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RESEARCH ARTICLE

INFLUENCE OF TEACHER PERCEPTIONS ON IMPLEMENTATION OF COMPETENCY BASED CURRICULUM IN PUBLIC PRIMARY SCHOOLS IN KENYA: A CASE STUDY OF RANGWE SUB-COUNTY, KENYA

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ABSTRACT

Successful Competency Based Curriculum (CBC) implementation must be cognizant of various teacher factors that are most likely to influence it. In 2013, partner states in the East African Community agreed to put in place a harmonized curriculum framework which is competency-based and one that matches global trends. The Competence Based Curriculum was rolled out in Kenya in January 2017 and is currently being implemented in lower primary school in phases from grade one to four. As at the end of 2018, eighty nine thousand teachers of the total 160, 000 teachers of lower primary imparting basic education in Kenya had been inducted trained on the implementation of the Competence Based Curriculum. Teachers are the implementers of the curriculum hence they play a significant role in developing and transforming learners Rangwe Sub County who found to be facing low primary to secondary school transition rates. Recent statistics indicated that 52% of pupils sitting Kenya Certificate of Primary Education examinations every year scored less than 250 marks. The pupils were left disoriented and demoralized causing some to either drop out or repeat as per the 8-4-4 curriculum. With the CBC in place all learners are believed to have a chance to develop their competencies and skills for nation building. It is against this backdrop that the current study sought to establish teacher factors influencing implementation of CBC in Public Primary schools. The objective of the study was to specifically establish the extent to which teacher perceptions influence implementation of CBC in public primary schools. The findings were that teacher perceptions accounted for 34.0% of the variation in implementation of CBC as signified by the coefficient 0.340. Therefore teacher perceptions were found to have a moderate influence on the implementation of Competence Based Curriculum. The study recommended that efforts should be made to ensure that teachers have a positive attitude towards CBC in order to enable the pupils also to develop a liking towards the contents of CBC for effective implementation. The findings of this study are significant to stakeholders in education as they inform policy making and amendment.

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INTRODUCTION

Competency Based Curriculum was introduced to the United States in the 1960s in reaction to concerns that learners did not have life skills needed after school and, therefore, were social misfits (Barrick, 2017). It was felt that they needed a curriculum that imparted knowledge, skills and attitudes that built broad competencies to solve everyday problems.

The application of knowledge and skills includes collecting, analyzing, Organising and synthesizing information, communicating effectively, working with others in teams, using mathematical and scientific inquiry techniques, pursuing creativity, innovation and problem-solving. The Competency Based Curriculum has since spread its wings around the globe and has withstood tests. Countries around the world have since carried out extensive curriculum reforms to better prepare learners for the higher education demands and job market

requirements in the 21st Century (Chu, Reynolds, Tavares, Notari & Lee, 2017). In 2013, partner states in the East African Community agreed to put in place a harmonized curriculum framework which is competency-based and one that matches global trends. This is because a curriculum is perceived as the means through which a country empowers its people with the essential values, knowledge, attitudes and skills that will allow them to be empowered for individual and national development (IBE-UNESCO, 2017). The competency-based curriculum is education that seeks to develop in learners the ability to apply appropriate skills and knowledge to successfully perform a function (Kenya Institute of Curriculum Development, 2016). The curriculum emphasizes on the application of skills and knowledge to real life situations. Mosha (2012), states that a competency-based curriculum is one that has specific outcome statements that outline the competencies to be developed or attained. Competency is defined as proven ability to apply skills, knowledge and personal abilities in different study or work situations (Nikolov, Sholkova & Kovatcheva, 2014). Tuning Educational Structures in Europe defines competences as a dynamic combination of knowledge, understanding, skills and abilities. Competences are obtained or developed during the process of learning by the student. A distinction can be made between generic competences (i.e. transferable competences across study areas) and subject-specific competences (i.e. competences specific to a subject area).

