



Original Article

The Relationship between Teacher Training and Implementation of a Competency-Based Curriculum in Public Primary Schools, a case study in Kericho county, Kenya.

Dr. Beatrice Ngeno, PhD*

¹Kenyatta University, P. O. Box 43844-00100 Nairobi, Kenya.

*Author for Correspondence Email: ngenoc.beatrice@gmail.com

Article DOI: <https://doi.org/10.37284/eajes.6.1.1138>

Date Published: ABSTRACT

13 March 2023

Keywords:

Curriculum,
Competency-based
curriculum,
Teacher Training,
School
preparedness.

A competency-based curriculum is a curriculum that allows students to develop prescribed competencies. In Kenya, the Competence-Based Curriculum implementation of 2-6-6-3 was adopted in January 2017. This education system replaced the 8-4-4 system of education and it aimed to nurture the learners' talents. School preparedness for the new curriculum change in Kenyan public primary schools is very important in the education policy framework. When curriculum change takes place in education, teachers as instructors and implementers should be prepared to be competent in their work. Educators have a responsibility to ensure that today's learning content meets tomorrow's global demands for every learner. However, in Kenya, various stakeholders have expressed concerns regarding school and teachers' preparedness for the Competence-Based Curriculum. This aim of this study was to find out whether there is a relationship between teacher training and the implementation of a competency-based curriculum in public primary schools. Dewey's Social Constructivism theory guided the study. A descriptive survey design was used in this study. The target population of the study included 24 Curriculum Support Officers (CSOs'), 524 head teachers, and 610 Grade 1 teachers. The sample size was 6 CSOs, 52 Head teachers, and 61 Grade 1 teachers. A saturated sampling technique was used to select all the 52 head teachers from 52 schools. Simple random sampling was used to select the schools and CSOs. A purposive sampling technique was used to select Grade 1 teachers in Kericho County. Data was collected using interview schedules, questionnaires and observation technique. Quantitative data were analysed using descriptive statistics in form of percentages, means, and standard deviation, while inferential statistics were correlated using Pearson product-moment correlation. Qualitative data was analysed using themes and sub-themes. The findings established the teachers had a correlation of 0.369 with a calculated value of 0.005 and were significant to the study. For teachers, it was 0.500 with a calculated value of 0.00. The calculated p-values of 0.00 and 0.004 were significant. The study recommended that the government should fast-track more teachers' training and employ upgraded teachers who were already CBC

compliant to meet the gap of insufficient teachers due to high population of learners. The results of this study were important for the successful adoption of the CBC and for educational stakeholders.

APA CITATION

Ngeno, B. (2023). The Relationship between Teacher Training and Implementation of a Competency-Based Curriculum in Public Primary Schools, a case study in Kericho county, Kenya *East African Journal of Education Studies*, 6(1), 277-291. <https://doi.org/10.37284/eajes.6.1.1138>.

CHICAGO CITATION

Ngeno, Beatrice. 2023. "The Relationship between Teacher Training and Implementation of a Competency-Based Curriculum in Public Primary Schools, a case study in Kericho county, Kenya". *East African Journal of Education Studies*6(1), 277-291. <https://doi.org/10.37284/eajes.6.1.1138>

HARVARD CITATION

Ngeno, B. (2023) "The Relationship between Teacher Training and Implementation of a Competency-Based Curriculum in Public Primary Schools, a case study in Kericho county, Kenya", *East African Journal of Education Studies*, 6(1), pp. 277-291. doi: 10.37284/eajes.6.1.1138.

IEEE CITATION

B., Ngeno, "The Relationship between Teacher Training and Implementation of a Competency-Based Curriculum in Public Primary Schools, a case study in Kericho county, Kenya", *EAJES*, vol. 6, no. 1, pp. 277-291, Mar. 2023.

MLA CITATION

Ngeno, Beatrice. "The Relationship between Teacher Training and Implementation of a Competency-Based Curriculum in Public Primary Schools, a case study in Kericho county, Kenya". *East African Journal of Education Studies*, Vol. 6, no. 1, Mar. 2023, pp. 277-291, doi:10.37284/eajes.6.1.1138

INTRODUCTION

Competency-Based Curriculum (CBC) is one of the curriculums offered in most countries worldwide including Kenya. According to Christensen and Lane (2016), the Canadian government implemented the CBC in 1992 nationwide. In 2020 the Forum for Research and Policy in Communication (FRPC) indicated that Technology, Reading, and Mathematics were also successfully implemented in the United States on Programme for International Student Assessment (PISA) tests. The Government of Scotland implemented the CBC curriculum and the evaluation was above average basing on PISA tests which were successful. In Finland, CBC was successfully implemented and ranked top globally in 2016. Mbarushimana and Allida (2018) carried out a study in Rwanda and it indicated that the CBC was implemented in 2015. CBC was more skill-based and more practical to the environment in daily life. Teachers were also equally comfortable with the intricacies of changes, especially in cases where they were actively involved and prepared as required by the curriculum change. They were involved in preparations through

campaigns, teacher involvement, teacher preparedness, as well as improvement of the modalities and guidance of curriculum implementation, which led to the success of CBC implementation.

