

to Kiswahili. This can help the child if he/she meets with strangers along the way. **(S-FGD-NYAM-S-NYAM)**

Parent: ECDE Level-learners should have know things they have learned, simple skills in writing numbers, counting and reading vowels and alphabetical letters. They should be taught how to keep themselves clean. **(PA.-FGD-MALIK-S-BUN)**

Parent: The teachers should help learners to have skills and knowledge such as; integrate play and numeracy and communication; Modeling, drawing and creative Arts; singing, dancing and Life Skills and Simple reading and writing **(PA.-FGD-MALIK-S-BUN)**

At ECD, parents expressed need for their children to acquire skills of counting, recording and sorting things in order of sizes.

**Parent:** ... distinguished numbers, alphabets, they should be able to match, sort, read, record, reading, writing, paint, record and socializing with other learners... **(PA-KAMOP-MAN)**  
-Kwa)

Emphatically, learners indicated that at the ECDE level learners should be given opportunities for play and that they should also be involved in inter- school co- curricular activities.

**Student:** When we talk about co-curricular activities, the big challenge is that in the ECD it is a bit challenging. I think that as we are developing a curriculum, there should be something for these little children, so that they can also come together to enjoy and interact in their own way. For these upper schools and colleges, there is not much problem there. The big challenge is on the ECD section. These small children as not so much involved in the co-curricular activities. That is why even when you go to a primary school, maybe there is a co-curricular activity that is taking place in the school nearby, you will hear that teachers saying that only the upper classes will go, but the lower classes to remain in school. That is why it is a challenge... **(CSL – TTCP – NAR - NAR)**

**Student:** It will be a big challenge in terms of travelling and managing the children is very hard. You cannot take little children to a very far place because to handle them will be a problem, but I think it should be done in the school level. They should be having something like a competition, they can make a talent day for the school...the competition that they will be able to do within the school. Going outside is a big challenge for the young ones... **(CSL – TTCP – NAR - NAR)**

**Parent:** At ECD the child should know themselves. Since this is a new being. They don't even know whether a boy or girl. **(PA-FGD-KIS-S-NYA)**

Some of the respondents were of the opinion that at ECDE, the child should be taught sounds and writing.

**Parent:** I think the child should know sounds for them to know big things about education. (PA-FGD-KIS-S-NYAN)

**Parent:** A child leaving ECD level should be able to write... at least, the first numbers, and to identify numbers and letters together with their sounds. This is because, by the time the child leaves ECD without knowing what sounds are, going to class one becomes difficult for this child trying to pronounce those sounds. Therefore, if those sounds are known from ECD level, writing letters and numbers, now it will be easier when joining class one, he/she will start learning other things. (S-FGD-NYAM-S-NYAM)

Respondents underscored the importance of teaching such skills as self awareness, time management, communication, planning, work-appropriate behaviour and attitudes, team and independent work, financial literacy and entrepreneurship, workplace health and safety, work place rights and responsibilities and customer orientation and satisfaction. Some of the areas potential for carriage of soft skills are entrepreneurship, leadership training, mentorship and experience in starting a business.

**Respondent:** Let them be able to make basic decisions without fear, e.g. reporting strangers or bad actions to their superiors like teachers, parents, older students, etc. (BUS.MAN-INF-NAI)

Respondents also indicated that exposing children to CRE would help them learn more about God while creative arts would help them develop their motor skills, and basic mathematics.

**Parent:** I would like when a child is still at ECD level, he/she should be taught CRE, because the child is supposed to know how God created and who created him/her. Also, I would like that child to be taught Creative Arts, because, this will make him/her to fine his/her motor skills, to be strong, through drawing pictures. The child will perfect that as he/she grows up. Also maths is necessary so that as they come every morning, they count their bottles, and growing up to maturity, it will be possible for the child to see how that math is progressing. Also, there is this subject called Social Studies. It is important, because it talks about a family, the types of houses that people built. So the child gets to know their house and those of others, while noting the differences that are there. All these plus the

others my colleagues said, will be helpful to the child. (S-FGD-NYAM-S-NYAM)

Respondents expressed the need for young children to develop the skill of self-awareness and self-esteem.

Parent: I think, from ECD we should have a child who has developed her self-esteem, such that when the child goes to primary he or she can approach the teacher, can respond without shying off from what the teacher demands from him or her...(PA-FGD--MUTG-S-KIT)

Parent: the child should be self-understanding, the child should be made eager to understanding why he or she is in school (PA-FGD--MUTG-S-KIT)

**Parent:** At ECD the child should know themselves. Since this is a new being. They don't even know whether a boy or girl. (PA-FGD-KIS-S-NYA)

It was further suggested that curriculum should adopt spiral approach of content where one builds onto the other. Further, the respondents suggested that the curriculum should incorporate international and regional best practices on assessing, addressing and promoting the emotional and psychological wellbeing of children. Age appropriate health education content should be taught in line with Articles 10, 11 and 24 of the Constitution of Kenya 2010.

The respondents suggested the following learning areas for the ECDE; communication skills, numeracy, creative and manipulation; social and life skills, environmental awareness; respect for and sanctity of life; nutrition and health (knowledge and practice); religion and ethics; language (including mother tongue); values related to hard work, truthfulness and integrity; national values; personal safety (security) knowledge and practice; values associated with the common good, communal responsibility and respect for other people's property; technology; emotional awareness, empathy, self-regulation and conflict resolution; respect for the rule of law, appreciation for democracy; creative arts and expression; literacy

and communication;, cooperation and innovation; critical thinking, reasoning and problem solving; number sense and operations, sense and geometry, patterns and classifications, measurement and comparison; awareness of the natural and the physical world, inquiry skills; public speaking, writing; physical education, drawing, simple mathematical concepts, good manners, keeping the environment clean, washing hands, using courteous language; vernacular; basic communication skills such as reading and writing; counting, mannerisms, knowing the environment, socialization and religious values.

**Respondent:** ...should be able to respect... value of respect and obedience. If she leaves ECD she should be able to have those. (CARW-INF-UG)

**Respondent:** ...they should be able to differentiate between good and bad habits, and stand out for good habits. Also let them be able to socialize normally with peers; (BUS.MAN-INF-NAI)

Teach Vernacular Languages at ECD and Lower primary levels (up to class4) to ensure we don't lose/erode our culture/ heritage/ traditions as has already in most young urban families. This is to deepen our African/ Kenyan roots (NK-IS)

The respondents further suggested that the curriculum for the level should be flexible to let children be children.

Respondent: The main area of focus at this level is stimulation of the residual sensory inputs. Learners should be guided to explore the environment with a lot of concrete materials for concept formation. Play should also constitute the majority of time spent in the ECDE centres. Routine practices should be maintained for familiarity and confidence building. No meaningful academic work to be engaged rather all the prospected academic work should be introduced at the last level remotely in plays and songs. (OCO-IS).

Other respondents suggested that CRE, social ethics, pastoral programme of instruction, guidance and counseling, and health education to be taught and made compulsory at ECDE, primary, secondary and teacher education levels.

Respondent: CRE be a compulsory subject in ECDE, primary, secondary and teacher training colleges....to promote sound

moral and religious values among learners. ..guidance and counseling to enhanced and offered in a recognized office in all schools at all levels...the church to be involved in identifying and recommending teachers who are assigned these subjects (CRE, social ethics, PPI and guidance and counseling). (GA-RI).

Agriculture was proposed to be compulsory in basic education to address the issue of food security in the country. In addition integration of nutrition education, food production and physical activity into the curriculum was emphasized to resolve problems of malnutrition in Kenya. The respondents further suggested that strategies be developed to evaluate nutrition related learning experiences in each successive grade to assess the children's knowledge on health living and whether they have adopted a healthy lifestyle. In the proposal, they suggested making nutrition education practical in order to ensure that students learn basic skills in nutrition and health. School gardens/farms/livestock projects should be promoted to support and complement classroom nutrition education teaching. Food preparation demonstrations should form part of class work that the students could be required to learn to provide practical skills in applying knowledge in nutrition. The respondent further argued that physical education be included in the curriculum, even though it is already in the school curriculum.

Respondent: Include physical education in the curriculum. Physical activity has tremendous health promoting and disease preventing benefits and define to a large extent people's health, growth and development. (NDU-AC).

**Parent:** I would like when a child is still at ECD level, he/she should be taught CRE, because the child is supposed to know how God created and who created him/her. Also, I would like that child to be taught Creative Arts, because, this will make him/her to fine his/her motor skills, to be strong, through drawing pictures. The child will perfect that as he/she grows up. Also maths is necessary so that as they come every morning, they count their bottles, and growing up to maturity, it will be possible for the child to see how that math is progressing. Also, there is this subject called

Social Studies. It is important, because it talks about a family, the types of houses that people built. So the child gets to know their house and those of others, while noting the differences that are there. All these plus the others my colleagues said, will be helpful to the child. **(S-FGD-NYAM-S-NYAM)**

**Industrialist...**There should be proper focus on the ECD level because the first 6 years of a child are very crucial for a child's development and their foundation is really important for any child later on when they go to primary and secondary **(MAN-IND-BAR)**

**Industrialist...**ninge wahimizawatoto wafundishwe at least kwa lugha ya mama. Mother tongue nimzuri. Mtoto wakati ni mdogo zaidi, hizi maclass za chini, lower classes, nursery na standard one.... Kingereza hafahamu kitu gani anasema...kingereza kije baadaye. **(CEO-IND-GAR)**

**Industrialist...**pot making is thriving but there is no pot making in school so connecting to that reality so that at least someone sees the real issues in the ground connected to education. **(MAN-IND-KAK)**

**Industrialist...**The child should ... be able to read and if you give an exam they should be able to take it and pass...**(MAN-IND-NYA)**

**Industrialist...**we need to identify who is better mentally to proceed with some of these learning aspects up there. Because you find a person who is art oriented, is able to do a few things through art so they should also find a way of making a form four of their own so that form four doesn't mean mathematics, but means mathematics, science and physics and whatever. Form four that also means pot making, dress making and something of that kind...So that everyone will be able to achieve their personal potential rather than the kind of straight jacket **(MAN-IND-KAK)**

**Parent:** To add on to that, the backbone of any school is the base of preschool education. That is the beginning. .. When you go down the level of kindergarten that is where you see the child's talent. However, we harass children at the lower levels and by doing so we only make things worse. This is because some of them end up dropping out of school because they did not see their talent in education. .... those talented in math and place them where they are best suited, another may be a good football player, another gymnast; this is where their talents can be seen. From there, in classes 1, 2 and 3 a child may be taken and each child is taught this and that which will enable



him/her to be a useful member of society. ... we urge our government to put an emphasis on early childhood education. The teachers of ECD should also be considered and the government should look into their salaries and employ them just like any other teachers. .... In some cases, some children miss school and only the older ones attend school because here the ECD teachers are paid by the parents. .... Once we do this, our education system in Kenya will change and we will be like other countries. If a child is good in math, then he should take math, if he is a driver, then he should go in that direction and likewise. **(PA-FGD-SENP-NYM)**

At the ECDE level respondents expressed the need for writing letters of the Alphabet, numeracy social studies, life skills like dressing, spiritual nourishment/Religion, role play, modeling, singing, and dancing, respect for others, honesty, listening, discipline and sharing. They also indicated that learners should be equipped with basic foundational skills such as Mother Tongue, awareness of the environment, culture and moral values.

**Parent:** let this child be taught mathematics i.e. counting as well as mother tongue **(PA-FGD-DRUP-NRB)**

**Parent:** ...they need to understand their home language before learning other languages. **(PA-FGD- DRUP-NRB)**

At this level, some participants noted that children should be taught how to make things using clay, colour, paint, sort things, learn songs and sing, story-telling, and write one's name.

**Parent:** ... these children used to be taught how to make things using clay. They would be able to make even alphabet using the clay. They would mould cows, dogs etc. but today this is not practiced so much. They only use charts. **(PA-FGD-UNOAP – MAK)**

**Parent:** ...colouring and painting, they should be able to model and model clay from materials from items such as sport and model clay from animals, they should be able to be sorting things in terms of sizes, shapes and colour. **(PA-FGD)**

**Parent:** Basic foundational skills should be taught, also mother tongue should be taught and awareness about environment, culture and moral values. **(PFG-ST. JOSE-BUNG)**

**Parent:** Kuandika...na Kunjisomea mwenyewe..**(PA-LIKP-LK)**

PA: Mtoto anapelekwa pole pole ndiyo aweze kushika, sounds, na,...Sasa ukimwonyesha kuchola ataweza kuelewa, n aakisoma ile kitu anataka soma akimaliza ni hii, kwasababu sisi tunaambia watoto wewe unapenda kucheza na hujui hiyo ni talent yake na ikifungiwa haitamzaidia... (PA-LIKP-LK)

Some participants indicated that learners at this level should be taught how to read and write and some psychomotor skills related to holding the pen and shaping of letters.

**Parent:** They should teach these small kids how to write and read, ...still young they do not know even how to handle the pens so the teacher is forced to show them, how to write ,how to shape letters on line e.g on exercise books you know there are some lines so they follow the lines and shape letters (PL-CHEBP-UG)

Parent: I think by time the child leaves ECD he should be able at least be able to write simple words. Even if is a word with three or four letters... even he/she knows how to write their names (PA-FGD-MALP-SAM)

Participants were of the view that by the end of this level children are able to read, write, count and memorize the letters of the alphabet, pronounce words and sounds correctly, sort, record, paint and socialize. One should also be able to perform certain tasks by oneself such as washing one's clothes and bathing.

**Parent:** ...he/she should know this is my father and this my mother, to be able to count from one up to a hundred, to know how to say A - Z this knowledge will help the child to move from where he/she was to the light... able to wash self, to wash her/his clothes, the Nursery class is where the foundation is, he/she should know mathematics and all the letters of alphabet. She/he should be one who knows what he/she is doing (PA-FGD- MAKWP –KWA)

**Parent:** ... distinguished numbers, alphabets, they should be able to match, sort, read, record, reading, writing, paint, record and socializing with other learners... (PA KamoP –MAN)

**Parent:** Pre-primary, we expect them to be able to read some words, simple words and maybe they can make simple statements or a simple sentence, know a bit of arithmetic; be able to add 15+10 this kind of thing.(PA-FGD-TONP-NYM)

**Parent:** In ECD the child should be taught modeling because we know that is one stage in life. And there are places, if you go to town schools: there are places I went and found children in upper primary modeling. They had passed this stage and this should be taught in ECD level. Then they should be taught to differentiate letters because others, instead of reading 'sha' they

read 'sa'. So the child needs to be taught 'la', 'ra', he finds it the same. You find the child in class three but still he cannot differentiate between 'la' and 'ra'. This stage is when the child should be taught pronunciation of letters.

A number of respondents stressed the importance of the child to know about his/her home environment first.

**Parent:** pre-unit, he/she starts learning with the surrounding environment. The environment is the first thing that child starts to learn about; what surrounds him/her. So for him/her to understand more, she must understand the home where s/he comes from. That is the first environment. After that then the neighbours; who are my neighbours. That is pre-unit. Who is my father? Who is my mother? Who is my uncle? After that he/she proceeds.(PA-FGD-TONP-NYM)

**Parent** :.... Their teachers need to know how they will teach the children how to know themselves, how to use the toilet; ... Even things like how to bathe and eat. This also includes working; and that is why these children should be allowed to dirty themselves completely so that they can learn how to work with their hands. Things like running, playing, singing and dancing; ... At this point is where they should be told this is what is bad and this is what is good; ... Moreover, this is where their behavior is nurtured and this is where they start to learn things to do with God. At this level they should be taught that there is a place called heaven where we shall stay forever. All these things are made known. Kindergarten is the foundation of everything.(PA-FGD-SENP-NYM)

**Parent:** At this level is where they are also taught how plants grow and why it grows in a certain way. This is where they are very inquisitive to the point of asking, this God, how big is He? In the same way, they may ask about the plant, how big it grows and you must also tell them why it bends towards sunlight so that they may understand.(PA-FGD-SENP-NYM)

The findings on mathematics, languages and sciences are in line with the aspirations of the country's blue- print for economic development which flags the teaching of mathematics, languages and sciences as being vital to the country's development. Vision 2030 indicates that by 2012 the country should mainstream Science, Technology and Innovation (STI) into the curriculum (RoK, 2007). Studies have also shown that countries like Singapore and Malaysia with high technological development have put great emphasis on mathematics and sciences as a foundational requirement for their

technological advancement. The Malaysian education system, like others around the world, has emphasized the development of strong content knowledge in subjects such as sciences, mathematics, and languages (Government of Malaysia, 2012).

The high ratings on creative arts are in line with a study carried in Nigeria by Ajibade and Elemi (2012) on importance of learning visuals in school. The study found that art and design is significant in the development of a child as it is a tool subject and students performed better using visuals and illustrations to learn than those who learnt without them. According to (Enamhe, 2001) visual arts find practical use in other subjects in schools and pupils who partake in art classes perform better in illustrations. Ajakey (1982) indicates that creative art is a correlation of all other subjects in school, for it influences their successful teaching through sketches or illustrations and art as a subject may compensate for the education of persons who are not science inclined.

Owing to their importance and contribution to development, languages, mathematics, life skills and creative arts activity areas should be highly considered for inclusion in the envisaged curriculum at the foundational stages.