In Mexico for instance, the implementation of competence-based approach curriculum kicked off in 2009 via a number of reforms and changes on basic education and national education policies in which competence was viewed as the employment of skills, knowledge, values and attitudes (Malone & Supri, 2012). The competency-based approach main agenda was stimulating students in order to attain optimum academic performance. The skills, values, attitudes and knowledge were to be applied in daily activities and learners were expected to reflect them on their practical life endeavors. The Republic of Rwanda in an effort to deal with scarcity in skills in the Rwandan education system with emphasis on science and technology adopted the Competency Based Curriculum in 2015 (Ndiokubwayo & Habiaryemye, 2018). This was called for due to Rwanda's desire to build up a knowledgeable society in order to meet its global and local demands in the job market. This was in response to Rwanda's education philosophy of ensuring that every child at all levels of learning receives quality education to nurture their full potential and relevant skills, knowledge and desired attitudes that will help them fit in the society and job market. Rwanda's objective is to transform its state by the year 2030 into a knowledge-based society and middle-income country. It considers Information Communication Technology, a critical instrument in facilitating the transformation. Tanzania introduced the competency-based curriculum in 2005 to tackle the challenges facing preparation of learners in training institutions that inhibit the quality of education (Paulo, 2014). According to Komba and Kira (2015), the graduates who were the products of the old curriculum did not exhibit the competencies and skills that wholly matched the global job market demands locally, regionally and internationally. Therefore, the competency-based curriculum was intended to raise the quality of education in Tanzania and produce learners who could demonstrate and apply the acquired skills, attitudes and knowledge in problem solving in meeting the changing needs and aspirations of the society. However, five years later after

the implementation of the competency based curriculum in Tanzania, a study carried by Tilya and Mafumiko (2010) on the compatibility between the Competence Based Curriculum and teaching methods in Tanzania found out that curriculum developers, book writers and teachers lacked clarity on the implementation of the competency based curriculum as they had not fully grasped the meaning of the competency based curriculum. The Government of Kenya in January 2011 initiated a review of the national curriculum in order to originate a curriculum that would sufficiently address and resonate with the needs and aspirations of the Kenyans and equip the children with knowledge, appropriate attitudes and skills that will help them fit and compete internationally (Njeru & Itegi, 2018). A research report on the need's assessment for curriculum reform by Kenya Institute of Curriculum Development affirmed the necessity for a primary school curriculum that integrates and equips individuals with competences and skills applicable in real life situations locally and globally. It added that curriculum needed to prioritize vocational education and practical subjects (Koskei & Chepchumba, 2020). Consequently, it recommended that for effective curriculum delivery and provision of quality education, teacher capacity building, provision of learning resources and teacher training in all areas either through pre-service and in-service is fundamental. The new curriculum was aimed at creating pathways to domicile talents (Koskei & Chepchumba, 2020). The Kenyan new curriculum reforms are aimed at nurturing every learner's potential and creating an avenue for identifying, nurturing and developing the learners' talents through the learning tracks and pathways which will be provided at senior secondary (Ondimu, 2018). Based on the needs assessment study carried out by Kenya Institute of Curriculum Development and the vision and mission of the Basic Education Curriculum Framework, there are seven competencies to be developed and they include self-efficacy, citizenship, creativity and imagination, critical thinking and problem solving, communication and collaboration, learning to learn and digital literacy. Basic education is structured into three levels; early years' education, middle school education and senior school (Waiganjo & Waiganjo, 2018). According to the Daily Nation (2017, January 22nd), The new Competence Based Curriculum was rolled out in January 2017 and is being implemented in lower primary school and has been rolled out in phases from Grade One to Four currently.

The shift from content and teacher centered curriculum to competency-based curriculum is a move towards improving the quality of education by allowing children to widen their skills pertinent in their life and diverse application (Komba & Mwandaji, 2016). The government of Kenya had to pick the CBC because of its presumed desirable outcomes of putting away the emphasis on passing exams and moving towards achieving competence and promotion of Science, Technology, Engineering and Mathematics subjects. Regarding this, Sudsomboon (2010) points out that the successful realization of competency-based curriculum relies heavily on the instructors, who are required to take up the new role of coaching and facilitating rather than just being transmitters of knowledge. Therefore, teacher factors relative to the implementation of the Competence Based Curriculum must be looked into in order to ensure full realization of the objectives. Teachers are the implementers of the curriculum hence they play a significant role in development and transforming a learner. Therefore, the quality of education depends largely upon the quality of the teacher (Burghes,