CBC was started in Kenya in 2017 to replace the 8-4-4 system that was introduced in 1985, and it was meant to produce self-reliant individuals, but it failed to meet its objectives. According to ministry of education Republic of Kenya (2017), the CBC approach allows meaningful ties while focusing on skills within and across subject areas. Subjects continue to be taught and core competencies are generated over time. The subjects taught in the lower primary are Literacy, Kenya sign language/Kiswahili language activities purposed for deaf learners' mathematical activities, nutrition, and hygiene activities, indigenous language, environmental, religious education, movement and creative activities. It is expected that by the end of the early years of education (Grades 1-3), the learner will have achieved the following skills: Demonstrate basic academic skills in reading and numeracy; Communicate appropriately in many

situations using verbal and/or non-verbal forms; Demonstrate adequate social relationship etiquette; use imagination and logical thought capabilities to overcome problems; Explore the instant learning and entertainment world; Hygiene, diet, hygiene and protection skills are taught to enhance wellbeing and health; Demonstrating the acquisition for healthy living of mental, spiritual, physical, spiritual, aesthetic and moral development; demonstrate the appreciation for harmonious coexistence of the rich and varied cultural heritage of the country; Apply digital literacy skills for enjoyment and learning.

Teachers are important resource personnel in any education system. Teacher Training is a key aspect that contributes to the successful implementation of the curriculum. For proper CBC implementation, teacher training is vital. A study done by Kabombwe and Mulenga (2019), in primary institutions in Lusaka, Zambia on competency-based curriculum implementation. The method used was an explanatory sequential style which was a mixed technique. This research focused on schools in Lusaka's tea areas. Analysis included a total of 80 teachers and 10 were interviewed. The respondents were chosen arbitrarily and intentionally. Questionnaires were used collect information from teachers and interview guides guided one specialist, chief curriculum, 2 Standard Officers, one specialist subject curriculum, 5 Head teachers 20 Teachers, and 10 Heads of Sections. Document study and findings of the classroom lesson were also undertaken. Using ratios, objective data was analysed. Thematically, qualitative data were analysed. The study showed that 67% of history teachers had no knowledge of the CBC or outcome-based learning concept. It also emerged that learning processes selected history secondary schools; historical teachers had inadequately used the CBC or outcome-based strategies because they had no knowledge experience with expertise in competence-based methods. The study suggested that in-service instruction and continuous

professional development meetings in institutions should be strengthened by the Ministry of General Education (GE); hence efficiency was enforced in all institutions. Momanyi and Rop (2019) carried out a study on teacher preparedness for competency-based curriculum implementation in Kenya: A survey of early-grade primary institutions of instructors in Bomet sub-county, Kenya was done. It was guided by questionnaires and interview plans to collect data. The study showed that educators were inadequately trained. Their understanding of the implementation and assessment of CBC was unclear to them. KICD and the Ministry of Education were encouraged to schedule additional training sessions in pedagogy, appraisal, and preparation of teaching documents to bridge capability gaps. (Kubai and Owiti 2022) agreed also that universities and teachers training colleges should put in place trainings that enhance smooth transition of CBC curriculum. It is important to carry out a study on teacher training and implementation of CBC in Kericho County. Therefore it was important to carry out a study on relationship of teacher training and implementation of CBC in public primary schools Kericho County.

LITERATURE REVIEW

Dewey (1938) on social constructivism suggests that the learning environment can create a learner who can cope successfully with new developments around the world. Therefore, the program should not be viewed as completed abstractions but rather as a preconception of the learner. Dewey's social theory pointed out the theory components based on educational, political, and economic institutions. It should maintain an equitable and exploitative condition that favours one group or another. He added that schools should be agencies of human liberation.

Gutek (2013) pointed out idealism, realism, pragmatism, existentialism, and postmodernism concepts by Dewey. Liberation thought manifests itself in education through gradual processes,

moderation, and incremental changes in curriculum change. Postmodernists tend to warn against this by permitting one frame of reference to dominate education. Therefore, CBC should be a process of gradual change.

Dewey's theory in his philosophy was related to education in various methodologies. He linked education to experiences, society and democracy. Since this theory involved the instincts in the learning areas, it guided the study, especially focusing on the new competency-based curriculum.