#### **4.5 Learning approaches that should be used in delivering the ECDE Curriculum**

Different approaches are used during the learning process. The ECDE teachers' were asked to rate the extent to which various learning approaches should be used in delivering the ECDE curriculum.

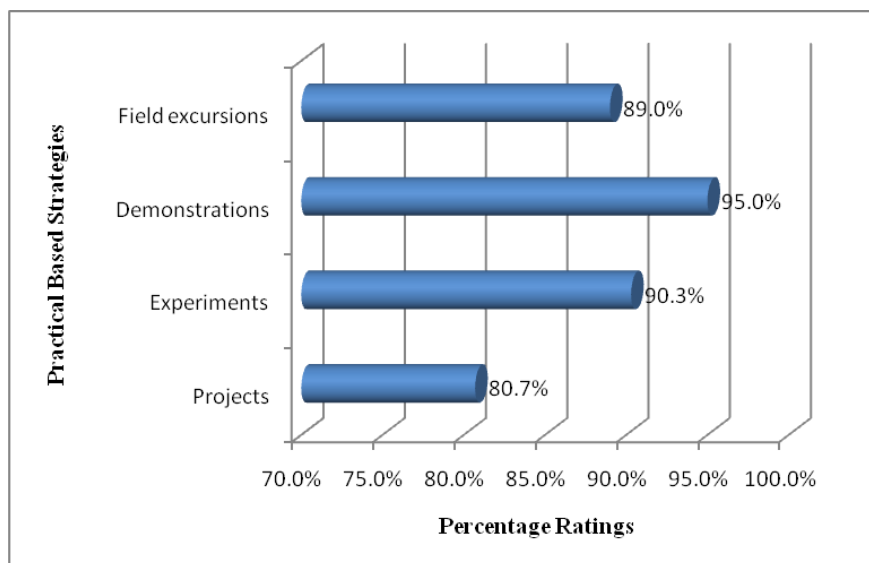
They were required to indicate their choices by selecting 'N=Never', 'R=Rarely' and 'A= Always' The responses were weighted out of 3 and averages derived. From the weighted averages, percentage mean

ratings were further derived. The approaches were categorized into practical, learners' activity-based, experiential and lecture approaches.

#### ***4.5.1 Practical Approaches of teaching***

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

**Figure 4. 6: ECDE teachers responses on use of practical based approaches for teaching**



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

There was ECDE teachers views reflected those of other respondents who suggested that practical and technology based learning be encouraged to enhance learning and nurture talents.

**Respondent:** ... giving them more practical lessons, apart from theory ...and also if they improve technology so that those children...technology I think will also help them develop their talent in more efficient (CARW-INF-UG).

**Respondent:** Vile vile hata waleo huwa najaribu kitu lakini ingekuwakatiuletunaifanya practical ingekuwamzurizaidi. Kwa vile ingesaidia yule mtotokwa vile hiyokitu ingekuwakwa kichwayangu.

(If those days we had done practicals, it would have been good since it would have helped a learner as the skills would have been learnt very well.) (BUT-INF-KAL)

It was also observed that in a competency based curriculum, pedagogical skills should be practical and not those which facilitate rote learning. This is indicated by the following response.

**KI:** In competency based education ..... we have to develop critical thinking. So that the learners are taught to internalize, think about issues, evaluate and be able to... those are some of the methods that the teacher trainees in this curriculum they can prepare teachers to deliver the curriculum the way it is intended to be.(KI-TSC-NAI)

Respondents strongly felt that teaching should be as practical as possible so that the teacher only guides the learner; as the children do more. The teacher has to create curiosity to the part of the learner so that the learners can discover the knowledge as much as possible. They said pedagogical approaches should differ according to levels. However, at ECDE the approaches should be child friendly, considering that it is the formative stage of the child that requires more play and humour, to get them interested in school. They also said that at this level they do better using interactive visuals and actively participating in learning. Respondents said that teachers should be competent in the use of information technology. They should also be well versed with the legal and regulatory frameworks in education. Internship for teachers was proposed.

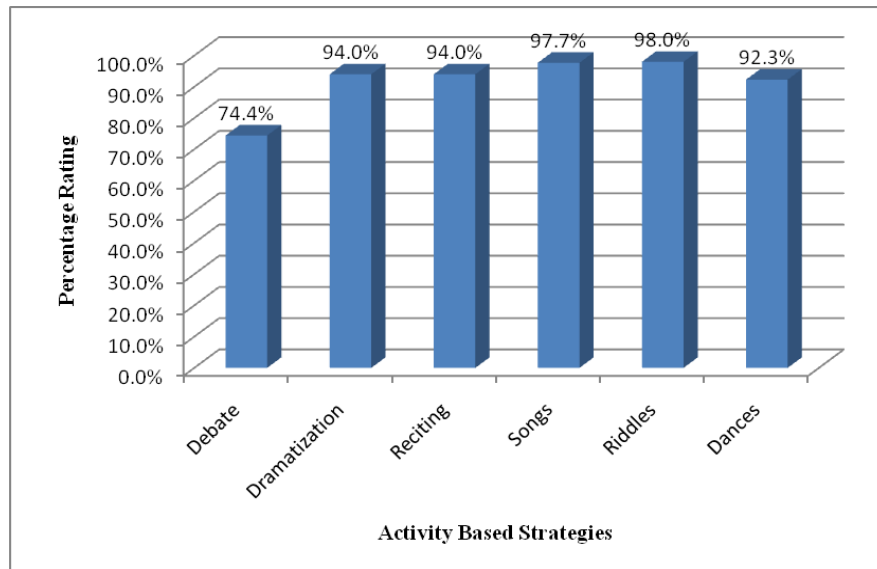
Respondents further proposed that small classes which are overcrowded would make it difficult for teachers to diagnose the strengths and weaknesses of the learners.

**KI:** Teachers should turn around the thinking of the children as the child is as good as what the teacher makes them to be (**KI-CES- BUS**)

#### **4.5.2 Learners' Activity-Based Strategies**

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

**Figure 4. 7: ECDE teachers' responses on use of learners activity-based strategies in delivering the Curriculum**



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

The teachers' findings were echoed by other respondents who proposed use of learner centered approaches for teaching as they liberate the learner. They posited that good approaches are those that encourage creativity and are interactive in nature.

**KI:**I would give a very broad answer and say anything that liberates the learner ..... Approaches that are discussive, dialogic, anything that is interactive, where there is actual interaction not you know for most of our teachers interaction is something like ask a question and the student answers. There is no interaction there..... It calls for creativity on the part of the teacher and it calls for inventiveness..... Then they also need capacity to some kind of reflexibility (CEB – DR. CHARLES NYANDIGIRISI - NYAMIRA)

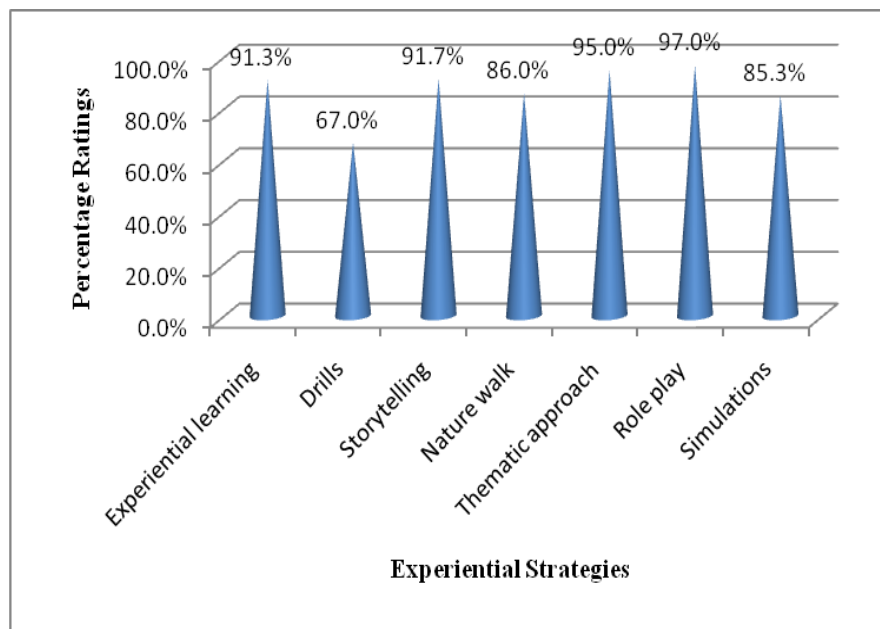


**KI:** Encourage creativity and activities that they perform. Allow them to participate where they want to. The moment creativity is encouraged in children am telling you they would come with different ideas that you didn't imagine they have at the back of their mind. **(KI-CEB-MIG).**

#### 4.5.3 Experiential Learning Strategies

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

**Figure 4. 8: ECDE teachers' responses on use of experiential approaches of learning in delivering the ECDE curriculum (N=144)**



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

Regarding experiential approaches of learning the other respondents suggested that group activities performed at school can help a teacher to group or regroup children according to their talents. This however happens in a conducive environment where the teacher is

cordial to them. A hostile environment inhibits children and this makes it difficult for the teacher to understand the learners.

**KI:** But if they are given the freedom for creativity when it is time for example P.E. and there is something you want to gauge give them the freedom, it will come up. Teachers should be in a position to be able to know when to do so that they can gauge well. **(KI-CEB-MIG).**

The respondents proposed diversified way of learning such as peer learning, modeling, use of pictures, role play, demonstrations, debates, projects, field work and practical system to be in schools as some of pedagogical approaches to be used and strengthened at this level

**Industrialist...**more of a practical kind of environment for learning and a diversified way of learning is needed... that's what is lacking currently... identify who is interested in what at an early stage and then help them further thus helping us to explore the potential of the learners in that particular direction. **(MAN-IND-KAK)**

The key informants expressed the need for teachers to be more professional and up to date with current information and make learning fun and learner centered.

**KI...** Lets talk about classroom environment, the teacher is supposed to enter in classroom, I think the structure is very clear, using that scheme of work, lesson plans, but the problem is how to deliver, on structured lessons, and here it comes about because most of the time if the teacher doesn't have the objective to deliver he may not know what is not getting out on the lesson, so the approach should be they normally call it, it can be participatory within the content, where the teachers know what the students have not learnt from the previous lesson, it has to be more of the children enquiring from the teacher, than the teacher enquiring but how does the child enquire if you don't give them the task, and you just talk **(,KI-UNESCO-NAI)**

A number of respondents proposed additional pedagogical approaches such as peer learning, demonstrations, modeling, exploratory/discovery methods, Field Studies, songs, dance, recitals Participatory learning and learning through role play. They however cautioned that children enjoy learning through play and therefore teachers should limit the use of the lecture method.

**KI** :Respondent: Letting children do things their own, I mean like research one I talked about and letting children go and research in their own like get a manila paper go and draw a plant involving children not just from the teacher involving the children (**KI HET NAI**) .

**KI**: even within the country for our students and pupils to see for example what is happening at Webuye paper mill, people from Mandera coming to Sony sugar so that they see that the sugar we take can also be made locally from our place and that in itself would even make them embrace Agriculture as a subject. They'd see the value that Agriculture adds to education (**KI-CEB-MIG**).

**KI**: making the children do something and taking them out for field studies and all that, going to this place called arboretum during science lesson I take my kids to arboretum I can tell them look at insects so that when I come to class instead of talking about an insect and a child is getting what insect is they can say this is a grasshopper, it has wings, it has six legs. Children look seeing, when they see they remember (**KI-HET-NAI**).

**KI**.. ...We want education that allow students to participate, more students participatory and one of our approach...is lesson plan that student centered, you prepare a lesson plan oriented and they participate more, rather than rushing, lets not just rush to do that but I think how much skills have they developed that every time, every topic we want to develop, and we will be keen in what they have achieved..(**KI-CEMASTE-NAI**)

**KI** .. Student centred approach for ownership and gender responsive approaches are important. Ways such as drama to be used, talking walls, noticeboards and trees. Practices in using local environment materials and resources should be considered. Use of songs and play. Use of approaches equivalent to Nyumba KUMI initiative. The textbooks should encourage both gender (pedagogy should be gender sensitive). (**KI-FAWE-NAI**)

**KI**-The children in their early stages of life should use role plays, songs dance and recitals. (**Ki-NCC-NAI**)

**KI**:Look at our school, the dilapidated broken down, with no play areas and yet children learn more through playing. Look at me playing this is a dice and believe me this is just to teach a bible verse. Why we gonaplayin class what does a child forget that am in class ...time. They will learn so much more from that life as opposed to me standing there and telling them the bible says, you understand?? (**KI CITAM NRB**)

**KI**:Groups work better when students are at school. But individually, homework or takeaway homework will work better. . (**KI-CEB-MIG**).

**KI**:The method of grouping the most bright together and the moderate together would not be the best in class. The best method to teach would be mixing the students in class. Of course. You as a teacher you know Okel is brighter or is the most slow learner. The best is to go and put

her/him next to the most bright one so that that one can also assist in their discussion maybe in their home work. . **(KI-CEB-MIG)**.

#### ***4.5.4 Lecture method***

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

Similarly to the ECDE teachers, the other respondents were also opposed to use of lecture method as they found it not appropriate for this level.

#### ***4.5.5 Other Suggested Learning Approaches***

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

From the findings, the respondents proposed learner centred methods such as role plays, songs, dance, recitals, demonstrations and thematic approaches be used with young children in delivery of the curriculum. Other methods proposed include; participatory learning, exploratory/discovery methods, field studies,

According to KIE 2013, for effective teaching to take place, a good method should be adopted by a teacher. The study findings are in line with the KIE study which indicate that learner centred methods enhance their participation in the learning process improving their individual concentration. This implies that learner centred methods should be highly embraced in the upcoming competence based curriculum.

#### 4.6 Forms of Assessment

ECDE teachers from both public and private schools from the entire country were randomly sampled and given questionnaires to respond to with regard to the extent to which various forms of assessment contribute to effective measurement of learners' achievements at the ECDE level. Their responses were collected using a five-point likert scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=Some extent' and 'G= Great extent'. The different forms of assessment were clustered into formative and summative. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings and composite means were further derived. Their responses are presented as in the Table 4.2.

**Table 4. 2: : ECDE teachers Responses on Assessment Methods in ECDE level**

| <b>(N=150)</b>              |                 |                         |              |
|-----------------------------|-----------------|-------------------------|--------------|
| <b>Formative Assessment</b> | <b>% Rating</b> | <b>Summative</b>        |              |
| <b>Assessment</b>           | <b>% Rating</b> |                         |              |
| Progress assessment         | 96.0%           | End of term examination | 82.8%        |
| Observation Checklist       | 92.2%           | End of year examination | 83.6%        |
| Continuous assessment       | 88.2%           |                         |              |
| <b>Composite mean</b>       | <b>92.1%</b>    | <b>Composite mean</b>   | <b>83.2%</b> |

The findings demonstrate that formative assessment stands highly rated at 92.1% compared to summative assessment at 83.2%. In the

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

The other respondents pointed out that assessment of learners was important in order for the teachers to gauge whether learners have understood the concepts taught. Assessment of learning was also viewed as one of the ways of identifying different potentials in learners.

**Respondents ...** the performance of children at different levels of competition is very important because along the same line you may realize this child can stand to represent Kenya in different levels ... (CAP-INF-LAM)

**Respondent:** There's nothing bad with the exams. However, for public schools, they do not compete favorably like their counterparts in private schools. The way I look at it, head teachers are to blame for non-effective monitoring of teachers' class attendance. Other officials should check on performance of schools generally (MAIZ-INF- NYAM)

Observation as a method of assessment was strongly recommended for ECDE learners. Respondents indicated that learners at ECDE level should not be subjected to examinations rather they should be offered a conducive learning environment with relevant resources where they can be observed by teachers

KI.. .. and there should be no exam from ECD to class 1, akiingia, there is a good environment, nature corner, the garden, environmental corner, which our teachers have neglected, wanasema, unfortunately, the environment might not be conducive.., (KI-CDE-MAK

Parent: through observation in ECD chenye amefanya (PA-FGD-S-KAJ)

A respondent observed that children in nursery should be given homework and as they transit to class one, they should be tested by their teacher for placement.

**Respondent:** If they come from nursery, they should be tested for placement. ...It (*test*) should be given by their nursery teacher. (SHOP-INF-NYE).

The respondents supported the use of of continuous assessment tests, observation and projects as assessment modes at ECDE level. They argued that individual learners learn at different pace and in different ways

**Industrialist...**the best kind of assessment would be the progressive assessment... The final exam normally captures some kind of a drill program. It focuses on the final lap but the one capturing step by step would be better provided its more inclusive of content. (MAN-IND-KAK)

**Industrialist...**apart from the national exams I would also go for continuous assessment test. There is nothing wrong with this. It will give continuous feedback. And again, the more you are taught at different classes, the more you understand the language of instruction which is very important.(MAN-IND-MAK)

**Industrialist...**the best way is to assess these students on what they have learnt, because students have different avenues of learning, there are some who are talented, they can memorize it in short time there are others who will take a lot of time and when they grab the information they are okay with it. What should happen is to assess progressively. For example if it is subject that the student is doing there should be a cat that the student do on the subject that they have been taught also they could put the practical aspect in that a teacher might have taught a certain lesson but he or she should be put in real life so that they try to solve the same problem in a different manner in such a way, a teacher will be able to gauge and assess if the student has go the concept or not. There should be a progressive way to test students..(CEO-RIV-UG).

