

#### THE KENYA NATIONAL EXAMINATIONS COUNCIL

Theme : "Assessment and Decision - Making"

Sub theme: Reliability and Validity in assessment for decision - making

Title : Competency Based Assessment in early years learning,

Kajiado North Sub County, Kenya

## Presented by

#### **ELIZABETH A OBADE**

eobade@knec.ac.ke

During the 45<sup>th</sup> -International Association for Educational Assessment (IAEA)- Conference held in Baku, Azerbaijan 22<sup>nd</sup> -27<sup>th</sup> September 2019

#### **Abstract**

A Study was conducted to examine the implementation of the Competency based Assessment in early years learning, Kajiado North Sub County, Kenya .The study objectives were four namely: to find out the Socio demographic characteristics of the teachers handling early years learning; establish the teacher's capacity in assessment of learners competencies in their early years; identify methods used in assessment of learners competencies; examine the challenges experienced in assessing the learners competencies. The study was guided by Brunner's theory of learning. The study adopted a Multiple Case study research design and was conducted in 14 Primary schools. The study targeted 52 teachers handling grade 2 learners and 14 Head teachers. Structured interview schedule, observation schedule and questionnaire schedule was used for data collection. Purposive sampling was used to select the respondents for the study. Descriptive statistics was used in data analysis. The findings revealed that teachers lacked capacity in assessment of learner's competencies. Written examinations were commonly used to assess learners' competencies. Training teachers in Competency based assessment and a multi sectoral approach recommended.

Key words: Assessment, Competency based Assessment, Learners competencies.

## Introduction and background

Educational Assessment is an important process in gathering information about a learner's performance. Assessment is hence critical in measuring learner's achievement. Due to globalization, some countries are in the process of a paradigm shift in assessment to adopt the best assessment practices required in the 21<sup>st</sup> Century. Education systems have shifted from a traditional content –based approach towards a more comprehensive competence based approach of education (Camacho and Legare, 2016). Singapore Government has invested heavily in its education and recognizes that different learners have different learning dispositions and preferences. This has been addressed by providing differentiated learning pathways. The education pathways begin with 6 years of elementary school and 4 to 5 years of Secondary school education. After 10 to 11 years of education learners have a choice of selecting a vocational pathway through the polytechnic route or the academic pathway through the junior colleges.

The Government of Kenya through the Ministry of Education is responsive to the global shift by adopting the best assessment practices required in the 21<sup>st</sup> Century. This is in order to realign the Country's education system to conform with Kenya's Vision 2030 to enable the country prepare a skillful workforce to realize industrialization(RoK,2008). This involves a paradigm shift in its education system from 8-4-4 system to 2-6-6-3 system and curriculum review from knowledge or Objective based curriculum to a Competency based curriculum (CBC). The Kenya institute of Curriculum Development carried out a needs assessment in 2006 and this informed the curriculum change (KICD, 2017). The Basic Education curriculum framework (BECF) was developed in 2017 that resulted in development of Curriculum designs for early years education (KICD, 2017). The BECF outlines the vision and mission of Kenya's curriculum reforms. The vision of the Curriculum's reforms is to develop an engaged, empowered and ethical citizen. The mission is to nurture the potential of every learner. The emphasis is to enable learners acquire values and competencies to prepare learners in different pathways. Imparting values to learners is in line with the Constitution of Kenya, 2010. The seven (7) core competencies include Communication and collaboration: imagination and creativity: self-efficacy: critical thinking and problem Solving: learning to learn: digital literacy and citizenship. The Curriculum designs developed for Pre-Primary 1 and 2 and for Grade 1,2 and 3. The Curriculum designs include nine Learning areas. In January 2019, The Government of Kenya has rolled out the Competency based Curriculum nationally and hence a paradigm shift to focus more on formative assessment and less focus on summative assessment. The Kenya National Examinations Council is therefore mandated to ensure standards are maintained as formative and summative Assessment is administered in schools. Teaching and learning are integral to assessment. The curriculum review has necessitated that The Kenya National Examinations Council rethink the best way of assessment of learning outcomes with regard to 21st Century Assessment skills for learner's competencies. The expected outcomes are to produce learners who are engaged, empowered and ethical citizens.

#### Literature review

#### **Assessment**

Assessment and learning has been significant component of classroom practice. Teachers spend their class time engaged in one type of assessment or learning evaluation activity (Stiggins &Conklin, 1992). The knowledge teachers hold about assessment matters has been limited with scanty attention paid to this area in teacher preparation programs (Christie et al., Louden et al., 2005: Matters, 2006). Assessment is the process of gathering data. Instructors gather data about teaching and learner's achievement (Hanna & Dettmer, 2004).