REVIEW OF RELATED LITERATURE ON TEACHER TRAINING

According to the World Bank (2019), the economy is evolving quickly in such a way that it is not enough to attend school. Learners should acquire fundamental skills and expertise in core subjects such as algebra, vocabulary and science to excel in both life and career. They must also learn how to communicate efficiently, how to solve challenges and work in teams. This agrees with the new CBC program in Kenya, where realistic orientation is required for learners. This is crucial to improve human dynamics in successful societies. It will lead to thinkers and self-driven individuals. This called for a curriculum that is relevant in this current century. European Union (2018) indicated that the curriculum for primary education in Greece is a thematic curriculum framework for compulsory education. This promotes the cognitive interconnection of different subjects; hence, learners have a better understanding of concepts.

Hernández and Menéndez (2017) pointed out that Competency-based Education (CBE) individuals lack sufficient labour ability or potential. They continued that it is the presentation of experience encountered in schools or universities around the world. Good communication-critical, thought and lifelong learning are the competencies that are facilitated. Activities in teaching practice are known as simulations and conditions in real life that are

meant to be realistic. In terms of approaches to competence testing, multiples are used to guaranteeing the optimal degree of competence. Competence performance is ranked as pass or not pass and with transcripts of a narrative. The viewpoint of the CBE profit learner is also taken into account. The key function of CBE is that after a curriculum is completed, it weighs what a learner can do. It can also be modified at various levels by colleges or universities of varying ages/sizes depending on approaches and resources. However, CBE has given evidence to solve the worldwide challenge. This was in the supply and demand gap, knowledgeable of personnel and can be managed if all responsible institutions cooperate.

According to Rw'abarezi (2018), the CBC implementation in Rwanda has taken shape with the majority of teachers having been taught and gained knowledge in CBC. The main challenge was that the majority of the teachers resisted change by anchoring to the knowledge-based curriculum. Teachers perceived that the new curriculum demanded a lot from them and was more complex than the knowledge-based curriculum. The Competency-based curriculum emphasises the use of a continuous assessments method compared to the exam-based one. The assessments were to assist in the identification, development and management of the capabilities and skills of the learner.

According to UNESCO (2017), foundation program creation and a driving force behind the mechanism of reform indicated that it was a classroom organising principle. The CBC program stated that by the end of the learning children should be able to perform classroom assignments competently. These classes of situations are classified either on the basis of real-life or work-related situations or on the internal rationale of the discipline in question. This may depend on the form of education. It was also intended to step away from the idea that the program is primarily enforced by the replication of theoretical experience by students and the memorisation of information arising from the

realistic study. Globally, the traditional methods of education have left gaps: it has not met the importance of outcomes such as fulfilling curriculum expectations and preparing learners for college and university. It also did not meet employers' industry needs and unprepared learners for life in general. Teaching techniques were important when implementing CBC in Kenya. There should be a well-updated and learner-centred approach.

The 8-4-4 system was introduced in 1985 by the Government of Kenya. The education system was meant to produce self-reliant individuals. On January 1995, the presentation from Mackay in nineteen eighty-two was that the 8-4-4 system of education was adopted. King and McGrath (2002) pointed out that the principle of action adopted by 8-4-4 emerged from the concern that the starting point of education may not have a sufficient state that was required in facilitating and distributing individual employment, which is maintained. The 8-4-4 principle of action adapted and emerged when there was an idea that learners should be equipped with skills of being self-employed. This would allow learners who dropped school early to have individual work or stable jobs at all levels but did not bear fruits. King and McGrath (2002) noted that young people would be geared to individual employment by the new approach. Framework strongly emphasises the training of attitudes and skills for the world of work especially self-employment work. However, only the program material and emerging problems were discussed in these reviews. In addition, the reviews did not discuss the fundamental issues that improved Kenyan citizens' competitiveness in developing economic development and did not consider the talents, potential and gifts of the learners. The reviews did not discuss the fundamental issues that improve the citizens of Kenya in competitiveness in developing economic development. The curriculum did not also consider the potential, gifts, and talents of the learners.

According to Wanjohi (2018), the 8-4-4 system was based on the national goals of education, amongst them promoting national growth, social, economic, technical, and industrial needs. Secondly, it was to encourage human growth and self-fulfilment, talents and gifts for learners of Kenyan citizens. Thirdly, was to promote religious values and sound morals. Unfortunately, these aims were not fully satisfied because of massive exam irregularities and non-self-reliant citizens. Council of Governors, the education experts from the government and the Curriculum Development Institute of Kenya, have been providing technical support to the County Governments in the implementation of a Competency-based curriculum (2-6-6-3). This was to achieve the targets that were not met by the 8-4-4 curriculum. (Council of Governors, 2019). According to KICD (2017), the new curriculum adopted four levels of learning including early year's education, Middle-level education, Tertiary colleges and University level. The Early years are broken down into pre-primary and lower-primary education. The pre-primary level is further broken down into Pre-primary one and Pre-primary two. Learners then proceed to lower grades, where the learners spend three years at this level. Later, the learners join a middle school which comprises three years in upper primary and proceed to junior secondary level. At this level, the learners are given an opportunity to realise their abilities and interests where they are guided in choosing the subjects in relation to career directions at the senior secondary school. The new system relies on cumulative evaluation from the continuous assessment tests administered at all levels. The learners later proceed to tertiary institutions of higher learning, which consist of undergraduate, Technical, and Vocational Education Training (TVET) and diploma programs.