Some respondents are of the opinion that using CATS will enhance comprehension of the content taught and help avoid rote learning just for the purposes of passing the examinations.

**Industrialist...**When you think about comprehensivity, the kind of coverage you need to test each area practically more than picking an area and testing it in the final exam. (MAN-IND-KAK)

**Industrialist...**There are several ways but there is one way I would personally recommend this one for doing an exam is good but it is encouraging something else like people are starting to cram exams and not really internalizing that information i would suggest because if you really want to assist this child not really teaching somebody how to cram..(CEO-IND-NYE)

The findings indicated that formative and summative assessment were most preferred. In the formative assessment, progress assessment was the most preferred followed by observation checklist, and continuous assessment. In the summative assessment, end of term examination was the most preferred and end of year examination. This implies that formative assessment should be more emphasized than summative assessment in the envisaged ECDE curriculum.

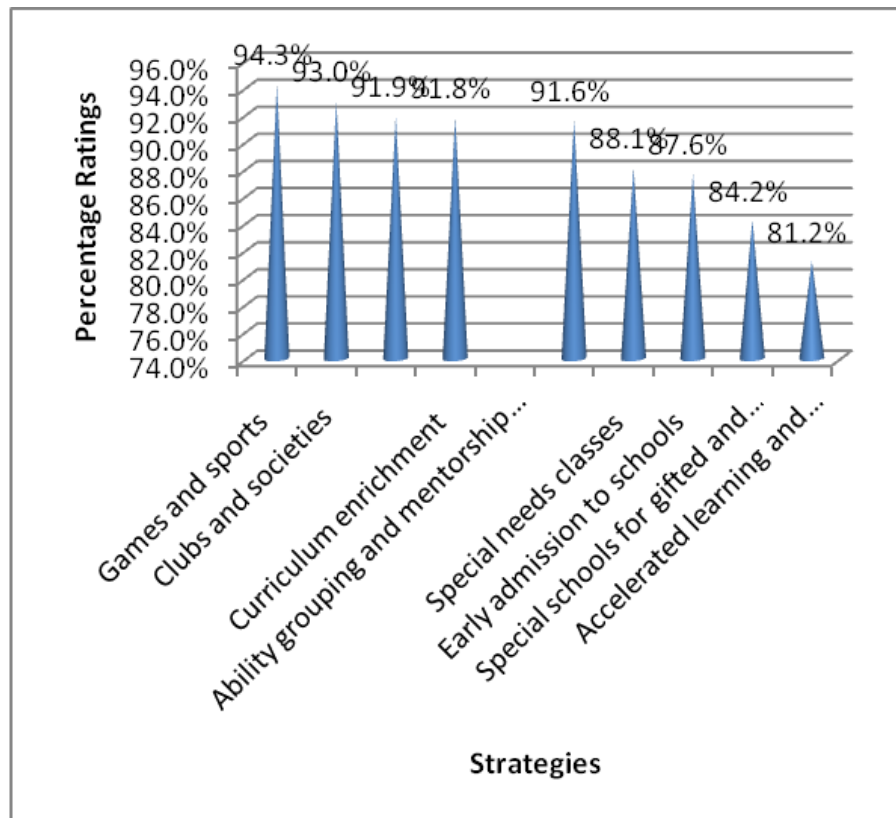
These findings are in line with a study carried out by UNESCO which established that in formative assessment the teacher is able to understand how students are learning, to identify problems that the students may face in the learning process and to use feedback to ensure that all have the opportunity to learn (UNESCO, IBE No. 15 – 2015)

#### **4.7 Nurturing the Potential and Talents of Learners at ECDE Level**

The study sought to establish the extent to which teachers should use various strategies to nurture potential and talents among the ECD learners. Their responses were collected using a five-point likert scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=Some extent' and 'G= Great extent'. The responses were weighted out of 5 and averages derived. From the weighted averages, percentage mean ratings and composite means were further derived. Their responses are presented as in the Table 4.9.



**Figure 4.9: ECDE Teachers Responses on Strategies of Nurturing the Potential and Talents of Learners**



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

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

Other respondents pointed out the need to identify and nurture talents from the earliest age.

**Respondent:** on the issue of talents we need to identify talents from when the child is as young as five years. If you look at a five year old child you may be able to know what he or she might do in life. You will be able to identify if he is a runner, a footballer. So maybe you need to identify the talents from a very young age and nurture them for that person to become what he or she wants to be in life (MECH-INF-MUR)

**Respondent;** we identify them early; we develop them early so that by the time they leave class eight they will have creativity.... (MEC – INFO-NAR)

The identification of talents was reported to be a responsibility of both the parents and teachers. The parents should monitor their children in order to identify what they are good at from an early age.

**Respondent...**For me I think the ... the major backbone lies with the parents in the first place...because they are supposed to monitor their children, which talents they have... in early childhood... then pass the information to the right teacher who is in that line (WEL-INF-NAR)

**Respondent;** As a mother, when do you know that your child has a talent? As a mother I will know there is a talent when the child starts playing the ball, starts singing, modeling.... (MEC – INFO-NAR)

**Respondent:**Ukiwa nyumbani kwako, watoto wako...hata kama uko na wa wili, watatu...ukiwangalia unaona huyu anafanya mambo kama mechanic, engineer ama ni daktari, huyuni driver, huyu ni pilot...yaani vile unaona mtoto wako akikua. Lakini, vile una muona, hakuna wazo lingine zaidi yahapo unatakiwa kumuelekeza kw ahiyo njia umeona. Ni rahisisa naku-identify talent ya motto.

(When you are at home, it is possible to identify the kind of talent any of your children may be having. some could have potential in mechanics, engineering, medical field, driving, or even piloting. so it is your duty to help the child pursue the area they seem gifted in. it is very easy to identify the talent of a child.) (HOT-INF-NAR)

**Respondent:**Na waalimu pia niwatu wamefundishwa. Hao pia niwazazi. Wanaweza-identify huyu mtoto, talent yake ni fulani. Sasa wapangwe kulinganana na talents, wanafundishwa masomo yakawaida, napia wanapelekwa kufundishwa kulingana na talent ile imeonekana na hao watoto.

(Teachers are well trained and they are also parents. they can be able to identify the talent in individual children. so the learners can be grouped according to talent areas and nurtured in this area even as they pursue the core curriculum alongside this). (HOT-INF-NAR).

Other platforms proposed for talents identification included: annual science congress, arts, drama and music festival, clubs, conferences, sports and games, excursions, field trips exhibitions, career talks and open days, student service and attachments, student mentoring and councils, teacher/staff nomination, peer nomination, parental information, using community resources and exposure to various activities. It was further noted that talents can be identified in different settings such as at school, religious institutions and at home where the family members can identify unusual abilities in children. In addition, respondents also proposed that the following methods be used in identification of talents. This is evidenced by the following from a respondent.

Practitioners must be actively involved in the identification of talents at all levels and in all relevant fields. Physical activities, community service, spiritual activities, arts and crafts, and creative arts are all areas that include search for talents. (KCCB-RI).

Other methods of identifying talents which were proposed included: provision of a wide curriculum in the formative years of education; provision of a variety of opportunities for the children to explore; encouraging creation and participation in co-curricular activities; encouraging tolerance and support for petty interests in children; encouraging teachers to have personal interest in learners lives; continuous assessment and exposure to other extra curricula activities.

Parents, teachers and learners can also identify talent.

**Industrialist**...it may be the student himself, the parents or even the teacher. They can identify the line of this child. But we keep on pumping in them content without caring. And even when we look at some of the things that are taught, they are never applied anywhere in life.(MAN-IND-MAK)

The respondents further recommended that clubs be expanded. They further proposed that career guidance departments be tasked with the responsibility of creating pathways for talented individuals to build careers out of their talents.

It was further reported that talent opportunities are limited to drama, music and sports. These alone do not cover the full range of talents that can be developed and exploited in school. It was suggested that the curriculum should broaden or create more opportunities for talents to be showcased and developed. Proposals were also put forth that a repository of ideas and innovations be built. The repository would contain a collection of learners' ideas while expressing their creativity in areas such as science and arts. It equally serve as a pool for interested actors (such as private sector, foundations etc) to pick from and help students develop/nurture innovations.

Respondents proposed that co-curricular activities should be mainstreamed and made a part of the learners' daily learning experiences. In the same way schools offer swimming as part of the daily timetable scheduling, other activities which could be relegated to clubs should be incorporated into the main school timetable. Music and Art should not just be club activities but should be taught as part of the curriculum.

Education should create a demand for talents and skills. Initiatives such as talent focused institutions and academies, talent scholarships and media focus on talent achievements should motivate learners to explore and develop their talents and motivate education institutions and its leaders to create opportunities to nurture these talents.

Counties should create education strategies that take advantage of their regional strengths to attract talent to their areas and create opportunities to develop them. For example, schools in and around

Iten should attract sports talents and Governors should offer talent scholarships and create career pathways that strengthen the county's standing, and exchange programs should be set up to maximize learners' exposure.

Respondents identified different talent areas to be nurtured. These talents include visual and performing arts, culinary arts, sports, pottery, Fine Art, music, drama among others. This is evidenced in the following responses:

**Respondent:** Talents like... music also should be taught at an early stage in schools...I think there many talents but for me are talent for me I just want ports...drawing...(CARW-INF-UG).

**Respondents:** Example is singing. Those with singing talents should be helped to develop them. (SHOP- INF-NYE)

**Respondent...**aina tofauti yamchezo, basketball, football, marathon na hizi zingine hizi zakurusharusha,mpila...(Different types of sports i.e. basketball, football, marathon and netball) (MEC-INF-UG)

**Respondent:**--talents,--- Sports, music, craft, pottery, debates, comedy, Agriculture (META – INF-BUS)

**Respondent;**anaanzakuundanyunguyakonaanaekahapo,kunamtuakonakip awayakuchongambaoanaanzakuundanyunguyakonaanaekahapo,kunamtua konakipawaYakuchongambao (Someone can make pots, someone else can be gifted in carpentry) (MEC-INF-UG)

The responses of different participants show an agreement on the different talents that learners may have. They pointed out that after identifying the talents, there is need to nurture them lest they are lost.

**Respondent ...** I would like to add that when we were young in school we had defined talents in that we were known what we individually likes and we were helped to develop the talents that we had rather than stressing on books where you aren't good. You start nurturing what you're good at from the school level (CAP-INF-LAM)

Respondents suggested that the government should set up talent academies to help nurture varied talents in learners.

**Respondents:** Maybe we need to set up institutions because not every child is bright with books. So maybe if we set up like football institutions, the main thing in that institution is football though the child will still learn like languages and how to communicate but above all the institution should be there to nurture talent (**MECH-INF-MUR**)

The respondents suggested that learners should engage in practicing what they are good at.

**Respondent;** una waambia wa fanye mazoezi zaidi kama wanajua wakona talent fulani, kama ni kukiambia enda kwa uwanja kimbia kama niyakucheza mpira chukua mpira ndio hii alafu wafanye more practise...(They should do more practice if it is athletics or playing football) (**MEC-INF-UG**)

**Respondent;** the Indians when somebody is young, they are given his talent in hand- work so he can make the toy hands and whatever and they sell these things and they are earning from these things.... (**MEC – INFO-NAR**)

**Respondent:**...giving children opportunities to practice different things in school,-----teachers have clubs in sports, athletics and run them well. (**META -INF-BUS**)

**Respondent:**...Expose them to many things by practical exposure or through wide reading habits (**QUAR-INF-MAC**)

A respondent noted that parents and teachers can nurture talents by supporting the children and making a follow-up even in school to ensure that there are practical activities that will help promote that talent. Parents also can support their children by providing the necessary resources that can help in nurturing their talents.

**Respondent:**...Kitu moja nikumuunga mkono ndio nimsaidie. Kitu ya pili nimkalishe chini nimuulize kama hii kitu umeona kama iko ndani yako? Akikubali iko ndani yake, mimi mwenyewe nimuugne mkono kama ni shule hiyo kitu iko shule tilia mkazo kwa hiyo kituu nataka kufanya. (The first thing is to support him or her so that I can help him. The next thing is to ask him or her if that in deed is their talent. If it is, then I should support him even in school if the talent is offered there). (**BUT-INF-KAJ**)

A respondent suggested that learners should have some free time so that those with special talents can be identified.

**Respondent:** in terms of sports an early age... the school should offer them morale to develop. Offering part-time or free time so that they can select those students who have the special talent in sports (**CARW- INF-UG**).

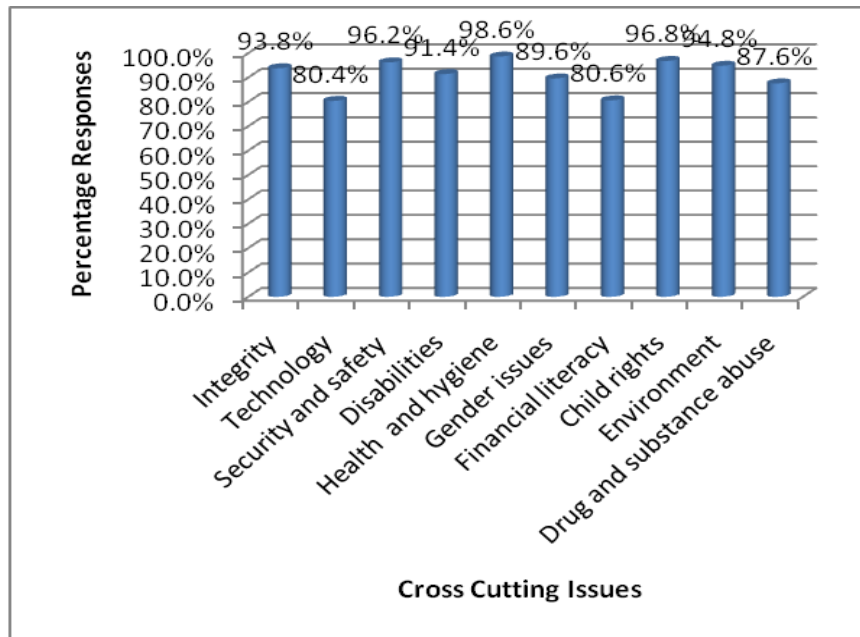
#### ***4.7.1 Other Suggestions on Nurturing Talents.***

Several suggestions were put forward by respondents on how to nurture talents. These include; provision of adequate resources such as talent academies; creation of incubation centres for innovations; promotion of healthy competition and reward systems; fair evaluation and appraisal systems provision of a balanced curriculum; rewarding gifted children; offering a market driven curriculum for sports and creative arts ;establishment of talent academies in every county; Talent scouts to identify learners with talents; schools exhibitions in science, handcrafts, sports , games, music and drama; training talent assessors and trainers; institutionalization of career guidance and counseling; building linkages between industries and school.

#### **4.8 Cross Cutting Issues**

The Early Childhood Development Education (ECDE) teachers are responsible for nurturing the young learner's potential at a very early age. ECDE teachers gave responses on extent to which various cross-cutting issues should be addressed in the ECDE curriculum. Their responses were collected using a five-point likert scale. They were required to indicate their choices by selecting 'N=Not at all', 'VL=very little extent', 'NS=Not sure', 'S=Some extent' and 'G=Great extent'. The responses were weighted out of 5 and averages derived. Their percentage mean ratings are presented in Table 4.10.

**Figure 4.10: ECDE teachers' responses on extent to which Cross Cutting Issues should be promoted through the curriculum**



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

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

In support of the teachers, other respondents highlighted the following contemporary issues prevalent in the society: drug and substance abuse, life style diseases such as high blood pressure, diabetes and hypertension, technology, globalization, radicalisation, corruption, cheating in examination, political intolerance and responsible citizenship. In addition they indicated that curriculum needs to address un-employment, terrorism and natural disasters pollution, communicable diseases, alcoholism and regional



integration. Other pertinent issues in the society that should be given serious consideration by the curriculum are; gender issues, early marriages, HIV and AIDS, early pregnancies, violence at family level and sexual orientation.