2012). As such; teachers need to be highly skilled in the application of teaching methods essential to make learners learn effectively (Kafyulilo, Rugambuka & Moses, 2012). The quality and significance of the teacher cannot be compared to any variable (Reeves, 2004). The achievement of learners' is directly proportional to teacher preparation and the quality of teachers. Teacher quality and learner's achievement are related than other types of investments like teacher salaries and abridged number of learners per classroom (Darling-Hammond, 2000). The technical skills of a teacher contribute greatly to what learners' learn and affects the process of learning in schools. Buchmann (1984) points out the innumerable duty of guiding learners during the teaching process like deciding which knowledge is worthwhile, organizing learning activities, asking productive questions, giving relevant explanations and assessing learners learning all rely on the teacher's level of comprehension of what is it that learners are to be taught. In the same light, Jadama (2014) contends that how much the teacher knows and understands the subject matter defines how well teachers can teach the curriculum content to the learners. Clarification of misconceptions of knowledge to the learners largely depends on teacher's comprehension of the subject matter through which learning is affected. This means that the implementation of a new curriculum as the Competence Based Curriculum faces a great task if the teacher's technical skills are questionable and therefore must be looked into in order pave way for a successful implementation. Studies worldwide have concluded that implementing a new curriculum is a slow and complex process that is influenced by many factors, one of which is demographic variables (Inan & Lowther, 2010; Levin & Wadmany, 2008; Valcke, Rots, Verbeke, & van Braak, 2007). A gap in literature exists that analyzes the effect that age plays on the successful implementation of the Competence Based Curriculum, (Henry & Apelgren 2008). This is the gap to be filled by the current study.

SYNTHESIS OF LITERATURE ON CONCEPT OF COMPETENCE BASED CURRICULUM AND IMPLEMENTATION IN PUBLIC PRIMARY SCHOOLS

Competence based curriculum is a planned learning experiences in terms of knowledge, skills and attitudes based on the objectives a system of education. Competence based curriculum emphasizes the learning outcomes in terms of knowledge, skills and attitudes to be applied by learners to their benefit and the society at large. It is a departure from the traditional curriculum that emphasizes achievement of the objectives of a system of education that prioritize subject content. The competency-based curriculum lays more emphasis on what learners are expected to do rather than mainly focusing on what they are expected to know. Jallow (2011) posits that a competency-based curriculum is one that aims at developing in learners the ability to do things, to learn and learn how to learn and to know. According to Muraraneza, Mtshali and Mukamanaza (2017), the competency-based curriculum that is being implemented in the developing countries is borrowed from developed countries and therefore developing countries are facing challenges in trying to adapt it. Frenk, Chen, Bhutta, Cohen, Crisp and Evans (2010) further argues that in this situation a reform in curriculum is hard to plan and slows the process of implementation. The competency-based curriculum discourages mere acquisition of knowledge and lays more emphasis on skill development. There is a change from content-based to competency-based curriculum (Ministry of Education, 2005).

Therefore, there is need to change the teaching-learning approaches from rote memorization to approaches that support development of competencies and skills that can be applied in solving life problems (Woods, 2008; World Bank, 2011). The studies acknowledge that CBC is good for the current and future generation but it faces challenges to its smooth realization. This is a major a concern even to be addressed in the current study by answering the research questions.

Research Objective: The research objective was to establish the extent to which teacher perceptions influence implementation of CBC in public primary schools in Rangwe Sub County.

CONCEPTUAL FRAMEWORK

The study was conceptualized on how various teacher related factors interrelate to influence the implementation of CBC. The conceptual framework represented in Figure 1 shows the relationship between the independent variables (Teacher perceptions) and the Dependent variable (Implementation of Competence Based Curriculum). The intervening variables are Location of the school and infrastructure.