### **Teacher training in competency based Assessment**

Teachers have frequently evaluated learner knowledge through recall test or by asking content questions. Different type of teacher assessments play an important role in supporting learning (Black &William, 1998: W.J. Popham, 2008b). High quality designed assessments provide insights on what and how learners are learning in time for teachers to modify or personalize instruction: they allow teachers to assess broader range of skills and abilities. These assessments give learners new roles in the assessment process that can make assessment itself a learning experience and deepen learner engagement in content.

The Assessment strategies that impact on teaching and learning to help teacher's foster a 21<sup>st</sup> Century learning in their classrooms include Rubrics: Performance –based Assessments: Portfolios: learner self assessment :peers assessment :and learner response systems A rubric allows teachers to measure certain skills and abilities not measurable by standardized testing systems discrete knowledge at a fixed moment in time (Reeves &Stanford,2009).Rubrics encourage self-monitoring and self-assessment and give structure for a final grade on an end product(H.L. Andrade.,et al2008:LEE&lee,2009 :National Research Council,2002).Rubrics function as teaching as well as an assessment tool(H.L Adrade ,et al., 2008:J.W.Popham ,1997).

Performance based Assessments are also known as project-based or authentic assessments. The strategy is used to obtain information about what learners know and the skills to apply that knowledge in a "real-world" situation.

Portfolio assessment is considered learner centered and authentic assessments of learning (Anderson & Bachor, 1998). Portfolio as an assessment tool can be smoothly integrated into classroom instruction. The Portfolio acts as a repository for work assigned and completed throughout the year.

Self-assessment main purpose for learners to identify their own strengths and weakness and to work to make improvements to meet specific criteria (H.Adrade and Valte Pedagogyeva, 2009).Ross (2006) argues that in order for self-assessment to be effective four conditions must be in place: the self-assessment criteria, learners receive feedback on their self assessments and teachers help learners use assessment data to develop an action plan.

For successful implementation of classroom assessment good quality school leadership and teachers are crucial in enabling student learning (Chetty, Friedman &Rockoff, 2013: Darling – Hammond 2000; Hattie, 2003. Teachers intensive interaction in the classrooms would have the most extensive impact on a learners learning outcomes. Teacher interaction, pedagogical

practices adopted and tools they have used to deliver their lessons play crucial roles in the learners learning process. Therefore, equipping the teacher with most appropriate competencies is crucial to prepare the 21<sup>st</sup> Century teacher to support the 21<sup>st</sup> Century learner (NIE, 2009)

#### Formative and summative assessment

Formative Assessment provides feedback and information during the instructional process, while learning is taking place and while learning is occurring. Formative assessment measures learner's progress and also teacher's progress as an instructor. A primary focus of formative assessment is to identify areas that may need improvement. The assessments are not graded and act as a gauge to learners learning progress and to determine teaching effectiveness.

### **Types of Formative assessments**

- Observations during class activities
- Homework assignments
- \* reflection
- Question and answer sessions both planned and spontaneous
- \* class activities where learners informally present their results
- ❖ Learner feedback collected by periodically answering specific questions about the instruction and their self evaluation of performance and progress

#### **Summative Assessment**

Summative assessment takes place after the learning has been completed and provides information and feedback that sums up the teaching and learning process. No more formal learning is taking place at this stage other than incidental learning which might take place through completion of projects and assignments. Rubrics are often developed around a set of standards or expectations can be used for summative assessment. A rubric is an explicit set of criteria used for assessing a particular type of work or performance and provides more details than a single grade or mark. Rubrics convey timely feedback to learners' ability to include required elements of an assignment (Stevens &Levi, 2005).

#### Theoretical framework

# **Brunner's learning theory**

According to Jerome Brunner the intellectual development includes three stages, the enactive stage of learning through actions. The Iconic stage in which learners make use of pictures or models. The symbolic stage the development of the ability to think in abstract terms. The teacher should provide appropriate instruction to the level of the learners, assist in preparation of appropriate materials for instruction. Hence the teacher should design authentic tasks with clear instructions to the learner. Teachers should provide assessment feedback directed towards intrinsic motivation.

### **Statement of the problem**

Assessment is critical for successful implementation of the Competency based Curriculum. The Kenya National Examinations Council is mandated to ensure quality assessments are administered in schools. The Government of Kenya has initiated the national roll out of a Competency based Curriculum that gives more emphasis on formative Assessment and less

focus on Summative Assessment hence Teachers are expected to design assessment tasks to measure levels of performance on learning outcomes. Assessment is integral to enhance learner's achievement. The paradigm shift on assessment poses a challenge to the teachers who are required to take charge for successful implementation despite limited knowledge on designing Assessment tasks. It is against this background that a study was conducted to examine the implementation of the competency based assessment in early years learning.