**KI:** ...issues arising from politics, religion, social disorders which should be addressed in the curriculum. If people go to church or mosque why do we have rape cases every day, robbery and yet we are a religious country. There is national cohesion, teachers need to be told what national goals are, subject objectives and objectives of education. We have problems of drugs abuse, we have rape, ethnic cleansing, in vehicles where the young cannot give way for the aged. The freedom of human rights should have limits **(KI-CEB-KAK)**

**KI:** So would the curriculum designers then therefore pick real issues affecting citizens and those issues become the ones addressed in the classrooms. Not just writing a form one text book, and you tell me what to do in algebra, but how does this algebra apply in my life? Yes! So that, we are not reacting, you see we had peaceful education it ended after the clashes, we had HIV it ended. So I think we, I can't pick one over the other, I think it is being able to embed our today's experiences in each of the discipline that the child is going to interact with. And that contextualized item that we gradily level, remember we did the general paper? It is examined. . **(KI-CITAM-NRB)**

**KI:** ...for example for me HIV and AIDS, the message should be one, that there is AIDS and if you make a mistake you will die, and that is it because people have died, despite the fact that we have so much of a, of a knowledge....there are drugs and if you misuse drugs, you will die, you have so many addicts, you see....so by now, these very many pertinent issues in this country have done some survey in land rights land is very sensitive, it becomes the centre of everybody's occupation in terms of discussion and even war and fighting, why can't we teach land rights in our, in our, curriculum. **(KI-PWA-UNI)**

**KI:** The ministry introduced life skills which are not taught in schools now because they feel teachers are burdened. We need to ensure life skills are taught as schools embracing it do not have issues. Other issues coming in require our curriculum to be responsive on a yearly basis. Like now we need to bring on board issues of radicalization going on in our schools. We need to include it urgently. Drug abuse though integrated has not improved, it's now in girls' schools. We need to move with the changing times. How do we prepare our children to respond to disaster? Life skills area need to be dynamic besides teachers implementing everything. I do not know whether the ministry should appoint people to go round and teach disaster preparedness because teachers have let us down. **(KI-CEC-BUN)**



#### **4.8.1 Environment**

The respondents emphasized the need for environmental conservations to be addressed by the curriculum. Learners should be made to understand their role as co-creators of the environment with God

**KI:** Now I am sure what you are up to is the right thing but if you would come up with that curriculum and have the implementers who are able to bring out the human nature in the children it would go without mention that they care for the environment because an integral person who is well formed automatically just sees the beauty of the environment and sees the role of God in it and his/her own role in it being a co-creator with God. So I believe the problem is concerning it still will melt down to the ministry of education. ( **KI-CEB- HOM**)

**KI:** .. how does a child see environmental sustainability, how does he visualize environment, when he sees ground being littered, it should not be that way, then he nurture understanding that I can arrange this environment to be better and make use of that litter somewhere else, that what the children need, to become better in the society (**KI-UNESCO-NAI**)

**KI:** Now I am sure what you are up to is the right thing but if you would come up with that curriculum and have the implementers who are able to bring out the human nature in the children it would go without mention that they care for the environment because an integral person who is well formed automatically just sees the beauty of the environment and sees the role of God in it and his/her own role in it being a co-creator with God. So I believe the problem is concerning it still will melt down to the ministry of education. ( **KI-CEB- HOM**)

#### **4.8.2 Climatic Change**

Climate change was said to be the talk of the day and for this

reason it is among the contemporary issues affecting the society.

**Respondent:** Climate change is at the fore of most international discussions nowadays, and the consequences of this change are becoming evident every day. Students should be enlightened on this, and on measures they can internalize and do on a day to day basis so as to have an overall positive impact on climate change in the long run, e.g. they can be trained on how they can make it a habit to plant a number of trees each year. If everyone did so, the impact would be very positive. **(BUS.MAN-INF-NAI)**

#### **4.8.3 Pollution**

Respondents pointed out that noise pollution from bars located in the vicinity of schools as having a negative effect on learning.

Respondents: Na hii pombe, sio eti iko mbali sana, iko karibu na institutions, iko karibu na nyumbani kwetu, iko karibu na mashule. Hiyo ni kitu pia inachangia kurundisha maendeleo nyuma.:bar, hizi clubs zakupigakeleleana, hizo. The easy access to alcohol due the location of bars near schools and homes and noisy bars and clubs has had a negative effect on development **(HOT-INF-NAR)**

. **Respondent:** Yeah, for example environmentally, for example ... the more industries are being developed the more pollution **(CARW-INF-UG).**

**Respondent:**...I think education ... can address environment at school at an ECD, primary and secondary level, kitambo in parts of cleanliness children were taught on how to keep the environment clean. That's one way. And also if students are taught more technology, technology that cannot pollute more environments ...if there is a special subject that teaches people on how to deal with environment at school level **(CARW-INF-UG)**

#### **4.8.4 Security**

Respondents pointed out that terrorism is problem that needs to be countered and the youths could be equipped with some paramilitary skills at the NYS. They also expressed the need to counter the

narrative that leads the youth into joining terrorist groups

**KI:** ... Under the issues of counter terrorism we should have training for college instructors, in other , although it will not protect you on gun shots but the best things we are saying, the US every one is a military, because all knows how to handle a gun, so it mean those students who are finishing schools they should know how to handle weapons, and pass through NYS.. KI.. has not come out is the narrative given to the youth to the level that they want to go and explode themselves, Because when you know this type of cause effect, what causes this, remedy, you can be able to get a solution, because we have not known, why should Mohammed, go to do this, because we have seen a child abuse his father that he is nonbeliever and needs to be killed... **(KI-CDE-GAR)**

**KI:** ...insecurity, radicalization, inter clan conflicts and terrorism are some of the most common barriers to learning in our region **(KI-CCO-MAN)**

The respondents observed that education in some regions has greatly been influenced by insecurity in the region. He especially singled out cattle rustling to be a major impediment to education. He suggested that peace education should be addressed in the curriculum.

**KI:** Yes. I think like our area of operation is a place that is prone to insecurity and I think, even tomorrow I have a training for the teachers and then to peace education I think you know what I have leant watoto wakitazama saa hizi there is a school called amahia primary samburu hawapelekishule that school kwasababu, because of that issue between Samburu and Pokot. The border so I think even teachers wanaogopa kuja kufunza huko because they fear of their lives and also intimidation of tribes from enemies because they call them enemies. So I think peace education. **(KI – WVS - SAM)**

**Industrialist...**we have got ethnicity. You find that in a company it's only a group that is there, if it is the Abgusii,it is the Abagusii only that are there. **(MAN-IND-NYM)**

#### ***4.8.5 Radicalization***

The respondents indicated the need for learners to have lessons on the effects of radicalization

**KI:** waaaaa!!!There are so many emerging issues, for example in our days there was no radicalization... we should have lessons on effects of radicalization ( **KI-CEE-KIL**)

**KI:** how we should fight terrorism should also be included because Alshabab is a major problem to us and we don't know how to react the problem with the government yes they have those studies but they come only once ...I don't think we understood how we can handle when we find ourselves in those situations... (**KI-STU-KAU**)

**KI:** ...Curriculum should embrace issues to do with lightening, banditry and radicalization. Disaster management should be a subject of its own. (**KI-MCDE-KAK**)

#### ***4.8.6 Alcohol and drug abuse***

Respondents expressed the need to have the curriculum address issues of drug and substance abuse, smoking and moral behavior. It was also noted that it is important to have consultations between the parents, teachers on learners' behaviour.

**KI:** .. In the past class, has not addressed the issues of competency and it is spoiling, once emerging issues that the system of education should address, because children are lost because of drugs, smoking, moral behavior, an controlled way of living. Students have been left almost alone because out of school you don't know where they are between the school and home, I think there should be a consultant between parents, teachers and students. (**KI-AIC-KIT**)

**KI:** ...issues arising from politics, religion, social disorders which should be addressed in the curriculum. If people go to church or mosque why do we have rape cases every day, robbery and yet we are a religious country. There is national cohesion, teachers need to be told what national goals are, subject objectives and objectives of education. We have problems of drugs abuse, we have rape, ethnic cleansing, in vehicles where the young cannot give way for the aged. The freedom of human rights should have limits (**KI-CEB-KAK**)

**Respondent:** Mambo mengine ni pombe, jambo ambalo ni hatari sana. Ni hatari kuanzia wenye kupika pombe, wenye kuuza, na wale wana kunywa. Na hii pombe, sio eti ikombali sana, iko karibu na institutions, iko karibu na nyumbani kwetu, iko karibu na mashule. Hiyo nikitua pia

inachangia kurudi isha maendeleo nyuma.

(Alcohol is dangerous to the one who makes it and the consumer. it is easy to access it since it is easily accessible in most neighbourhoods of schools.) **(HOT-INF-NAR)**

Respondents...pia mambo ya sigara, vitu kama hizo. Na watu wana kubaliwa, hata kama ni watoto, kujiingiza kwa hizo vitu. Unakuta motto wamiaka kumi na tano ,kumina sita, kumi na saba bado anakunywa pombe...na watu wazima wako hapo**(HOT-INF-NAR)**.

**Respondents:** Alcohol is one major concern. Children are freely consuming alcohol and this will hinder our country's development **(MAIZ-INF- NYAM)**

**Respondent...**The drugs issues actually are a nuisance to our children thus Lamu County should be clearly checked and a number of the rape case perpetrators are the persons under drugs influence **(CAP-INF-LAM)**.

**Respondent:** alcohol... parents should be involved,...should work together with schools to take care of this. **(MITU-INF-NYA)**

**Respondent;** The father comes home drunk and makes noise to the children and fighting in the house. .... **(MEC –INFO-NAR)**

#### ***4.8.7 HIV and AIDs***

The respondents indicated the need for learners to learn about HIV and AIDs

**KI:** HIV the problem with us is that we teach one thing for a year and nothing else, then suddenly stop, or forget. Like right now we talk so much about politics, we emphasize on issues “occasionally like a wedding”, then suddenly stop ( **KI-CEE-KIL**) .

**KI:** Okey I support them and I think that HIV and Aids awareness should be eeeh.....included in the curriculum HIV and Aids its drugging us behind and the prevalence is high **(KI-STU-KAU)**

#### ***4.8.8 Early Marriage and FGM***

Respondents indicated that FGM and early marriages are some of the issues that hinder effective learning in several Counties.

**KI:** ... early marriages, FGM, Corruption of all forms and nepotism leading to unfair resource allocation affect learning in our area **(KI-**

**CCO-MAN)**

**KI:** In my county, early marriages, the number of successful women is low because of early marriages. People who we went to school together, fell off along the way because of early marriages, and now have grandchildren. These things are there (KI-CEE-KIL)

KI: ...In my county, early marriages, the number of successful women is low because of early marriages... (KI-CEE-KIL)

**4.8.9 Leadership and Integrity**

The respondents expressed concern about poor leadership practices and wished that curriculum addresses the issue of leadership, corruption, general apathy among the youth and the issue of unemployment and poor work ethics /idleness.

**KI:** When a child has done a mistake punish the child do not bribe a child with a sweet, so the child grows up knowing that if I need to keep quiet I must be given this. So when he becomes a police officer or a teacher outside there and you want to be given something so as to do the other way round and that's where the corruption is. So our curriculum should be clear on the levels of corruption starting just from the parent and growing up and if the parent can stop it from that level am sure we can be able to reduce corruption in Kenya. (KI-DDE-MUR)

**KI:** Character building is our biggest problem. Character has failed us completely because that is the root cause of people..(becoming)..dishonest employees, corrupt employees, corrupt government, name them in every sector, this corruption has ...(cut).. across the board yeah. ...(KI-KEPSHA-NAI)

**4.8.10 National Values**

Respondents also proposed the need to include National values in the school Curriculum

**KI:** ..National values mainstreamed in the curriculum and institutional managers and teachers be provided with necessary resources to deal with emerging issues such as substance abuse, violence and national values and cohesion (KI-CBK-NAI)

**4.8.11 Technology Cyber- crime and Pornography**



It was noted that challenges associated with technology should be addressed. Guidance on the use of computers and internet was emphasized by the respondents. Not all content should be allowed to be accessed by the learners. This will address the issue of cybercrime, pornography among other vices.

**Respondent:** The onset of the Internet has created a great rift between the “analogue” and “digital” generations in Kenya and Africa at large, with the awed older parent generation unable to guide their computer savvy children into a digital world they know nothing about. The internet-exposed youth therefore lead themselves into all kinds of extreme mischief as they “learn” from the net; traditional social structures have broken down, resulting in amoral society on all fronts. Control of children’s interaction with the internet should thus be paramount, with the government leading the way in providing guidance and necessary controls and regulations towards this end, and the education system weighing in with structured lessons. Conservative China has demonstrated that this can be done by blocking unsavory content from the internet, unlike the liberal West that believes in “absolute freedom”. It is to be noted that the West has strong remedial support systems and traditions in case of adverse exposure of youth as well as adults to negative traits, unlike in Kenya where there are very few professional guidance and counseling experts or remedial centers, and it is stigma in Africa to be seen to have been “treated” for waywardness of any kind. **(BUS.MAN-INF-NAI)**

**Respondent:** I think it is affecting our country because ... most people spend most of the time on technology. They don’t have time for their family, so if people are taught on how to control their time with technology, I think it will help .... For example, students they don’t have much time to study. Parents don’t communicate with their children well so it really affects them. I think technology if people put it correctly it will help... people spend most of the time with for example phone **(CARW-INF-UG)**.

**KI:** ...ICT institutional framework be strengthened to allow efficient integration of ICT in the entire education sector...Provision of technical backup in ICT initiatives in government learning educational institutions... **(KI-CBK-NAI)**

**KI:** Through the use of ICT technology but has to start from that early age so it is not an emerging issue it is an ever evolving issue. because technology now transcends and cuts across all facets of the economy ...tourism ,agriculture. Preparedness for farmers to prepare their farms. One shouldn’t learn when they get to university. **(KI-CA-NAI)**

**KI:** ...when you listen to people talk is like corruption has become like our culture and when you talk about culture, culture is like something that is practised by all people in the community you are talking about. So corruption in our case has become a way of life ok, and then you know even if it’s a way of life you know what it means so I think whether invaded in another curriculum it is an area which needs to be

tackled by any means. (KI-REG-LAU)

**Industrialist...**when you think about technology, we think about the mobile phone. I look at it as a serious emerging area that needs to be handled. (MAN-IND-KAK)

**Industrialist...**we have technologies that are not being utilized...the youth are coming up with new things and ideas but no support. Too much freedom without responsibility.(EMP-IND-BUS)

**Industrialist...**technologically, we have hacking of the systems.(CEO-IND-NYE)

#### *4.8.12 Lifestyle Diseases*

The respondent proposed that diabetes was an emerging issue as there are young children who are having diabetes.

#### *4.8.13 Parents' Programme*

Respondents indicated that there is need for parenting education so that the parents can be able to bring up their children in an appropriate way.

**KI:** let me add on the part of moral part I think we should introduce something like a programme where parents are enlightened because aaah..... no matter how much the administration or the students themselves are advised on what to do I think parents too should also play their role eeeeh(KI-STU-KAU)

**Industrialist...**siku hizi, wazazi wameuza watoto kwa waalimu. Hakuna mzazi nafuatilia mtoto wake. Na kama mzazi hufuatilii motto wako, ni nani atafundisha hayo maadil yote kwa motto... (MAN-IND-NAR)

**Industrialist...**wamama wanakataa tu watoto wakae nyumbani. Si walimu wang'ang'ane... washugulike naye. Wanafanya busy... Watotowanafanywamaabusu. Motto anapelekwa saa kumi nambili shule. Mpaka saa kumi na mbili ama saa kumi na nusu. Mtoto ambaye hawezi kukaa mda huyo wote...(CEO-IND-GAR)

#### *4.8.14 Career Guidance*

It was also recommended that career guidance be included in the school curriculum.

**KI:** Issues of counseling is very important and if we can have people who are role models so the children can feel very free to emulate that

person and they can openly talk to them. I felt from young age that we need to come up with booklets **(KI-CPD-NAI)**.

#### ***4.8.15 Peace and conflict resolution***

Some the key informants expressed the need for peace education as it contributes to cohesion and national integration.

**KI:**... education as an issue that is an emerging, and I can pick issues of skills in understanding and behavior skills because you have to make sure children understand their behavior and identify good behavior from bad behaviours, these are skills..**(KI-UNESCO-NAI)**

**KI:** Issues concerning conflict resolution be included, assessment should be comprehensive. **(KI-KPSA-UG)**

**Industrialist**...does national integration and that would be very important. We want to see our daughters and sons from western Kenya joining those schools in Mandera so that at the end of the day they may know Mandera is also their home. **(MAN-IND-KAK)**

#### ***4.8.16 Gender and life skills***

Respondents expressed the need to address gender and life skills in the curriculum as emerging issues since they relate to real life situations among the learners

**KI:** ... The gender components also is an important component where they are able to recognize that they are equal and are able to participate equally within their self without being biased and also by understanding the difference in their body changes, because a girl with menstruation the boy should appreciate, these are things that look simple but they are critical...if somebody have not heard proper life skills it will be a problems, you will be having good grades but they will not help you to deal with life..**(KI-UNESCO-NAI)**

Respondent: Mtoto msichana na mvulana...hawaelekezwi kwa njia sawa. Hapo nyuma kidogo, vijana walikuwa wana wekwa mbele. Concentration nyingi ilikuw ainawekwa kwa motto wakijana. Siku hizi wameanzakugeuka, wananeda vice-versa, sasa wana-concentrate sana kwa motto msichana. Na tukiendelea hivyo, hatutakuwa na imbalance. Tuna enda kupata watoto vijana wameachwa mbali, wasichana wameenda mbele. Kama wangeweza kupelekwa pamoja...kimasomo, ki-talents, tunaweza kuwa na jamii ambayo itatufuata yenye itakuwa na elimu na ujuzi, na hiyo sasa itapeleka county mbele

(The boy and girl child are not being directed well. Earlier, the emphasis was on the boy child. Today, things have gone vice versa and concentration now is on the girl child. If we go on this way, then there will be an imbalance with the boy child being left behind. If they were both given the same attention in education and I talent development, the country would develop well.) **(HOT-INF-NAR)**

**Industrialist...**we need to talk about gender and look at the needs of the girl child and the needs of the boy child and ask ourselves whether these meets their physiological development or needs to be met  
(MAN-IND-KAK)

#### ***4.8.17 The Constitution of Kenya***

Key informants indicated that the Constitution of Kenya should be explored by learners in order to understand the issues of Devolution and how to take advantage of the same.