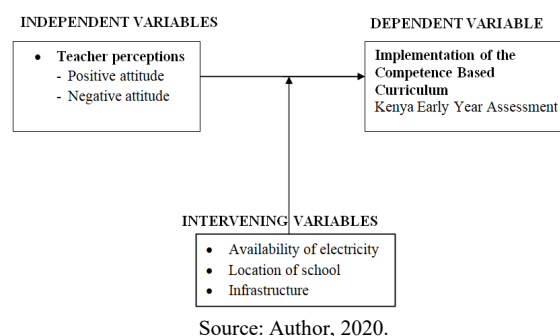


Figure 1. Influence of Implementation of Teacher Perception on Competence Based Curriculum in Schools

This study investigated the extent to which teacher factors influence implementation of the Competence Based Curriculum in Public Primary schools in Kenya. The Independent variable was the teacher factors influencing the implementation of the Competence Based Curriculum in schools. Perception is considered by many researchers as a critical factor in influencing attitude and adaptation to any new change or innovation. If perception and interpretation of an innovation varies on individual basis, they may be considered as contributing factors to an individual's attitudes towards any programme being implemented. Availability of teachers with adequate qualifications on successful implementation of integrated English curriculum but did not determine the influence of teacher qualifications to implementation of Competence Based Curriculum which the study sought to establish. Teacher proficiency and technical competence are vital quality components with regard to curriculum implementation and may include their academic as well as professional grades, subject matter, certification and coursework as (Ferguson & Hellen, 1996) reveal. Teacher quality is a significant concern towards the implementation of curriculum (Wilson, 2001) be it in lower or upper levels of education i.e. pre-schools, primary and secondary level. To some extent, teacher qualifications are effective at identifying teachers who improve the achievement of children.

Some teacher qualifications are consistently associated with increased student achievement in particular subject areas. Previous studies suggests that as adults' age and mature they view all new ideas and knowledge through the lens of their own experiences and apply those experiences to make sense of new information. As a teacher continues to teach over a long period of time, he/she acquires more skills through experience. Harris and Sass (2011) cite that all the studies of teacher productivity include some measure of teacher experience which serves as a proxy on-the-job training experience. The dependent variable is the implementation of the Competence Based Curriculum among public primary schools. Other factors such as family background, social economic status, political stability, learning environment also influence implementation of CBC but the researcher did not see them as crucial in implementation of the Competence Based Curriculum. The intervening variables were school location and infrastructure. Intervening variables are factors that moderate the influence of independent variables on dependent variables by either enhancing or reducing the influence. Random sampling helps to control their effect on dependent variables due to their neutralizing effect, among other methods. In this study, random sampling sufficed.

RESEARCH METHODOLOGY

The study adopted a mixed research method and employed a descriptive survey and correlation research designs. A conceptual framework showing the relationship between teacher factors and implementation of the Competency Based Curriculum guided this study. The population of the study included 105 head teachers, 105 Grade 3 teachers, 4200 Grade 3 learners and 6 Curriculum Support Officers. A sample of 82 Head teachers, 6 Curriculum Support Officers, 82 Grade 3 teachers and 351 Grade 3 learners were involved totaling to 527 respondents. Questionnaires, Observation guides, learner assessment tool and interview guides were used to collect data. Validity of instruments was determined by experts examining instruments and incorporating their inputs. Reliability of instruments was done by piloting in 10 schools (10%). Test-retest method was used to determine reliability whereby Pearson's (r) coefficient of 0.733 at a P-Value of 0.05 was obtained hence reliable. Quantitative data was analysed using frequency counts, percentages, means and regression analysis. Qualitative data was transcribed and analysed in emergent themes and sub themes.

RESULTS

Demographic Information of Grade Three Teachers: The grade three teachers were requested to give information about their gender, age, academic qualification and years of service. The information was as presented in the following sections.

Gender of Grade Three Teachers: The Grade three teachers were requested to state their gender. The responses are as tabulated in Table 1 below.