# The purpose of the study

The purpose of the study was to examine the implementation of the Competency based Assessment in early years learning, Kajiado North Sub County, Kenya.

## Research objectives

The study objectives are four namely to;

- 1. Find out the Socio demographic characteristics of the teachers handling early years learning;
- 2. Establish the teacher's capacity in assessment of learner's competencies in their early years;
- 3. Identify methods used in assessment of learner's competencies;
- 4. Examine the challenges experienced in assessing the learner's competencies.

### Research design and area of study

The study adopted a multiple case study research design. A case study enables a researcher to closely examine the data within a specific context. It selects a small geographical area or a very limited number of individuals as the subjects of study .A case study is also defined as an empirical inquiry that investigates a contemporary phenomenon with its real life context; with the boundaries between phenomenon and context are not clearly evident; and which multiple sources of evidence are used (Yin ,R.K., 1984) This design was appropriate for getting an indepth information on the implementation of Competency based assessment in early years learning. The locale of the study was in Kajiado North Sub County considered because of being a peri urban centre.

### The study population

The target population for the study comprised 52 teachers handling Grade 2 learners and 14 Head teachers in public primary schools in Kajiado North.

# Sample

17 Grade 2 teachers were sampled for the study. Purposive sampling was used to select the respondents for the study. It was used to make judgment of an expert in selecting cases (Black K., 2010).

#### **Data collection instruments**

Structured interview schedule, observation schedule and questionnaire schedule was used for data collection. The Questionnaire schedule sought information on the Socio demographic

characteristics of the Grade 2 teachers. The Structured interview schedule sought information on methods used in assessing learner's competencies, challenges experienced in assessing learner's competencies, The Observation schedule sought information on rubrics and Portfolio assessment.

# Data analysis

Data was analyzed qualitatively and quantitatively using descriptive statistics and was presented in frequency tables and figures.

# **Findings and Discussion**

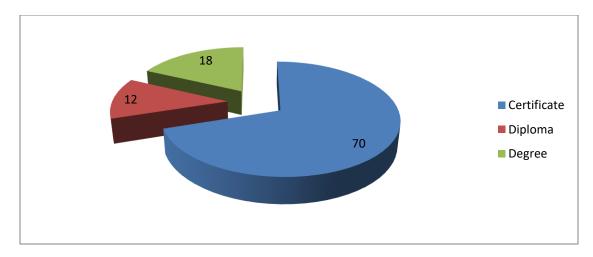
# Socio-Demographic Characteristics of the Grade 2 Teachers

Table 1: Socio demographic characteristics

Gender	Frequency	Percentage (%)
Male	0	0
Female	17	100
Total	17	100
Age	Frequency	Percentage (%)
20-29	2	12
30-39	8	47
40-49	4	23
50 and above	3	18
Total	17	100

The study findings shown in Table 1 reveal that 100% of the Grade 2 teachers were female. This would be attributed to female gender associated with Child care and charged with a responsibility of nurturing to ensure children develop to their fullest potential.

Slightly less than a half (47%) of Grade 2 teachers were between 30 - 39 years. This implies that they were mature and of appropriate age to handle the grade 2 learners.



**Figure 1: Professional Qualifications** 

Figure 1 above shows that majority (70%) of grade 2 teachers were trained at P1 certificate level while (12%) trained at Diploma in Special Needs in Education while (18%) had a degree in Early Childhood education. All the Grade 2 teachers met the minimum requirements to be a professional teacher. This implies they had the pedagogical competencies to implement the Competency Based Curriculum.

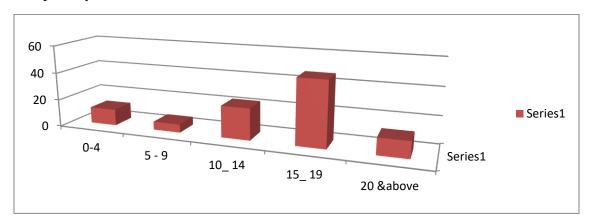


Figure 2: Teaching Experience

Figure 2 above shows that slightly less than a half (47%) of the Grade 2 teachers had a teaching experience between 15\_ 19 years teaching experience. This implies they are adequately equipped with pedagogical competencies to handle Grade 2 learners.