**KI:** The constitution and the changing constitutional framework and the requirements for example public officers in the realm of ethics...include the changing legal framework to a devolution is ..capacity among the citizens to take up this opportunity other than reliance on national. (KI-CA-NAI)

#### ***4.8.18 Peer Pressure***

Respondents pointed to peer pressure among town youth in contributing to their involvement in social vices such as alcohol consumption and absenteeism.

Respondents: Peer pressure, given this is a town set up, keeping bad company can also contribute, for example, drinking alcohol. It is mostly bad company, leading to school absenteeism (MAIZ-INF-NYAM)

Hygiene, child rights, environment, security and safety should be embedded in the envisage ECDE curriculum. The proposed cross cutting issues have also been identified in different policy documents such as the Constitution, Vision 2030, Education for Sustainable development (ESD), Children Act (2001), Millennium Development Goals (MDG), Sustainable Development Goals (SDG), and NESP (2015) among others. Each of these documents emphasizes different aspects of the cross cutting issues and education has been identified as the wheel to nurture them among the youth. This therefore implies that the identified issues should be embedded in the envisaged competency based curriculum.

## 4.9 Learning Resources

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

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

### 4.9.1 Availability of ECDE General Resources

ECDE general resources were observed using an observation schedule. The results are presented in Table 4. 3.

**Table 4. 3: Availability of General ECDE Resources N=127**

| Resources                  | Availability of Resources |        |
|----------------------------|---------------------------|--------|
|                            | Yes (%)                   | No (%) |
| Safety tools and equipment | 27.6                      | 72.4   |
| Classroom                  | 93.7                      | 6.3    |
| Play ground                | 88.2                      | 11.8   |
| Play equipment             | 58.3                      | 41.7   |
| Reading materials          | 80.3                      | 19.7   |
| Furniture                  | 89.8                      | 10.2   |
| Library                    | 22.0                      | 78.0   |
| Library books              | 36.2                      | 63.8   |
| Syllabus                   | 90.6                      | 9.4    |
| Toilets                    | 89.8                      | 10.2   |
| Water                      | 87.4                      | 12.6   |
| Electricity                | 48.0                      | 52.0   |
| Charts                     | 85.8                      | 14.2   |
| Bulletin boards            | 20.5                      | 79.5   |
| Flannel boards             | 13.4                      | 86.6   |
| Flash cards                | 52.0                      | 48.0   |
| Flyers                     | 17.3                      | 82.7   |
| Costumes decoration        | 28.3                      | 71.7   |

|                      |      |      |
|----------------------|------|------|
| Painting             | 30.7 | 69.3 |
| Photographs Pictures | 46.5 | 53.5 |
| Puzzles games        | 33.1 | 66.9 |
| Learning areas       | 64.6 | 35.4 |
| Textbooks            | 72.4 | 27.6 |
| Models               | 29.9 | 70.1 |
| Toys                 | 38.6 | 61.4 |

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

Regarding the general resources, the respondents expressed the need for a conducive learning environment for learners in primary schools especially provision of quality school infrastructure

KI...preparedness in the provision of the vital infrastructure in the form of classrooms, a computer lab, computers themselves...provision of power maintenance framework **(KI-CA-NAI)**

KI..universal service fund whose main objective is to facilitate development of ICT infrastructure in places where there are gaps across the country... that fund will focus on is on education to create infrastructure to enable schools to be prepared to deliver electronic content. Government..connecting power to all schools.. county government also need to inject resources in provision of that infrastructure . **(KI-CA-NAI)**

The respondents maintained that it is impossible to talk about resources before internalising what the syllabus entails. However they outlined the various categories of resources in relation to teachers, financial and infrastructural resources.

KI.. .What you need is financial resources, well trained teachers i.e. up to date teachers, relevant physical resources depending on the curriculum, up to date resources in place, printed materials i.e. textbooks depending on the syllabus, upgraded library at all levels. **( KI – CBE – SIA)**

The respondents indicated that some of the resources required to implement a competency based curriculum include laboratories both for sciences and languages, print materials, quality teachers and ICT and workshops, enough classrooms and play fields. The institutions

should be provided with a very wide and diverse resource based on available means, locally relevant and without and the issue of shortage of teachers be addressed. The learners should also be provided with play materials

KI...It's more cumbersome in secondary school than in primary school where subjects like biology, physics are compulsory so already I know the government is chipping in but sometimes need to be done particularly for the new schools because otherwise our students are not getting equal attention when it comes to other subjects like sciences, even computers. It is theory sometimes when we talk of all secondary schools having electricity they don't have some don't have.  
(KI-CEB-MIG)

Key informants expressed the need to establish sub-county libraries, revive teachers' Advisory centres to help equip teachers with skills

KI.. .. We require library in county-subcounty level where children can access the materials, we also need to revise teaching advisory centre, where we had teaching learning aids were being developed, and teachers in zone can go there and get and share them as a zone... offices to support teachers in curriculum issues. (KI-CDE-KIT)

The key informants also expressed the need for a conducive learning environment for learners in primary schools especially the school infrastructure

KI.. .. unakuta class 1 and 2 hazina mlango na dirisa, ukienda huko, unakuta anakwambia unajua nilikuwa nimetengeneza hiyo curtain na hakuwa ametengeneza na wanyam awakaharibu, na hakuwa ametengeneza, but you are giving excuse because you have not put the doors, so they should be secured. Kuna other environment that is not conducive they are supposed to match nursery and the lower primary which I believe was a very good option, because hiyo area, that time was huyo motto anakuwa moulded. .. (KI-CDE-MAK)

KI.. We need the fundings especially for infrastructures in primary schools..(KI-CDE-KIT)

KI..the important thing like a sport centre and here we have children doing variety of sports that is important and the only

limitation in our country is that we may not build it across the whole country we may only have a few schools with those equipments.,(KI-UNESCO-NAI)

**KI**-if students are doing sciences they may require labs so that they are able to undertake practical in carrying out experiment. .... adequate number of teachers and their respective subjects. ...and of course the general working environment (**KI-IED-NAI**)

KI.. Facilities for example, room, ...there is a child doesn't even has classroom, the environment is not conducive, there needs to be that classroom, it needs to have enough space then all other.....girls do not go to school when they have their menstrual periods because of the kind of toilets ....so that environment may not just mean on classroom..... yes the classroom is important enough desk ...(**KI-KNHCR-NAI**)

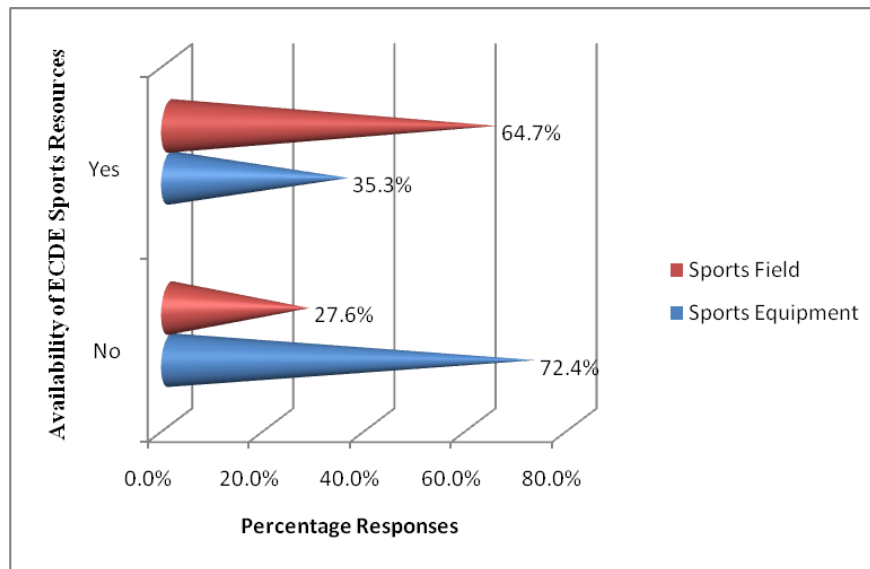
KI.. Laboratories, trained teachers, teaching materials like books and teaching equipment for practical subjects. (**KI-TCD-GAR**)

Respondents mentioned several resources such as computer tables, demonstration workshops, science kits, drama academies. better equipped laboratories, libraries, relevant books; language laboratories, media suites and filming studios with related quality equipment as being necessary for the implementation of ECDE curriculum. They further proposed the sharing of infrastructure among neighbouring schools and establishment of income generating programmes in schools to help finance education.

#### ***4.9.2 Availability of ECDE sports Resources***

ECDE sports resources were observed using an observation schedule. The results are presented in Figure 4.11.



**Figure 4. 11: Availability of ECDE sports Resources N=124**

The findings show that majority (72.4%) of the ECDE centres did not have sports equipment. However, 64.7% of the ECDE centres had sports field. This implies that sports skills were not being fully utilized in the absence of sports equipment.

The key informants emphasized the importance of play materials especially for the ECDE learners to nurture talents.

KI..Need more of playing materials in early grades (ECD – primary) e.g. music. Mostly provide necessary materials to nurture talents. A subject like former handwork needs to be introduced, this subject should be introduced in primary to encourage learners to like maths by using numbers, or blocks to build a house so that a child learns that maths in about playing with numbers. This helps learners develop positive attitude towards the subject. . (KI – CEC - BUN).

#### ***4.9.3 Availability of ECDE Media Resources***

ECDE Media Resources were also observed using an observation schedule. The results are presented in Table 4.4.

**Table 4. 4: Availability of ECDE Media Resources N=120**

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

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

The key informants expressed the need for the establishment of computer laboratories and provision of computers so that ICT can be taught successfully.

KI...If we want to say the about the computers, a computers as a resource, computer laboratory is very important in primary level now that we are agreeing that ICT should be taught as a subject. (KI-SCDE-SAM)

The key informants suggested the following resources as key in media, library, modern facility computer, proper editing suites, video

cameras, better environment for learning with ample space, isolated from noise pollution.

KI... You may need very good library, you need modern facility computers, for example if you are in media you need proper editing suites, you need .....studios, you know you need cameras you need .....steel cameras, you need video cameras, and then you need .....Proper skills in terms of use of computers and designing desktop kind of skills you know so that people can be able to do desktop publishing and all that and ... more importantly also you need some better environment for learning with ample space well aerated, clean space, isolated from the pubs, the markets, **(KI- MCK-NAI)**.

KI.. the government should consider the marginalized areas receiving we have great schools in Nairobi and other urban areas but when we go in the low marginalized areas we find that they don't have labs there are students who have gone from form one to form four they are learning about burnsen burners in schools they have KCSE and they have never seen a bunsen burner and chemicals so that that's what I think ( **KI STU KAU**).

KI...physical resources we try as much as possible not to crowd very many students in one class so that the teacher can be very effective in delivering the curriculum to the limited number of learners. Physical resources here we are also saying that it is good that we can try to pull up to ensure that at least we have standard physical resources that will accommodate the learner to feel, to appreciate the learning environment **(KI-TCDE-NYA)**

In the digital era, the key informants expressed the need to provide learners computers and laptops which have multi-media capability, the ability to take pictures, the ability to take a video and the ability to record sound in order for them to create and share own content. The respondents proposed the need for computers. Incorporating more innovative resources such as ICT which make learning more interesting and enhance retention of learnt concepts.

KI...Last week I opened a workshop in Meru about tusome .....TAC tutors teachers using this gadget I don't know whether you have seen it.... where a TAC tutor is able to monitor a lesson and this is the in thing and that is why I keep on saying this is the way to go this is a flight and the children are able to.... to read .. **(KI CDE LAI)**.

KI.. One of the resources that we need is the computers now that we are in the world that is growing in terms of technology,

computers are an essential resource that is needed (**KI STU KAU**)

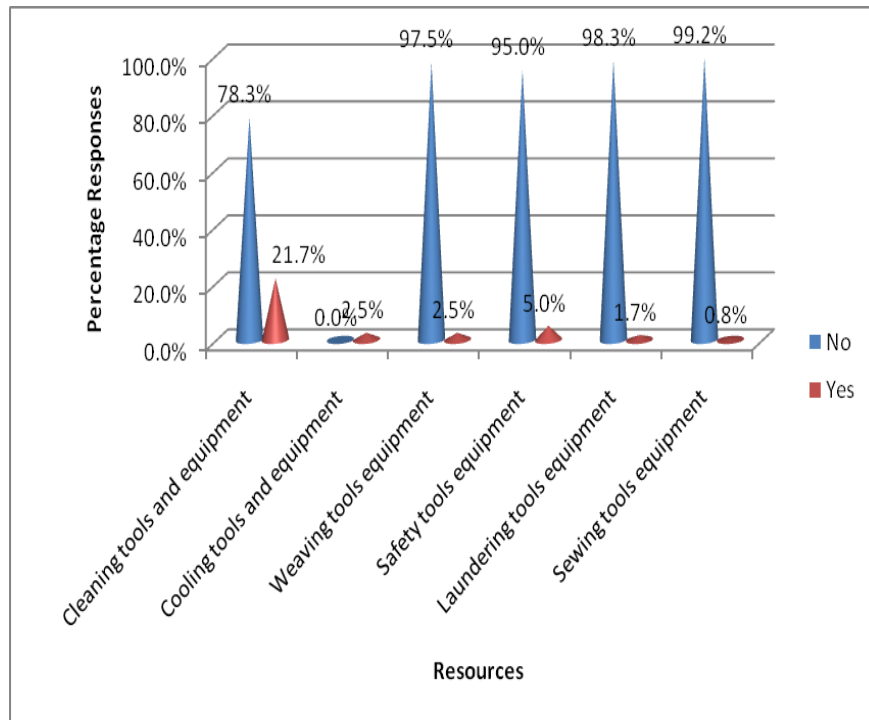
KI... I would focus on the buildings, outdoor equipment, learning resources like .....more innovative resources like ICT .... Counselors in school to assist in the issue of moral values and spiritual development. (**KI-CEE-KWA**)

KI...The learner acquires 11% from listening and 70% from visuals. Where the learner is involved the learner uses all the six senses. Some of the materials needed can be bought or made locally...In ECDE teachers are trained to make materials. They use sacks to make materials and children enjoy learning using the materials. Where aviation is taken a skeleton of a plane will be required, where engineering is taken they require a skeleton of a vehicle which can be used for a very long time. (**KI-MCDE-KAK**)

E-platforms or online platforms and text books were identified as key resources that should be provided to improve learning in schools. The respondents recommended provision of adequate and relevant materials that promote a child's talents. Teaching learning materials should be appropriate, interesting and responsive to the local environment.

#### ***4.9.4 Availability of ECDE Home science Resources***

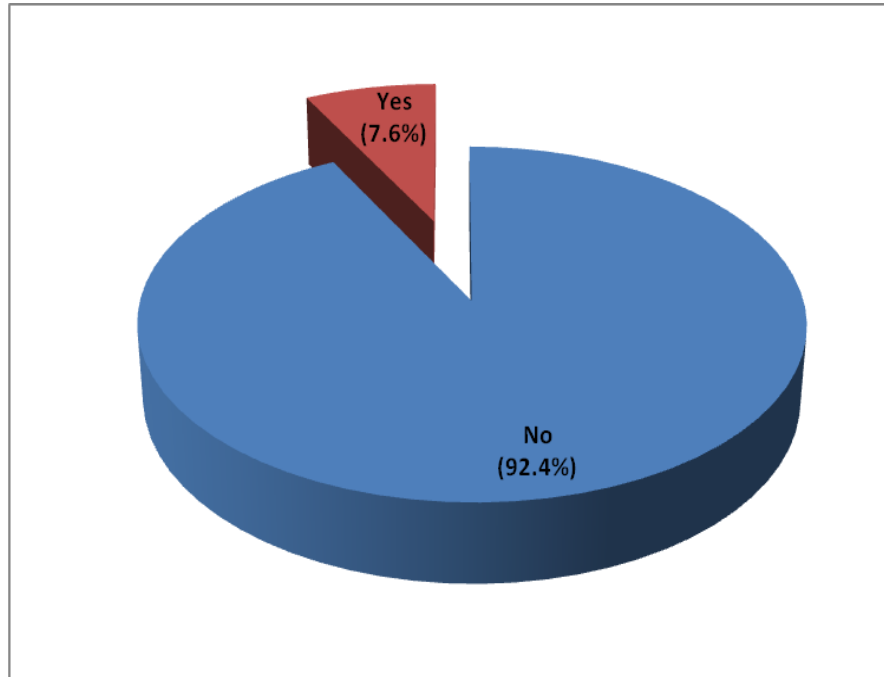
ECDE home science resources were also observed using an observation schedule. The results are presented in Figure 4.12.