Table 1. Gender of Grade Three Teachers

| Gender | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male | 36 | 45 |
| Female | 44 | 55 |
| Total | 80 | 100 |

Table 1 above illustrates that females constitute a higher percentage (55%) in terms of grade three teachers compared to Males (45%). This negatively affects the education of the boy child since there are minimum male teachers to serve as their role models in their early years. This concurs with McDowell and Klattenberg (2019) who notes that the demand for more male teachers has become prevalent in educational discourse and the lack of male 'role models' in schools has an adverse effect on boys' academic motivation and engagement. As such, gender equality should be given the attention it requires when recruiting teachers.

Age of Teachers: The Teachers were requested to indicate their age bracket and the results are as shown in Table 2.

Table 2. Age Bracket of Teachers

| Age (Years) | Frequency | Percentage (%) |
|-------------|-----------|----------------|
| 21-25 | 10 | 12.5 |
| 26-30 | 10 | 12.5 |
| 31-35 | 8 | 10 |
| 36-40 | 8 | 10 |
| 41-45 | 8 | 10 |
| 46-50 | 18 | 22.5 |
| 51-55 | 10 | 12.5 |
| 56-60 | 8 | 10 |
| Total | 80 | 100 |

Majority of the pre-school teachers (22.5%) are between age 46 to 50 years and only (10%) are fifty-six and above years. This means that most of the teachers (77.5%) are below the age of 50 years. Age was important in this study as it is considered to be one of the factors influencing the implementation of the CBC curriculum and is under scrutiny in this study. From the interviews, it was revealed that older teachers preferred teaching lower classes owing to the less burden of work that is there. Also, their carefulness and passion for taking care for the young was noticeable in the interviews as one head teacher, commented that he receives requests from older teachers to be allocated classes to lower levels.

Teachers' Academic Qualification: The teachers were requested to indicate their highest academic qualification and their responses are as indicated in Table 3 below.

Table 3. Academic Qualification of Teachers

| Academic Qualification | Frequency | Percentage (%) |
|------------------------|-----------|----------------|
| Certificate | 42 | 52.5 |
| Diploma | 36 | 45 |
| B.Ed. | 2 | 2.5 |
| Total | 80 | 100 |

Table 3 illustrates that majority of the teachers (52.5%) teaching in pre-school classes are Certificate holders and Diploma holders (45%). The level of education is crucial in implementation of the CBC and adopting a new curriculum with efficiency in imparting knowledge to learners. The findings imply that most teachers have meet the minimum requirements to teach in a school. The academic qualification of teachers was essential in this study as it was necessary to determine whether the teachers are adequately qualified to implement the contents of CBC. It was also necessary so as to establish its influence on the implementation of the Competence Based Curriculum.

Teachers' Response on Number of Years of Service: The teachers were asked to indicate the number of years they have taught at pre-school level and their responses is as indicated below.

Table 4. Response on Years of Service (Experience)

| Years of Service | Frequency | Percentage (%) |
|------------------|-----------|----------------|
| 1-5 | 18 | 22.5 |
| 6-10 | 16 | 20 |
| 11-15 | 22 | 27.5 |
| 16-20 | 2 | 2.5 |
| 21-25 | 10 | 12.5 |
| 26-30 | 6 | 7.5 |
| 31-35 | 6 | 7.5 |
| Total | 80 | 100 |

From Table 4 above, it can be noted that those who had taught for less than five years were 18, those who had an experience of between 6 and 10 years were 22.5%, between 11 and 15 years 27.5, between 16 and 25 years were 7.5% and those who had an experience of 26 years and above were 7.5%. The data revealed that a greater percentage of grade three teachers had an experience of fifteen years and below in teaching.

Learners' Scores Obtained in the Mathematics Assessment Test: Grade Three learners were subjected to an assessment test to demonstrate their competencies and level of CBC implementation. The questions were marked against the ability of the learner to score all the 25 questions right. The scores are as tabulated in Table 5 below.