## Methods used in assessment of learners Competencies

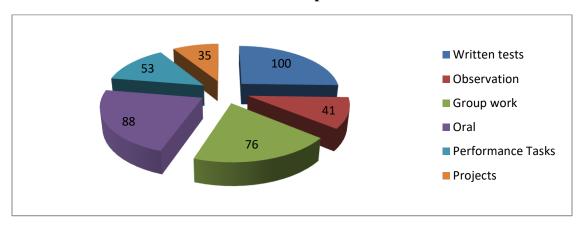


Figure 3: Assessment Tools

Figure 3 above reveals that written tests (100%) were commonly used in classroom assessment while oral questions (88%) and performance tasks (53%) and projects at (35%). This implies that despite training of Teachers in Competency based Curriculum the Grade 2 teachers had limited skills in designing assessment tasks for classroom assessment.

# Challenges experienced in assessing learner's competencies

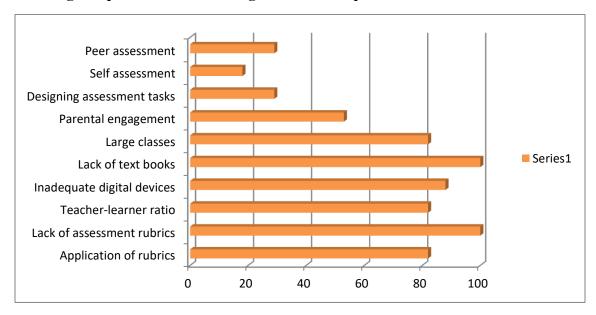


Figure 4: Assessment Challenges

Figure 4 above reveals that all (100%) Grade 2 teachers did not have assessment rubrics however, assessment sheets were available without description of performance and they also lacked text books in some learning areas which include environmental Science, Hygiene and Nutrition and Christian religious education while majority (88:%) reported inadequate digital device availability while majority (82%) reported teacher learner ratio a challenge attributed to large numbers of learners while (53%) reported parental engagement is minimal attributed to

lack of cooperation and support to provide materials for learning .and rarely participates in meetings .

#### Conclusion

In Conclusion, Teachers lack capacity in designing authentic tasks for classroom assessment.

#### Recommendations

The following are recommendations of the study:

- 1. The Directorate of Quality Assurance and Standards should continuously monitor and supervise the implementation of the Classroom assessment to ensure learning and assessment strategies are effectively implemented. This will enable the teachers use Assessment rubrics in assessing learners and provide the necessary intervention measures.
- 2. The Kenya National Examinations Council should organize for an intensive training for teachers handling the early years learning to enable them adopt the best classroom assessment practices required in the 21<sup>st</sup> Century. This includes training teachers on designing multiple assessment tasks which will enhance identification and nurturing of a learner's potential in the early years.
- 3. The Teacher's service Commission should recruit more teachers to enable effective implementation of classroom assessment. This will enable the teachers assess learners appropriately by identifying their strengths and weaknesses and providing necessary intervention measures; timely assessment feedback to the learners, parents and guardians.
- 4. The Curriculum Support officers should be facilitated by the Ministry of Education to enable them continuously supervise the implementation of early years' classroom assessment and assist the teachers where necessary to review the assessment practices. This will assist fast track change of mindset of teachers to use multiple methods of assessment in assessing learner's competencies.
- 5. Sensitization of parents on their role in Competency Based Assessment (CBA) is critical. The head teachers should organize for open days to create awareness on parental engagement on the CBC and CBA implementation. This would enhance collaborative learning important for the development of learner's competencies.
- 6. MOE should fast track provision of text books in other learning areas such as hygiene and nutrition, environmental science and Christian religious education. This would promote teacher's effectiveness in learning and assessment. Provision of digital devices to learners would also boost the development of digital literacy amongst learners.
- 7. Further research should be conducted in Private Primary schools on Competency based Curriculum and assessment implementation in the early year's learning.

### Reference

Black, K.,2010 "Business Statistics; Contemporary decision making"  $6^{\rm th}$  edition, John Wiley & Sons

Brunner, J.S Motivation (1961). The Act of Discovery, "Harvard Educational review 31:21 32

Hanna,G.S.,&Dettner,P.A(2004),Assessment for effective teaching :using context-adaptive planning.Boston ,MA:Pearson A&B

Stevens D.D., & Levi, A.J. (2005). Introduction to rubrics: An Assessment tool to save grading , convey effective feedback, and promote student learning. Sterling, V.A: Stylus

Yin, R.K.,(1984), Case study research design a d Methods, Beverly hills Calif: Sage Publications