**Figure 4. 12: Availability of ECDE Home science Resources**

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

#### ***4.9.5 Availability of ECDE Agriculture Resources***

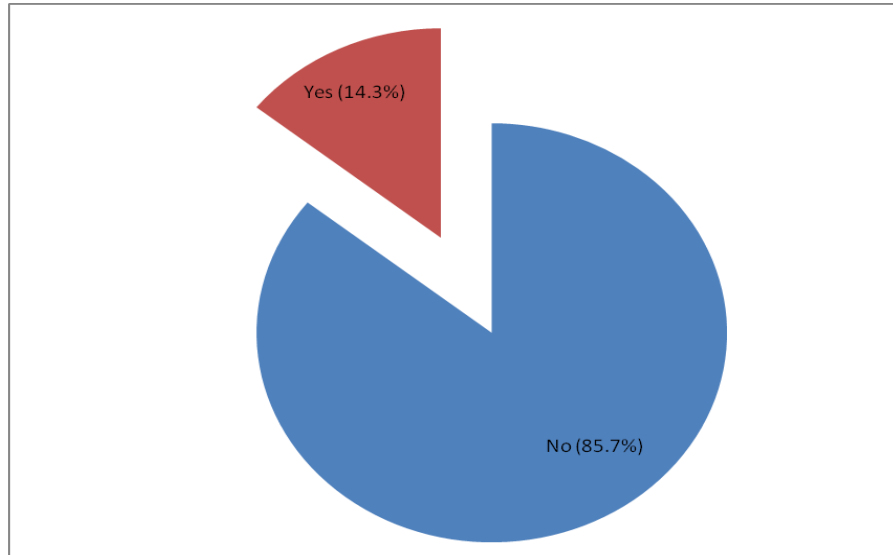
ECDE agricultural resources were observed using an observation schedule. The results are presented in Figure 4.13.

**Figure 4. 13: Availability of ECDE agriculture Resources N=119**

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

#### ***4.9.6 Availability of ECDE Music Resources***

ECDE music resources were observed using an observation schedule. The results are presented in Figure 14.

**Figure 4. 14: Availability of ECDE Music Resources**

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

#### ***4.9.7 Availability of ECDE Science Resources***

ECDE science resources were observed using an observation schedule. The results are presented in Figure 4.15.

**Figure 4. 15: Availability of ECDE Science Resources**

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

#### ***4.9.8 Availability of ECDE Human Resource***

The respondents expressed the need to provide enough learning resources which include human resources. One of the respondents expressed the need for provision of enough teachers instead of free education. It was further noted that it is critical to provide well trained teachers and ensure that they receive continuous and regular in-service

**Industrialist...**Elimu inaharibika kwa sababu ya ukosefu wa walimu. Mimi ningesema badala ya hii free education, ile pesa kidogo wananchi walikuwa wanalipa, afadhali walipe walimu wa kutosha **(CEO-IND-GAR)**

**Industrialist...**tuwe na watu ambao wao wanaweza kuwa fundisha...ambao wana ujuzi wakufundisha... **(CEO-IND-GAR)**

**Industrialist...**Inservice. Hiyo inservice iangaliwe... Kila term kila mwaka hiyo training iwe inaendelea...**(CEO-IND-GAR)**

Respondents expressed the concern that education standard and quality assurance officers should be effective in ensuring that teachers use teaching and learning resources to facilitate teaching and learning process.They also underscored the importance of teaching and learning materials in ECDE and suggested that the community members should be involved in the development of the materials

**Industrialist...**Kwasababu school inspector...Anakaa ndani ya darasa, ana angalia mwalimu vile anafundisha, ana angalia mototo vile ana soma...ana angalia kitabu cha mwalimu amejitayarisha,mambo nyingi yalikuwa yanatengenezwa hapo. Lakini siku hizi hakuna. **(CEO-IND-GAR)**

KI.. teaching aids local materials like I went to a certain world vision office down country they have developed local materials reading materials for the children and the community itself they have improvised materials that really help those small kids in the ECD level to learn more so I think that local materials should be developed at the ECD at that level. **(KI – WV - SAMB)**



The respondent advocated for equity in resource allocation to schools to afford every learner the same learning opportunity and so that the graduates are able to compete competitively on the same level in the job market.

**KI...**social aspect, I'll talk of equity in politics first in Kenya for example we have schools that are marginalized, we have schools that are private and they are rich in facility and we still expect that these students will compete in the same opportunities and the same things that the society offers and so if we look at these developed schools they have enough resources and support and these schools that are in marginalized areas you find that they go for an exam when they've never seen a lab or any facility. For the education sector to grow we have to empower marginalized schools. **(KI-FGD-PWN)**

Teachers who are well trained, regularly in serviced and motivated as well as high speed broad internet broad were identified as being necessary in order to implement the 21<sup>st</sup> century skills. Trained counsellors should be brought on board in schools to assist in addressing moral values and spiritual development of learners. In arid and semi-arid areas lack of teachers, lack of commitment from parents and poor facilities were noted as compounding learning achievement.

**KI..**I propose here that the most important resource is first of all of the teacher and that's why we are still insisting that number one teachers should be motivated from the word go. We are not so much talking about money but we are saying we should try to identify the right person who should be a teacher from the word go with or without what we may call a package teachers who would actually take teaching as their career as their profession ( **KI-TCDE-NYA**)

**KI..** .. Another issue is because of lack of teachers and poor facilities, 38% in the schools are not also performing properly, so the parents are not seeing that the one we have taken to school and are not doing anything and they are coming back after dropping out of school so what is then use of taking more to school so that they fail after 8 years so this is a biggest problem that is there...(KI-CDE-GAR)

KI...This needs funding, development of human resources and changing curriculum. We need the human resource, even time is also there as a resource. (KI-TCDE-KAK)

#### ***4.9.9 Locally Available Materials that Promote our Culture***

Key informants pointed out the need to expose learners to both local and international curriculum materials that relate to areas of interest in our country such as culture, patriotism and even legends. There was emphasis on using the immediate environment for teaching and learning.

KI..learning resources will be guided by the content of the curriculum ..have main course books which are helping the teacher to teach in class ...need to have supplementary materials that are beyond the national level..materials which give a global perspective, which goes beyond your own country it is good to expose the children to resource materials that are not within the country context.. other materials that looks at culture and patriotism, even the material that engage on legends ..children are really exposed to variety of materials,,KI-UNESCO-NAI)

.... Features in the community or we want to learn about the life skills practically so instead of telling them in learning giving theoretically to learners you can take them and let them seek for themselves in the community because the community is available ( KI STU KAU)

Respondents expressed the need for use of learning materials which are relevant to the local needs. They noted that most of the ECDE reference materials are imported from other countries. Clear guidelines on textbook should be provided since in a subject there are various books written by different authors hence confusing the children.

KI...we need to see how we can even review the booksthat are sometimes recommended for the students and the pupils to read right now as the industry even people are concerned that even the language is a problem so that means something should be done how is language languages being taught in schools (KE-CKUJ- NAI)

It was strongly indicated that government and the community should provide textbooks to learners. It was further indicated that the move to introduce ICT in schools is a very noble idea especially in

this era of globalization. However it should not be done on a crisis mode but adequate preparations should be done.

KI..You see some schools without desks, some schools even without classrooms, And then you are talking about IT. We are going to increase the gap between those who have and those who haven't (KI-KNEC-NAI).

Respondents proposed the need to come up with visual resources for various learning areas and establish an institution at County level to develop these resources

KI... We need to develop teaching/learning resources like CEMASTEIA is doing. We need the visual resources. Come up with an institution to develop the resources even at county level.  
(KI TCDE-BUS)

#### ***4.9.10 Financial Resources***

The respondents acknowledged the pre-eminence of finance, because finance is key to provision of teaching and learning resources. It was however apparent that the utilization of finances in the institutions was paramount to the availability of resources. Respondents stressed on application of sound financial management practices.

KI ..one of the main resources ..you know resources both financial and human these are two resources we require most, because for you even to develop human capacity you need money to train the teacher, you need money to put up infrastructure, so we need both human and financial resources, and in that sense what we are saying the government should put more money to education in the counties because I have noted that the Serem commission has allocated more money, to the education sector whereby now the county government will not only be basically involved in the early childhood training but will also be involved to improve the infrastructure both secondary and primary .(KI-CDE-GAR)

Respondents indicated that economically, the funding disbursed to schools is inadequate because they cannot sustain children from poor backgrounds. They said due to household poverty, parents may not supplement what the government provides. They observed that children learn in impoverished classrooms and very difficult environments yet they have to compete with those learning under conducive environments. Consequently, the issue of the funds has to be addressed.

Respondents noted that good infrastructure especially sanitation facilities, ICT and feeding programmes are critical for quality education to be realized.

KI..Those children must.....you know during those days there was maziwa ya nyayo. How I wish that maziwa ya uhuru could come upto may be standard 3.(KI-CEE-KAK)

The findings show that the most available resources were classrooms, syllabus, furniture and toilets, and playground. Considering that the resources both human and material play a very important role in facilitating learning, the findings reflect the current situation in ECDE centres. The respondents indicated that some of the resources required to implement a competency based curriculum include laboratories both for sciences and languages, print materials, quality teachers and ICT and workshops, enough classrooms and play fields. The institutions should be provided with a very wide and diverse resource based on available means, locally relevant and without and the issue of shortage of teachers be addressed. The learners should also be provided with play materials. The respondents expressed the need to revive Teacher's Advisory Centres to help equip teachers with relevant skills.

McAliney (2009) indicated that for effective teaching and learning, quality human and physical resources are required. The findings are in line with a study by Bauer, Brust and Hubbert (2002) which found out that investment in physical resources contribute directly to academic learning environment. He indicated that the other resources that may influence learning environment are well stocked libraries, well supplied and maintained classrooms with laboratories including computer labs and well maintained grounds.

The study found out that the least available resources included iPads, iPods, Recording studio, Storage devices, Computers, Radio and Mobile phones. These resources are an important component in the learning process and their absence may adversely affect the quality of learning. According to Deollikar (1997), inadequacy in school equipment is one of the most important factors adversely affecting the quality of education in Kenya.

#### **4.10 CHAPTER SUMMARY**

Based on the respondents views the most desired societal needs were; environmental protection, social development, patriotism, economic and industrial development ranked between 100% and 92.50%. Based on the responses of the head teachers and teachers, it can be deduced that there was a convergence of views among the respondents on competencies such as creativity, innovation, collaboration and critical thinking which were ranked highly above 90%. The head teachers and teacher rated highly games and sports, curriculum enrichment, clubs and societies, special schools for talented and gifted with above 92% as opposed to early admissions that was ranked least. Both primary head teachers and teachers emphasized to great extent of technology, agriculture and vocational and technical subjects, which rated at 95.2%, 95.8%) and 87.4

respectively, besides the sciences, languages, and humanities. The findings on pedagogical approaches preferred by SNE primary teachers and head teachers were discussions 100%, experiments 93.33%, brainstorming 90.33% and demonstrations 90%. The observation of teaching and learning resources at primary level showed that art room, music room, technical subject equipment and home science rooms were not available by above 80% in most primary schools

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.0 Introduction

This section presents the summary of the findings, conclusions and recommendations. The conclusions are in line with the study objectives. Recommendations have been presented based on the stated conclusions.

#### 5.1 Summary of Findings

- Environmental protection, patriotism, social, technological, economic and industrial development should be embedded in the envisaged curriculum in addition to religious and moral values.
- Curriculum should be relevant to every community in terms of resources of the catchment area. Every county should be involved in the development of the ECDE curriculum in accordance with the needs of the locals.
- Curriculum should be holistic in nature, thus addressing the physical, social, psychological, spiritual, intellectual, moral, character formation and value education as contained in the Constitution of Kenya 2010.
- Curriculum should emphasize competencies such as creativity, organizing, interpersonal relationships, planning, coordination and decision making, innovation, teamwork and virtues such as hard work, honesty, communication, play and associating with others, expression in music, basic life skills, basic arithmetic and responsibility.
- Identification of talents is the responsibility of parents and teachers.
- Annual science congress, annual term games, arts, annual drama and music festival, use of mentors, teacher/staff

nomination, peer nomination and parental information should be used as platforms for identifying talents.

- Schools, religious institutions and homes settings can be to identify learners talents.
- Visual, performing arts, culinary arts, sports, pottery, fine arts, music and drama talents should be nurtured.
- Establishment of talent academies, provision of adequate resources, creation of incubation centres for innovations, schools exhibitions in areas like science, handicrafts, IT, sports, games, music and drama, equipping teachers with competencies to identify and nurture talents, realigning teacher education to produce teachers in all the potential pathways of academic, technical and vocational, sports, creative arts, establishing pathways early enough to nurture sports, music, performing and can used for nurturing talents.
- Games and sports, clubs and societies, cooperative learning, competition among schools and holding of academic conferences, curriculum enrichment, ability grouping and mentorship programs are the best strategies for nurturing the potential and talents of learners.
- The activity areas that were preferred were languages, mathematics, life skills, creative arts, communication skills, numeracy and literacy skills; creative and manipulation; social and life skills; environmental awareness; respect for and sanctity of life; nutrition and health; religion and ethics; national values; patriotism; self-awareness, self-esteem, self-confidence, personal safety (security), technology, emotional awareness, empathy, self-regulation and conflict resolution; respect for the rule of law, appreciation for democracy; critical thinking, problem solving; geometry, patterns and classifications, natural and the physical world, inquiry skills and physical education.



- Learner centred methods such as role plays, songs, dance, recitals, demonstrations and thematic approaches can be used with young children in delivery of the curriculum.
- The most available resources were classrooms, syllabus, furniture and toilets, and playground. Laboratories both for sciences and languages, print materials, quality teachers and ICT and workshops, enough classrooms and play fields were the resources required to implement a competency based curriculum.
- Shortage of teachers should be addressed.
- Formative assessment was the most preferred mode of assessment.
- Hygiene, child rights, environment, security and safety cross cutting issues should be embedded in the envisage ECDE curriculum.

## **5.2 Conclusions**

### **5.2.1 General Societal ECDE Needs**

Kenyans would prefer environmental protection, patriotism and social development to be fully embedded into the curriculum from the foundation level among societal needs. Holistic development of learners and contemporary issues should also be addressed.

### **5.2.2 Competencies**

Learners in ECD should acquire the 21<sup>st</sup> century skills namely interpersonal relation skills, communication skills, basic literacy, life skills as well as basic health and hygiene practices.

### **5.2.3 Identification and Nurturing the Potential and Talents of Learners at ECDE**

Talents should be identified at the formative years of learners. This can be done in different settings by parents, teachers and other

professionals. An assessment tool needs to be developed for identification of talents. Creative arts and physical education should also be emphasized in the school curriculum. Materials and facilities should also be made available to learners to exploit their potentials. It is important to provide a variety of platforms or settings that can facilitate identification and nurturing of talents.

#### **5.2.4 Activity Areas that should be included in the ECDE Curriculum**

Kenyan preferred language, life skills, creative arts, communication skills, numeracy and literacy skills; environmental awareness; health and nutrition; religion and ethics; national values; patriotism; self-awareness, self-esteem, self-confidence, personal safety (security), emotional awareness and physical education as the learning areas to be covered under the ECDE curriculum.

#### **5.2.5 Learning Approaches**

Child centred methods are the most appropriate pedagogical methods for delivery of the competence based curriculum. These methods include participatory learning, exploratory/discovery methods and field studies.

#### **5.2.6 Resources**

The resources required to implement a competency based curriculum include laboratories both for sciences and languages, print materials, quality teachers, ICT infrastructure, enough classrooms, play materials and play fields.

#### **5.2.7 Forms of Assessment**

The most appropriate method for assessment in ECDE competency based learning is observation. This can be achieved through the use

of observation checklists. Learners can be observed formally or informally in diverse settings while performing different activities.

### **5.2.8 Cross Cutting and Contemporary Issues**

Drug and substance abuse, HIV and AIDs, religion, use and misuse of ICT, sexuality, environmental conservation, insecurity, gender issues, violence at family, health and nutrition are some of the issues that should be addressed in the envisaged curriculum.

## **5.3 Recommendations**

In the light of the findings, results and discussions of the study, the following recommendations were formulated.

### **5.3.1 General Societal ECDE Needs**

Education should promote:

- Holistic development of the learner physically, socially, psychologically, spiritually, intellectually, morally and in character formation.
- Respect for different peoples culture in Kenya.
- Utilization, protection and conservation of the environment.
- Positive values to deal with challenges facing Kenya such as corruption, radicalization, tribalism and youth apathy
- Globalization
- Entrepreneurship
- Patriotism

### **5.3.2 Competencies**

Learners in ECD should acquire the following competencies;

- Creative thinking skills
- Problem solving skills

- Communication skills
- Financial and entrepreneurial skills
- Health and good personal hygiene practices
- Numeracy and literacy skills

### **5.3.3 Identification and Nurturing the Potential and Talents of Learners at ECDE**

ECDE teachers should be trained on how to identify and nurture learners talents.

The following should be nurtured in the ECDE centres;

- Visual and performing arts
- Talents academies or centres be set up
- Symposiums, science conferences, exhibitions and competitions be emphasized in identifying and nurturing talents
- Programmes and relevant opportunities should be provided to allow for talent identification and nurturing

### **5.3.4 Activity Areas that should be included in the ECDE Curriculum**

The National ECDE curriculum should have the following learning areas;

Languages, mathematics, life skills, creative arts, communication skills, numeracy, literacy skills, creativity and manipulation, social, environmental awareness, nutrition and health, religion and ethics, national values, personal safety (security), ICT technology, patterns and classifications, physical education, natural and the physical world.

### **5.3.5 Learning Approaches**

The ECD teachers should use learner centred methods of teaching which are participatory in nature. These methods includes role plays, songs, dance, drama, demonstrations, exploratory/discovery methods and field studies.

### **5.3.6 Resources**

The ECDE centres should be provided with diverse resources. These materials should be sourced within the locality to ensure relevance, and meaningful learning. ECDE teachers should be capacity built to be able to improvise and develop low cost materials. Teachers Advisory Centres to help equip teachers with skills. More qualified teachers should be employed to reduce the teacher pupil ratio.