Table 5. Learners' Scores in Mathematics

| Learners' score (Marks out of 25) | Frequency | Percentage (%) |
|-----------------------------------|-----------|----------------|
| 1-5 | 26 | 7.5 |
| 6-10 | 70 | 20 |
| 11-15 | 35 | 25 |
| 16-20 | 61 | 17.5 |
| 21-25 | 105 | 30 |
| Total | 351 | 100 |

Table 5 gives the learners' scores that were obtained from the learner assessment tool. It shows that majority of the learners (30%) scored between 21-25 questions right while only 7.5% of learners scored below 5 questions right. It can be noted that majority of the learners (62.5%) scored above average. This implies a good performance in the competence area tested and consequently an adequate implementation of the CBC. From the performance in the assessment, it can be deduced that the implementation of the Competence Based Curriculum was on good track as most learners were found to comprehend the skills incorporated to them in line with the expectations of Competence Based Curriculum.

Research Objective: Research objective was to determine the extent to which teacher perceptions influence implementation of Competence Based Curriculum in public primary schools in Rangwe Sub County. Grade three teachers were asked to rate on a 5-point rating scale their perceptions on CBC implementation. The results were as shown in Table 6.

From Table 6 it can be observed that Grade 3 teachers indicated that teacher perceptions had a moderate influence on implementation of CBC as signified by the overall mean rating of 3.04.

The teachers were of the perception that CBC is an interesting curriculum to implement and rated its influence as moderate with a mean rating of 3.43. Grade 3 teachers further rated the influence of training of teachers on implementation of CBC as moderate with a mean rating of 3.4. The perception that CBC equips learners with appropriate skills was rated by grade 3 teachers as to a great extent influencing implementation of CBC with a mean rating of 3.73. The teacher's perception that CBC is cost effective was rated by grade three teachers to moderately influence implementation of CBC as signified by mean rating of 3.15. Equally, Table 6 revealed that grade 3 teacher perceptions that CBC implementation is a waste of resources was rated by teachers as influencing implementation of CBC to a small extent as signified by a mean rating of 2.38. Also, grade three teacher perception on CBC being well thought hence making its implementation easy was found to influence implementation of CBC to a small extent as indicated by a mean rating of 2.43. On teachers not being well experienced to give a good curriculum, the mean rating by grade 3 teachers indicated that this influenced CBC implementation to a great extent as signified by a mean rating of 3.55. Also, grade 3 teachers indicated that to a moderate extent, teachers perceived CBC as a curriculum that Kenya deserves at this point with a mean rating of 2.95. Grade 3 teachers further rated the perception that CBC is just a recycled failed policy as influencing CBC implementation to a small extent as signified by a mean rating 2.38. The data on learners' scores in the assessment test was shown in Table 7.

Two sets of data Table in 6 and 7 were regressed to establish the influence of teacher perceptions on implementation of CBC as shown in Table 8. From Table 8, it can be noted that teacher's perceptions accounted for 34% of the variation in learners' scores as signified by the Adjusted R^2 coefficient of 0.34. This means that the other 66% was due to other factors such as infrastructure, stationery, parent's social economic status which were not the subject of this study. This means that when a teacher has positive perception, then there can be a variation which is positive in the learners' competence in the subject the teacher is teaching hence successful implementation of CBC. The results also indicate that teacher perceptions significantly influenced implementation of CBC since the p-value was $<.05$, that is, it was significant at 0.000 and thus there was strong evidence to conclude that teacher perceptions and CBC implementation are correlated. This also implied that teacher perceptions are a strong determinant of CBC implementation. To confirm whether teacher perception were significant predictors of implementation of Competence Based Curriculum, ANOVA was computed and results were as shown in Table 9. From Table 9 it can be observed that teacher perceptions were significant predictors of Competence Based Curriculum implementation ($F(1, 78) = 21.066, P < 0.05$). This means that teacher perception can be relied upon to explain the implementation of CBC. This is because teacher perceptions are key in the activities of the teachers. When teacher perceptions are positive, strong and consistent, the teachers will be committed to achieving the set objectives of Competence Based Curriculum. In order to establish the actual influence of teacher's perception on the implementation of Competence Based Curriculum, linear regression analysis was computed and the results were as shown in Table 10. From Table 10, it can be observed that teacher perceptions had a significant influence on implementation of Competence Based Curriculum.