### **5.3.7 Forms of Assessment**

- There should be a major shift from emphasis on summative to formative form of assessment.
- Formative evaluation should be used in assessment of learning at ECDE level,
- It is critical to train teachers on a variety of assessment techniques appropriate for ECDE learners.
- Promotion and admission to class one should not only be based on written tests or cognitive development of learners but other domains of learning should also be considered.

### **5.3.8 Cross Cutting Issues**

The ECDE curriculum should address the following pertinent issues: Drug and substance abuse, HIV and AIDs, religion, use and misuse of ICT, sexuality, environmental conservation, insecurity, gender issues, violence at family, health and nutrition.

## REFERENCES

- Buhere K (2016) why textbooks matter in Education. Wednesday, March 9, 2016  
Standard Newspaper.
- Browder, Diane M(2001): Curriculum and assessment for students with moderate and severe disabilities. The Gullford press.
- Department for Education and Children's Services, S. A. (1994). *Understanding giftedness: a guide to policy implementation.*
- Drew, C., Hardman, M. & Hosp, J., (2008). Designing and conducting research in education. California, USA: Sage publication inc.
- Evan, T., Haughey, M. & Murphy, D. (2008). International Handbook of distance education. Bingley, UK: Emerald Group Publishing Ltd.
- Farrant, J. S., (2004). Principles and practice of education. (18<sup>th</sup>ed). England, UK: Pearson education Ltd.
- Gagné's F. (2003) Differentiated Model of Giftedness and Talent (DMGT)
- Gachathi, P. J. (1976). Report of the National Committee on Educational Objectives and Policies, Ministry of Education. Nairobi: Government Printer
- GoK, (2007). Kenya Vision 2010. Ministry of Planning and National Development and the National Economic and Social Council (NESC), Office of the President. Nairobi. Kenya.
- Huitt, W.(1996). Measurement and Evaluation: Criterion-versus norm-referenced testing. Educational Psychology Interactive. Valdosta, GA: Valdosta State University. Retrieved from <http://www.edpsycinteractive.org/topics/measval/crnmref/html/>
- [www.pacwcbt@pill.edu](http://www.pacwcbt@pill.edu).(2002) Child and Adolescent Development Resource Book University of Pittsburg
- KIE (1990): Formative Evaluation of the Secondary Education Curriculum. KIE Research Report Series No.22. Nairobi. Kenya
- KIE (2010a): Summative Evaluation of the Primary School Education Curriculum Nairobi. Kenya

KIE (2010b): Summative Evaluation of the secondary School Education Curriculum. Nairobi. Kenya

Kenya Institute of Education Handbook: Silver Jubilee Edition; (1957-1982)

Kabiru, M. (1997). The status of Early Childhood Education in Kenya. Nairobi: NACEC

Republic of Kenya. (2007). Government of Kenya, Vision 2030. Nairobi: Government Printers.

Sifuna, D.N. and Karugu, A.M. (1988). Contemporary Issues in Education. Nairobi: Kenyatta University.

Treadaway, J. (2003). Education for what? revisited. Paper presented at the SICHE Education Conference, Panatina, Honiara, 23-25 September, 2003.

Assessment: Challenges.<http://www.cdio.org/implementation-cdio-your-i>

Kellagan T. and Greany V.(2001): Using Assessment to improve quality of education. UNESCO. International Institute for Educational Planning. Paris

Ministry of Education (1997): Towards Thinking Schools, Singapore

Kang'ethe, R. W. (2004). *A Comparative Study of Measures used in the identification of Gifted and Talented children in Two Provinces of Kenya*. Nairobi. Unpublished Ph.D Thesis. Kenyatta University.

Kang'ethe, R. W. &Mugo J. (2010) "Gifted and Talented Children and Policy in Kenya:A Ride through Post Independence History". A paper presented during the National Conference of The Gifted and talented in Kenya. Kenyatta University (July 27<sup>th</sup> to 30<sup>th</sup> July 2010).

Kinyua, P. M. (2014) Exploring Giftedness among Learners with juvenile Delinquency in elected Rehabilitation schools In Kenya . Nairobi. Unpublished Ph.D Thesis. Kenyatta University.

Kochung E, (2003) *A Report of the task Force on special Needs education.Appraisal Exercise Republic of Kenya*. Ministry of Education.

Koech, D. K. (1999). *Totally Integrated Quality Education (TIQET)*. Nairobi, Government Press.

MoEST(2012): Sessional Paper No 14 of 2012: Reforming education and Training Sector in Kenya

NEXT(2010):Japan Ministry of Education, Culture, Sports Science and Technology, Education Reform for the 21<sup>st</sup> Century, National Council of Education Reform and Process of its Reform, Tokyo, Japan.

SalteryD(1989): Assessment in Schools. Basil Blackwall Ltd.

Swaffield, S. (2008): unlocking Assessment, A David Fulton Book

Republic of Kenya (2009). *National Youth Situation Analysis Report* . Government Press. Nairobi.

Richert, E.S. (1991) Rampant Problems and proising practices in identification. In N.

Colangel o& G. A. Davis (Eds), Handbook of Gifted Education 9pp 81-96). Boston:Allyn& Bacon.

Republic of Kenya (2011). A teacher competency framework for the Kenya primary school teacher. Ministry of education

Republic of Kenya (2010). Task force report on the re-alignment of the education sector to the constitution of Kenya 2010: towards a globally competitive quality education for sustainable development

Ross, A. (2000). Curriculum: Construction and Critique; masters classes in education series. New York: Routledge Falmer Garland inc.

The Scottish Government (2009). Curriculum for excellence building the curriculum 4 skills for learning, skills for life and skills for work. Edinburgh: Scottish government

Wedell, M. (2009). Planning for Educational Change. Putting People and their Contexts First. Continuum International Publishing Group. London.

KICD (2013) Rapid Assessment Of Utilization Of Educational Resources (Prototypes) In Learning Institutions In Kenya. Nairobi. Kenya.



Twoli, N., Maundu, J., Muindi, D., Kiio, M, Kithinji, C., (2007). Instrumental Methods in Education, Kenya Institute of Education, Nairobi

Ministry of Education Australia, (2013). The Australian Curriculum. Retrieved June 7, 2014, from The Australian Curriculum v6.0.: [www.australiancurriculum.edu.au](http://www.australiancurriculum.edu.au)

Barrow, M. (2013). Woodland Resources. Retrieved June 7, 2014, from Mandy Barrow Woodlands Resources: [www.mandybarrow.com](http://www.mandybarrow.com)

Exchange, S. A. (2012). High School Exchange in South Africa. Retrieved June 7, 2014, from Experience a High School Exchange in South Africa: [www.jcr.co.za/sastudent.htm](http://www.jcr.co.za/sastudent.htm)

Japan MOFA. (2014). Web Japan MOFA. Retrieved June 6, 2014, from Schools-Explore Japan-Kids Web Japan-Web Japan: <http://web-japan.org>

Keteku, N. W. (2008). Education Reform Ghana. Retrieved June 7, 2014, from Education Reform in Ghana: Senior Secondary School: [www.bibl.u-szeged.hu/oseas.../ghana.htm](http://www.bibl.u-szeged.hu/oseas.../ghana.htm)

Ministry of Education Malasia (2014). Malaysian Guide. Retrieved June 7, 2014, from Malaysia Guide: Public, State Education in Malaysia.: [www.justlanded.com](http://www.justlanded.com)

Mugo and Asigo (2015). From Assessment of Learning to Assessment for Learning in Kenya's primary Education post 2015. A policy brief by the Learning Outcome Network.

UNESCO-IBE (2015). Repositioning and Reconceptualizing the curriculum for effective realization of Sustainable development Goals Four, for Holistic

Voogt, J &Roblin, N.P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of Curriculum Studies*. Volume 44, Issue 3.

## Appedex 1

**NEEDS ASSESSMENT ECDE CENTRES**

|   |
|---|
| 1. Municipal ECDE Centre                      |
| 2. AC Olkalou                                 |
| 3. AIC VISA OSHWAL ECDE Centre                |
| 4. Al noor ECDE Centre                        |
| 5. ALFAROUQ BOYS ECDE Centre                  |
| 6. Amalemba ECDE Centre                       |
| 7. Ancilla Catholic Academy ECDE Centre       |
| 8. Bishop Mahaini Pry Ecd                     |
| 9. Bishop Mahon PS ECDE Unit                  |
| 10. Booker ECDE Centre                        |
| 11. Booker Academy ECDE Centre                |
| 12. Bubisa ECD                                |
| 13. bungoma pry ECDE Centre                   |
| 14. Chebarus Eldoret East ECDE Centre         |
| 15. Chebois Primary ECDE Centre               |
| 16. Chesegem Primary ECDE Centre              |
| 17. Daa Primary ECDE Centre                   |
| 18. Deb Nyeri Primary ECDE Centre             |
| 19. Dundori ECDE Centre                       |
| 20. Dundori Primary ECDE Centre               |
| 21. Erait Academy ECDE Centre                 |
| 22. Garrissa Primary ECDE Centre              |
| 23. Gaturiri Primary ECDE Centre              |
| 24. Githima Primary ECDE Centre               |
| 25. Gk prison ECDE Centre                     |
| 26. Goro Rukesa ECDE Centre                   |
| 27. Goro Rukesa Primary ECDE Centre           |
| 28. Harmony junior school ECDE Centre         |
| 29. Homa bay Primary ECDE Centre              |
| 30. Igumo Primary ECDE Centre                 |
| 31. Ilpolei Primary ECDE Centre               |
| 32. Isibania Mixed Primary School ECDE Centre |
| 33. John Paul 2 ECDE Centre                   |

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| 34. Kachoda Leaders Academy ECDE                         |
| 35. Kadika primary school ECDE Centre                    |
| 36. Kaheti Nursery                                       |
| 37. Kahuro ECDE Centre                                   |
| 38. Kajiado child care ECDE Centre                       |
| 39. Kajiado Primary School ECDE Centre                   |
| 40. Kakamega Hill school Primary School ECDE Centre      |
| 41. Kakuswi Primary School ECDE Centre                   |
| 42. Kamatungu Primary School ECDE Centre                 |
| 43. Kamoko ECDE Centre                                   |
| 44. Kanyalu Primary School ECDE Centre                   |
| 45. Karindundu Nursery School                            |
| 46. Katheka Primary School ECDE Centre                   |
| 47. Kauwi Mixed Day Primary School ECDE Centre           |
| 48. Kawala ECDE Centre                                   |
| 49. Kiairathe Primary School ECDE Centre                 |
| 50. Kiairathe Primary School ECDE Centre                 |
| 51. Kiambaa Primary School ECDE Centre                   |
| 52. Kiambaa ECDE Centre                                  |
| 53. Kianderi Primary School ECDE Centre                  |
| 54. Kipkeino Primary School ECDE Centre                  |
| 55. Kraph ECDE Centre                                    |
| 56. Kwale school for the deaf Primary School ECDE Centre |
| 57. Lake ECDE Centre                                     |
| 58. Likii Primary School ECDE Centre                     |
| 59. Lodwar primary ECD Centre                            |
| 60. Logologo ECDE Centre                                 |
| 61. Lugulu Primary School ECDE Centre                    |
| 62. Lungalunga Nursery School                            |
| 63. Madogo Primary School ECDE Centre                    |
| 64. Maka Royal Academy ECDE Centre                       |
| 65. Makhokho Primary School ECDE Centre                  |
| 66. Makhokho Primary School ECDE Centre                  |
| 67. Makwenyeni ECDE Centre                               |
| 68. Malava Primary School ECDE Centre                    |
| 69. Maranatha Primary School ECDE Centre                 |
| 70. Marigat ECDE Centre                                  |
| 71. Marimanti Winners Academic ECDE Centre               |
| 72. Matinyani DEB Primary School ECDE Centre             |
| 73. Mbiri primary ECDE Centre                            |

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| 74. Mbita Primary School ECDE Centre                 |
| 75. Mekaelalikunda Primary School ECDE Centre        |
| 76. Mirigo ECDE Centre                               |
| 77. Miseke ECDE Centre                               |
| 78. Moyale Primary School ECDE Centre                |
| 79. Moyenit Primary School ECDE Centre               |
| 80. Muguru Primary School ECDE Centre                |
| 81. Muguru Primary School ECDE Centre                |
| 82. Muthithi Primary School ECDE Centre              |
| 83. Mwanika Primary School ECDE Centre               |
| 84. Nakwamekwi ECDE Centre                           |
| 85. Namawanga Primary School ECDE Centre             |
| 86. Nanyuki Primary School ECDE Centre               |
| 87. Ndhiwa ECDE Centre                               |
| 88. Ngukuni ECDE Centre                              |
| 89. Nyaburi Primary School ECDE Centre               |
| 90. Nyagachi Primary School ECDE Centre              |
| 91. Nyakiambi Primary School ECDE Centre             |
| 92. Nyakiambi Primary School ECDE Centre             |
| 93. Nyamachaki Nursery School                        |
| 94. Nyambogo SDA Primary School ECDE Centre          |
| 95. Olkalou Disabled School ECDE Centre              |
| 96. Our Lady of Mercy Ibara                          |
| 97. Rabwao Primary School ECDE Centre                |
| 98. Rapogl ECD Centre                                |
| 99. Ritaya Primary School ECDE Centre                |
| 100. Shabaa Primary School ECDE Centre               |
| 101. Sony Sugar Complex Nursery School               |
| 102. Sosiani Primary School ECDE Centre              |
| 103. St Joseph Primary School ECDE Centre            |
| 104. St. Michael Kawalase Primary School ECDE Centre |
| 105. St. Ann isibania Primary School ECDE Centre     |
| 106. St. Peters Primary School ECDE Centre           |
| 107. St. Stephens ECDE Centre                        |
| 108. St. Teresa girls Primary School ECDE Centre     |
| 109. St.Bakhita ECDE Centre                          |
| 110. St.Monica ECDE Centre                           |
| 111. Temple Road Primary School ECDE Centre          |
| 112. Tetu Primary School ECDE Centre                 |
| 113. Tulya ECDE Centre                               |

|      |                                  |
|------|----------------------------------|
| 114. | Unoa Nursery school              |
| 115. | Unyaa Primary School ECDE Centre |
| 116. | Waa ECDE Centre                  |
| 117. | Wambaa ECDE Centre               |
| 118. | Waudu ECDE Centre                |
| 119. | Young Muslim Academy ECDE Centre |

## Appedex 11

## KEY INFORMANTS INTERVIEWS

| NO. | INTERVIEWEE                                 | INSTITUTION                             | COUNTY   | CODE          |
|-----|---|---|----------|---------------|
| 1.  | COUNTY EDUCATION EXECUTIVE                  | COUNTY GOVERNMENT -KILIFI               | KILIFI   | KI-CEE-KIL    |
| 2.  | COUNTY DIRECTOR OF EDUCATION                | TEACHERS SERVICE COMMISSION             | KILIFI   | KI-CDE-KIL    |
| 3.  | FGD PWANI UNIVERSITY STUDENTS               | PWANI UNIVERSITY                        | KILIFI   | KI-UST-PWU    |
| 4.  | COUNTY EDUCATION EXECUTIVE                  | COUNTY GOVERNMENT KWALE                 | KWALE    | KI-CEE-KWA    |
| 5.  | DIRECTOR QUALITY ASSURANCE PWANI UNIVERSITY | PWANI UNIVERSITY                        | KILIFI   | KI-DQA-KIL    |
| 6.  | KEPSHA CEO-NAIROBI                          | KENYA PRIVATE SCHOOLS HEADS ASSOCIATION | NAIROBI  | KI-KEPSHA-NAI |
| 7.  | CHIEF EXECUTIVE OFFICER                     | MOGOTIO SISAL PLANTATION                | BARINGO  | KI-MSP-BAR    |
| 8.  | COUNTY EDUCATION EXECUTIVE                  | COUNTY GOVERNMENT                       | NYERI    | KI-CEE-NYE    |
| 9.  | CATHOLIC SECRETARIAT                        | CATHOLIC CHURCH                         | NAIROBI  | KI-CAS-NAI    |
| 10. | MUSLIM MADARASSA IMAM                       | MUSLIM IMAMS                            | NYERI    | KI-MMI-NYE    |
| 11. | CHIEF EXECUTIVE                             | LIFESKILL PROMOTERS                     | NAIROBI  | KI-LIS-NAI    |
| 12. | HEADTEACHER                                 | MAKINI SCHOOL                           | NAIROBI  | KI-HET-NAI    |
| 13. | DEPUTY VICE CHANCELLOR                      | KARATINA UNIVERSITY                     | NYERI    | KI-DVC-KAU    |
| 14. | DEAN DEPARTMENT OF ENGINEERING              | MURANG'A UNIVERSITY                     | MURANG'A | KI-DDE-MUR    |
| 15. | COUNTY                                      | TEACHERS SERVICE                        | LAIKIPIA | KI-CDE-       |

|     |   |   |              |                 |
|-----|---|---|--------------|-----------------|
|     | DIRECTOR                                | COMMISSION  |              | LAI             |
| 16. | STUDENTS<br>FGD                         | KARATINA UNIVERSITY   | NYERI        | KI-UST-<br>KAU  |
| 17. | CHAIR PERSON                            | PARLIAMENTARY<br>COMMITTEE ON<br>EDUCATION, RESEARCH AND TECHNOLOGY | NAIROBI      | KI-CPC-<br>NAI  |
| 18. | DEPUTY CEO                              | COMMISSION ON<br>UNIVERSITY<br>EDUCATION                            | NAIROBI      | KI-CUE-<br>NAI  |
| 19. | CHAIR                                   | COUNTY EDUCATION<br>BOARD   | BUNGOMA      | KI-CEB-<br>BUN  |
| 20. | PRIEST                                  | CATHOLIC DIOCESE  | BUNGOMA      | KI-CAT-<br>BUN  |
| 21. | FORMER CEO                              | KNEC  | NAIROBI      | KI-KNEC-<br>NAI |
| 22. | CEO                                     | BRITISH COUNCIL   | NAIROBI      | KI-BRI-<br>NAI  |
| 23. | CDE                                     | TSC   | BUNGOMA      | KI-CDE-<br>BUN  |
| 24. | CEE                                     | COUNTY<br>GOVERNMENT  | KAKAMEG<br>A | KI-CEE-<br>KAK  |
| 25. | CEO                                     | ICT AUTHORITY   | NAIROBI      | KI-ICT-<br>NAI  |
| 26. | DIRECTOR                                | MIN. OF<br>INDUSTRIALIZATION &<br>ENTERPRISE<br>DEVELOPMENT         | NAIROBI      | KI-IED-<br>NAI  |
| 27. | TIVET<br>EXPERTS(RATE<br>NG &<br>OWUOR) | TIVET   | NAIROBI      | KI-TVE-<br>NAI  |
| 28. | CHAIR PERSON                            | TSC   | NAIROBI      | KI-TSC-<br>NAI  |
| 29. | EACC DEPUTY<br>DIRECTOR                 | EACC  | NAIROBI      | KI-EACC-<br>NAI |
| 30. | INCHARGE<br>BASIC<br>EDUCATION          | COUNTY GOV  | KITUI        | KI-CBE-<br>KIT  |
| 31. | CDE                                     | COUNTY GOV  | MAKUENI      | KI-CDE-<br>MAK  |
| 32. | REVEREND                                | AFRICA INLAND<br>CHURCH   | KITUI        | KI-AIC-<br>KIT  |
| 33. | PRIEST                                  | CATHOLIC CHURCH   | MACHAKO<br>S | KI-CAT-<br>MAC  |
| 34. | CDE                                     | TSC   | KITUI        | KI-CDE-<br>KIT  |
| 35. | REPRESENTATI                            | UNESCO  | NAIROBI      | KI-             |

**KENYA INSTITUTE OF CURRICULUM DEVELOPMENT**  
**CODES FOR ANALYSIS AND CITATION OF MEMORANDA**  
**NAIVASHA DOCUMENT**

| SNo | Code | Submission by | Address |
|-----|------|---------------|---------|
|-----|------|---------------|---------|

|     |                                |                                |         |             |
|-----|--------------------------------|--------------------------------|---------|-------------|
| 36. | DIRECTOR                       | CEMASTE A                      | NAIROBI | KI-CEMA-NAI |
| 37. | CEO                            | FAWE                           | NAIROBI | KI-FAWE-NAI |
| 38. | DIRECTOR                       | CBK-SCHOOL OF MONETARY STUDIES | NAIROBI | KI-CBK-NAI  |
| 39. | CHIEF EXECUTIVE HUMAN RESOURCE | COUNTY GOV                     | MANDERA | KI-CCO-MAN  |
|     |                                |                                |         |             |



| <b>A: Analysed Submissions (Soft copy submissions)</b> |          |  |   |
|--|----------|--|---|
| 1  | ASM-IS   | Administrator,<br>St. Martin                 | <a href="mailto:admin@stmartin-kenya.org">admin@stmartin-kenya.org</a>  |
| 2  | CT-RI    | Childnet<br>Tuamke                           | <a href="mailto:info@tuamke.org">info@tuamke.org</a>  |
| 3  | AC-MM    | Pastor Mary<br>Mumo                          | 0733966327  |
| 4  | CEMASTEА | CEMASTEА                                     | Director, P.O.Box, Nairobi  |
| 5  | RW-IS    | Robert<br>Watene                             | CS-East African Chairman  |
| 6  | DJWK-IS  | David J. W.<br>Kimani                        | 0721 357954   |
| 7  | DBK-IS   | Dorcas Bahati<br>Kisiangani                  | 0726423532 <a href="mailto:dorcasbahati@gmail.com">dorcasbahati@gmail.com</a>                                     |
| 8  | HE-IS    | Hassan<br>Ebrahim                            | -----   |
| 9  | -        | Edward<br>Mungai...1                         | Box 20780-00202 Nairobi   |
| 10   | -        | Edward<br>Mungai...2                         | Box 20780-00202 Nairobi   |
| 11   | HATUA-RI | Hatua  | <a href="mailto:indaochola@gmail.com">indaochola@gmail.com</a> 0721650895   |
| 12a  | BSK-RI   | Bible Society<br>of Kenya...1                | Box 72983-00200, Nairobi  |
| 12b  | BSK-RI   | Bible Society<br>of Kenya...2                | Box 72983-00200, Nairobi  |
| 13   | JK-IS    | Joel Kariuki                                 | Kingongo primary, 0725523198  |
| 14   | CITAM-RI | Judy, CITAM                                  | <a href="mailto:janabwani@citam.org">janabwani@citam.org</a> 0724476677   |
| 15   | JWM-IS   | Juliet J.<br>Wachira                         | <a href="mailto:Julietmach@yahoo.com">Julietmach@yahoo.com</a> 0721213408   |
| 16   | KCCB-RI  | Kenya<br>Conference of<br>Catholic<br>Bishop | --  |
| 17   | TKS-IS   | Truphena<br>Kwaka Suba                       | --  |
| 18   | --       | Leonard<br>Wambiya                           | Box 4844 Kisumu   |
| 19   | --       | Margaret<br>Roche                            | --  |
| 20a  | --       | Masika...1                                   | Likoni school for VI  |
| 20b  | --       | Masika...2                                   | Likoni school for VI  |
| 21   | LCD-EO   | Leonard<br>Chesire<br>Disability             | <a href="mailto:orpogot@gmail.com">orpogot@gmail.com</a> <a href="mailto:orpa@lcd-enar.org">orpa@lcd-enar.org</a> |
| 22   | --       | Nairobi<br>chapel,<br>Mutheu                 | Box 53635, Nairobi 0702693906   |

|    |         |  |   |
|----|---------|--|---|
| 23 | --      | Nancy Wangui Kahu  | <a href="mailto:wanguiikahu@yahoo.com">wanguiikahu@yahoo.com</a><br>0722788514                                    |
| 24 | --      | Nduta  | tweeter@nduts09   |
| 25 | --      | Nikasio Karani   | <a href="mailto:Nikasio.karani@equitybank.co.ke">Nikasio.karani@equitybank.co.ke</a>                              |
| 26 | --      | Ongweno2   | --  |
| 27 | OCO-IS  | Owen Collins Orinda  | Nyando sub-county 0722971005  |
| 28 | --      | Risper children's pastor   | risper@life.or.ke   |
| 29 | --      | St. Martin   | --  |
| 30 | --      | CITAM, Eldoret Assembly  | --  |
| 31 | SMO-IS  | Sister Mary O'Brien  | --  |
| 32 | SN-IS   | Susan Nyamu  | <a href="mailto:susannyamu@gmail.com">susannyamu@gmail.com</a>  |
| 33 | --      | Pastor Susan Wanjiru   | pastorsusan@parklandsbaptist.org<br><a href="mailto:pastorwanjira@gmail.com">pastorwanjira@gmail.com</a>          |
| 34 | --      | Vincent Otieno Machimbi  | 0716363635  |
| 35 | --      | Violet Kerubo bokea  | --  |
| 36 | --      | Success For Africa   | <a href="mailto:wanjala@successforafrica.org">wanjala@successforafrica.org</a><br>Mob. 254 703 11 90 84           |
| 37 | RODW-IS | Rodgers Waswa  | P.O BOX 1628, WEBUYE:<br><a href="mailto:Waswar0@gmail.com">Waswar0@gmail.com</a>                                 |
| 38 | --      | Zachary Njagi Ndwiga   | <a href="mailto:njagizachary@gmail.com">njagizachary@gmail.com</a> 0727177706                                     |
| 39 | --      | Nikasio Karani -2  | <a href="mailto:Nikasio.karani@equitybank.co.ke">Nikasio.karani@equitybank.co.ke</a>                              |
| 40 | --      | Centre for Training, Research & Development Initiatives International (CETRADIN) | P.O. Box 695-10100;<br><a href="mailto:cetradin.international@yahoo.co.uk">cetradin.international@yahoo.co.uk</a> |
| 41 | --      | Ogweno Evans Odhiambo  | 0714 890 190<br>evogweno@yahoo.com  |
| 42 | --      | Anonymous caption  | --  |
| 43 | --      | Anonymous caption  | --  |
| 44 | --      | Collins Ouma   | <a href="mailto:Collins.ouma@afidep.org">Collins.ouma@afidep.org</a>  |

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|--|--------|--|---|
| 45   | A-IS   | Anonymous  | --  |
| 46   | ED-AC  | ED10 Consortium  | ( <a href="http://ed10.co">http://ed10.co</a> )   |
| 47   | --     | Jimmy Shangala   | 0714929286  |
| 48   | GA-RI  | General Assembly of Presbyterian Church of East Africa | Box 27573-00506,Nairobi<br><a href="mailto:revpkania@pcea.or.ke">revpkania@pcea.or.ke</a> 0722205 051 |
| 49a  | --     | Transparency international                             | Box 198-00200, Nairobi<br><a href="mailto:transparency@tikenya.org">transparency@tikenya.org</a>      |
| 49b  | TIK-AC | Transparency international                             | Box 198-00200, Nairobi<br><a href="mailto:transparency@tikenya.org">transparency@tikenya.org</a>      |
| 50a  | --     | Nutrition Dietetics Unit MoH                           | Box 43319-00100, Nairobi<br><a href="mailto:headnutrition@gmail.com">headnutrition@gmail.com</a>      |
| 50b  | NDU-AC | Nutrition Dietetics Unit MoH                           | Box 43319-00100, Nairobi<br><a href="mailto:headnutrition@gmail.com">headnutrition@gmail.com</a>      |
| 50c  | --     | Nutrition Dietetics Unit MoH                           | Box 43319-00100, Nairobi<br><a href="mailto:headnutrition@gmail.com">headnutrition@gmail.com</a>      |
| 51   | --     | Girl Education Challenge Project                       | --  |
| 52   | SD-RI  | Seventh Day Adventist                                  | Pr. Dr. John G. Macharia<br>Education Director  |
| 53   | --     | Titus Mutei  | --  |
| 54   | --     | Selected newspaper scans                               | --  |
| 55   | --     | Suggestions from facebook                              | --  |
| 56   | --     | Suggestions from tweeter                               | --  |
| <b>B: Analysed Submissions (Hard copy submissions)</b> |        |  |   |
| 1  | --     | Samuel K. Kibe   | Box 50572-00200, Nairobi.   |
| 2.   | KP-EO  | Kenya Publishers Association                           | 3752344/2635498/9   |
| 3  | WM-AC  | Wangari Maathai Foundation                             | <a href="http://www.wangarimaathai.org">www.wangarimaathai.org</a>                                    |
| 4  | BSK-RI | Bible Society of Kenya                                 | Box 72983-00200, Nairobi  |

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|----|--------|---|---|
| 5  | ME-RI  | Muslim Education Council                                      | Box 41013-00100, Nairobi.<br><a href="mailto:mecsecretariat@yahoo.com">mecsecretariat@yahoo.com</a>                                 |
| 6  | GA-RI  | General Assembly of Presbyterian Church of East Africa        | Box 27573-00506, Nairobi<br><a href="mailto:revpkania@pcea.or.ke">revpkania@pcea.or.ke</a> 0722205 051                              |
| 7  | ED-AC  | ED10 Consortium   | ( <a href="http://ed10.co">http://ed10.co</a> )   |
| 8  |        | EE4A Conference in Nakuru                                     | --  |
| 9  | KGK-IS | Kirui Gideon Kipngeno   | 0706 299248   |
| 10 | --     | National Drama Festival Committee                             | Prof L P Barasa, Box 3900, Eldoret  |
| 11 | --     | Diadem Medien Design Gruppe                                   | Jacobsplan 1, 99423, Germany.<br><a href="mailto:Vladimir.nunez@uni-weimar.de">Vladimir.nunez@uni-weimar.de</a>                     |
| 12 | --     | Jackie Otieno   | --  |
| 13 | --     | James Torome, Kenya Union of Special needs education teachers | Box 79418-00200, Nairobi.<br><a href="mailto:kenuste@gmail.com">kenuste@gmail.com</a>   |
| 14 | --     | Strathmore University   | Box 59857-00200 Nairobi   |
| 15 | --     | DSW Kenya   | Box 2438-00202 Nairobi<br><a href="mailto:info@DSWkenya.org">info@DSWkenya.org</a>  |
| 16 | --     | Kenya Autism Alliance   | Box 46596 Nairobi. 0721427730   |
| 17 | J-IS   | Julia Kariuki   | <a href="mailto:juliakariuki@gmail.com">juliakariuki@gmail.com</a>  |
| 18 | --     | Festus Mbuimwe  | <a href="mailto:fmbuimwe@gmail.com">fmbuimwe@gmail.com</a>  |
| 19 | NM-IS  | Nelson Muroka   | --  |
| 20 | TE-AC  | Transgender Education and Advocacy                            | Box 52418-00100, Nairobi.<br><a href="mailto:info@transgenderkenya.com">info@transgenderkenya.com</a><br>0712657124; or 0789 566612 |
| 21 | --     | Benson M. Mbuthia   | --  |
| 22 | --     | Kenya Little League   | Box 30852-00100, Nairobi.<br><a href="mailto:kenyalittleleague@gmail.com">kenyalittleleague@gmail.com</a>                           |
| 23 | --     | Egerton University  | Box 536-20115, Egerton  |
| 24 | --     | Dr. Atieno Kili K'Odhiambo                                    | <a href="mailto:kili@uonbi.ac.ke">kili@uonbi.ac.ke</a>  |
| 25 | --     | John Kimole   | <a href="mailto:jkimole@yahoo.co.ke">jkimole@yahoo.co.ke</a>  |

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| 26 | -- | Prof. George Amollo, Physics Society of Kenya                     | amolo@uoeld.ac.ke                                      |
| 27 | -- | Mititi Isaac Ombingi  | Box 635-40202, Keroka                                  |
| 28 | -- | Supreme Council of Kenya Muslims                                  | Box 45163-00100, Nairobi.                              |
| 29 | -- | Riara University  | Box 49940-00100, Nairobi                               |
| 30 | -- | Compassion Kenya  | Box 1945-00502, Karen.                                 |
| 31 | -- | Joe Kamau, Disciples Church                                       | Box 46894-00100, Nairobi.                              |
| 32 | -- | Child Outreach Network  | <a href="mailto:info@sukenya.org">info@sukenya.org</a> |
| 33 | -- | Beatrice Kemunto  | Rebinke05@yahoo.com                                    |
| 34 | -- | Scripture Union of Kenya  | Box 40717-00100, Nairobi                               |
| 35 | -- | Patrick Okiya Toka  | Box 110, Luanda.                                       |
| 36 | -- | Evangelical Alliance of Kenya                                     | Box 26513-00100, Nairobi.                              |
| 37 | -- | Office of the President, National Counterterrorism Center         | Box 975-00502, Karen.                                  |
| 38 | -- | Commission for education and religious education ref.16 soft copy | --   |
| 39 | -- | Center for the Study of Adolescence                               | Box 19329-00202, Nairobi.                              |
| 40 | -- | Daniel Kariuki  | marketing@travellerscharlet.com                        |
| 41 | -- | Ms. Audrey Amoit Okwara   | Box 4108-00506, Nairobi.                               |
| 42 | -- | Dr. Kiragu Kanayo   | Susan.kiragu@childreninfreedom.org                     |
| 43 | -- | Kenya Community Center for Learning                               | Box 52269-00100, Nairobi                               |

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|--|--------|---------------------------------|--|
| 44   | --     | Maisha Kara Children Foundation | Box 76685-00508, Nairobi.                          |
| 45   | --     | VSO Jitolee                     | Box 4943-00100, Nairobi                            |
| 46   | --     | VSO Deaf Child World Wide       | Box 4943-00100, Nairobi                            |
| 47   | KCP-RI | Kenya Christian Professionals   | Box 533922-00100, Nairobi.                         |
| 48   | --     | Enos Oyaya                      | --   |
| 49   | --     | Jeddy Ochuodho                  | Box jeddy.ochuodho@kra.go.ke                       |
| 50   | --     | Chess Kenya                     | Box 104726-00100, Nairobi<br>info@chesskenya.or.ke |
| 51   | --     | Marcel Odhiambo Ogango          | 0728 978200  |
| <b>D: Recorded Submissions Not Aailed for analysis****</b> |        |                                 |  |
| 1  |        | Moi University Eldoret (8pgs)   |  |
| 2  |        | CUEA (9pgs)                     |  |

#### Code suffix meanings

- *Individual Submission, IS*
- *Religious Institution, RI*
- *Advocacy Consultant, AC*
- *Educational Organization, EO*

#### Prefix

- Anonymous, A

#### Summary analysed

- 62 soft copy submissions
- 51 hard copy submissions
- 113 total submissions