Table 6. Status of Grade Three Teacher Perceptions on Implementation of Competency Based Curriculum

| Statement | | 1 | 2 | 3 | 4 | 5 | T | MR |
|------------------------------------------------------------------------|----|------|------|------|------|------|-----|------|
| Competence Based Curriculum is an interesting Curriculum to implement. | F | 4 | 10 | 30 | 20 | 16 | 80 | 3.43 |
| | % | 5 | 12.5 | 37.5 | 25 | 20 | 100 | |
| | SC | 4 | 20 | 90 | 80 | 80 | 174 | |
| Teachers do not have adequate training to effectively implement CBC | F | 6 | 16 | 20 | 16 | 22 | 80 | 3.40 |
| | % | 7.5 | 20 | 25 | 20 | 27.5 | 100 | |
| | SC | 6 | 32 | 64 | 64 | 110 | 276 | |
| Competence Based Curriculum equips learners with appropriate skills. | F | 0 | 14 | 20 | 20 | 26 | 80 | 3.73 |
| | % | 0 | 17.5 | 25 | 25 | 32.5 | 100 | |
| | SC | 0 | 28 | 60 | 80 | 130 | 298 | |
| Competence Based Curriculum is cost effective | F | 14 | 14 | 18 | 14 | 20 | 80 | 3.15 |
| | % | 17.5 | 17.5 | 22.5 | 17.5 | 25 | 100 | |
| | SC | 14 | 28 | 54 | 56 | 100 | 252 | |
| CBC implementation is a waste of resources | F | 30 | 20 | 8 | 14 | 8 | 80 | 2.38 |
| | % | 37.5 | 25 | 10 | 17.5 | 10 | 100 | |
| | SC | 30 | 40 | 24 | 56 | 40 | 190 | |
| CBC was well thought and makes its implementation easy | F | 24 | 22 | 14 | 16 | 4 | 80 | 2.43 |
| | % | 30 | 27.5 | 17.5 | 20 | 5 | 100 | |
| | SC | 24 | 44 | 42 | 64 | 20 | 194 | |
| Teachers are not well experienced to give a good curriculum. | F | 6 | 16 | 16 | 12 | 30 | 80 | 3.55 |
| | % | 7.5 | 20 | 20 | 15 | 37.5 | 100 | |
| | SC | 6 | 32 | 48 | 48 | 150 | 284 | |
| CBC is a curriculum that Kenya deserves at this point in time. | F | 22 | 6 | 22 | 14 | 16 | 80 | 2.95 |
| | % | 27.5 | 7.5 | 27.5 | 17.5 | 20 | 100 | |
| | SC | 22 | 12 | 66 | 56 | 80 | 236 | |
| CBC is just a recycled failed policy | F | 42 | 4 | 8 | 14 | 12 | 80 | 2.38 |
| | % | 52.5 | 5 | 10 | 17.5 | 15 | 100 | |
| | SC | 42 | 8 | 24 | 56 | 60 | 190 | |
| Competence Based Curriculum is very costly | F | 30 | 20 | 8 | 20 | 2 | 80 | |
| | SC | 30 | 40 | 24 | 80 | 10 | 184 | |
| | % | 37.5 | 25 | 10 | 17.5 | 10 | 100 | |
| Overall Mean Rate | | | | | | | | 3.04 |

KEY: F=Frequency; MR=Mean Rating; %=Percentage; S=Score CBC =Competence Based Curriculum

Interpretation of Mean Ratings: 1.00 – 1.44 = Very small extent 1.45 – 2.44 = Small extent 2.45 – 3.44 = Moderate extent 3.45 – 4.44 = Great extent 4.45 – 5.00 = Very great extent

Table 7. Grade 3 Learners' Scores in Mathematics

| Learners' score (Marks out of 25) | Frequency | Percentage (%) |
|-----------------------------------|-----------|----------------|
| 1-5 | 26 | 7.5 |
| 6-10 | 70 | 20 |
| 11-15 | 35 | 25 |
| 16-20 | 61 | 17.5 |
| 21-25 | 105 | 30 |
| Total | 351 | 100 |

Table 8. A Regression Model Showing the Influence of Teachers' Perceptions on the Implementation of Competence Based Curriculum

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .597 | .357 | .340 | 5.052 | .357 | 21.066 | 1 | 78 | .000 |

Predictors: (Constant), Teachers' Perceptions

Table 9. ANOVA showing Influence of Teacher Perceptions on Implementation of Competence Based Curriculum

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 537.615 | 1 | 537.615 | 21.066 | .000 ^b |
| | Residual | 969.760 | 78 | 25.520 | | |
| | Total | 1507.375 | 79 | | | |

a. Dependent Variable : Kenya Early Year Assessment Scores

Table 10. Linear Regression Analysis for Teacher Perceptions and Implementation of Competence Based Curriculum

| Model | | Coefficients ^a | | t | Sig. |
|-------|------------|-----------------------------|---------------------------|------|-------|
| | | Unstandardized Coefficients | Standardized Coefficients | | |
| 1 | | B | Std. Error | Beta | |
| | (Constant) | -.634 | 3.419 | | -.185 |
| | perception | 4.909 | 1.070 | .597 | 4.590 |

Dependent Variable: Kenya early year assessment scores Regression Equation $Y = \beta_0 + \beta_1 X_1$

The Regression Equation is $Y = \beta_0 + \beta_1 X_1$ where X is the teacher's Perceptions. This indicates that for every one unit improvement in teacher's Perceptions, implementation of Competence Based Curriculum was enhanced by 4.909 units.

DISCUSSION

This study revealed that the introduction of the Competence Based Curriculum faced a lot of resistance because some teachers felt their duties and workload would be doubled amidst complaints of poor compensation. They also perceived it to having some skills which they did not have as they were not trained prior to its inception. Findings with the interviews for the head teachers generally indicated that the Grade Three teachers had a positive perception towards the implementation of the Competency Based Curriculum but it was also worth noting some had a negative perception because of the earlier decay from their unions and stakeholders who held different views from the onset as asserted by one head teacher, who emphasized that Competence Based Curriculum is a very interesting curriculum to implement and all my teachers are curious and positive of what it carries and does wonders in class. Only a few teachers are against the curriculum but they are slowly adjusting which is a good thing considering that the Competency Based Curriculum is here to stay. Curriculum Support Staff also concurred with this as one Curriculum Support Staff noted "Initially, we had a challenge in introducing the Competence Based Curriculum to teacher's fraternity. This greatly hindered the implementation of the Competency Based Curriculum but further stakeholder engagement has seen this change. For effective implementation of CBC, teacher perceptions ought to be positive and aligned with the goals of CBC. Teachers should be taken for more trainings, workshops and peer seminars." These findings concurred with those of a study carried out at San Jose State University by Fernandez (2017) investigating teachers' perception on preparedness and support to implement the English language arts curriculum core state standards which found teacher competency and knowledge were fundamental in execution of curriculum reforms. Capacity or teacher readiness was considered as a prerequisite to integration of reforms where teachers first obtain a comprehension of the reforms before beginning to implement the curriculum reforms. According to Eggen and Kauchak (2001), teachers' perceptions and attitudes are fundamental for effective teaching and they influence learners' performance. Therefore, teachers make decisions in teaching activity based on their perceptions, experiences and beliefs about their roles and duties in school.

CONCLUSION

Teachers' perception positively influenced implementation of competence based curriculum in primary schools. This is because teachers were found to be confident and well endowed to teach Competence Based Curriculum based on the induction they had received. This was also further enhanced by constant involvement of the Ministry of Education officials through the mass and print media besides physical visitation to schools and encouragement.

RECOMMENDATIONS

The Ministry of Education through the Teachers Service Commission and head teachers should ensure that the following activities are undertaken:

- Make Competency Based Curriculum implementation interesting.
- Provide in-service training to the teachers in areas of need.
- Provide adequate funding for implementation of Competency Based Curriculum.
- Constantly review the Competency Based Curriculum.
- Enhance teachers' compensation so that they concentrate on implementation of Competency Based Curriculum.
- Provide adequate infrastructure and teaching learning resources.

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