Ogutu (2020) carried out a study on a creative art change in the curriculum that promotes learner growth and development in Kenya. The study pointed out that Kenya is focused on achieving the priorities of developments sustained with the four

Big Kenyan Agenda. The Ministry of Education created a new 2-6-3-3-3 education framework known as the Knowledge-Based Curriculum, whose mission is to foster the ability of every learner. It further noted that there was an overwhelming evaluation from numerous local and foreign stakeholders. It also observed that in the newspapers, radio and television chat shows had overwhelming assessment from multiple stakeholders domestically and globally elicited debates. The study revealed that in 1992, 1995, 2002, 2009, and 2011. The Kenyan government organised a specific task force to revisit the 8.4.4 curriculum, which was to evaluate professor Odhiambo who is late. Late professor stated that, learner's talents never did well in their achievements and was negative impact in frightening the accomplishment of Kenyan 2030 Vision. This research showed that the education of creative art that promotes the growth and development of the mental, physical, cognitive, and imagination of a child in different ways. Creative art analysis in levels of both developments with the growth of young kids was involved. This research adopted a hypothetical qualitative review. The study further showed that art and craft should be taken into consideration in every curriculum design due to underlying mental and developmental influence that develops the full potential of a child. Creative art is essential in child development and growth because it enhances the nurturing of child talents. This is one of the priorities in the curriculum based on competence.

Findings showed that schools had inadequate structures and portrayed teachers' professional needs. It further added that most teachers were not prepared to come out of the conventional way of doing duties. The study added that each school had engaged in certain activities of teacher development as directed by the Ministry of Education. It was also noted that the use of human services available from the inside classroom led to appropriate assistance from the external population. It further emerged that

most schools conducted teacher development events. Teachers faced of many challenges, despite the current barricade of laws and regulations. It was further noted that most of the planning committee members for schools could continue teacher development projects on their own if they were funded by higher education authorities. This study noted that most members of the School Planning Committee could continue their teacher development projects if necessary, and funding has been offered by the higher education authorities. This study recommended that better instruction and sufficient support for schools for teacher growth should be funded by higher education agencies. It also noted that stakeholders ought to be made aware of the success of teacher career development and personnel training processes in classrooms. Education is also very critical for Competency-based program creation and execution. Therefore, it increases the skill of teachers.

A study done in Cameroon by Chu et al. (2018) on the implementation of a competency based-curriculum indicated that Cameroon-instituted Competency-based instruction showed a rise in the repeat rate of primary school children to the tune of 41% per academic year, which is far opposite to the standards of the Jomtien Declaration of 2000. Since then, during difficulties in the application of the CBC, family education in the country has been studying the right methods. This study was purposively created to evaluate the application of CBC from the viewpoint of the utilisation of services by students. The design analysis was analytic descriptive was used in the study. Literature reviews academic journals, books, and other sources relating to the specific subject, field of study, and facts which offer a listing, overview, and objective assessment of these works. It reported that human growth is now facing the demands of information culture and needs a wider commitment to education maintained by the widening of views of learning. Schooling and preparation of Competency-based are more commonly used in studying specific

knowledge than abstract learning as an approach to teaching and learning. This has been described as the best curriculum that provided the world economy with trained, knowledgeable people.

Mwoma et al. (2020) carried out a study on the experience of incorporating support for early childhood development into bay-community initiatives in rural areas in Kenya. The study pointed out that over 66% of children in sub-Saharan Africa continue to be impacted by low performance in growth, contributing to worsening early inequality. The Care for Child Development (CCD) kit has been created by UNICEF and WHO to support caregivers as a community-based effort to create stronger relationships between them and young children. The outcomes of the qualitative interviews between caregivers and BFCI project managers in this study found that educating volunteers in the health community on CCD enabled them to include CCD messages in group therapy including those of the BFCI. Besides, more realistic educational opportunities and an organised approach to training, refresher training and the availability of curriculum materials would lead to more support for childcare in Kenya. The study recommended that when introducing any program, funding and adequate preparations were very necessary.

Ondimo (2018) carried out a study on the readiness of teachers for the implementation of the competency-based curriculum in individual pre-institutions in the Dagoretti North sub-county in Kenya. The study was carried out to evaluate of readiness of teachers to implement a competency-based curriculum. Development of the subject matter of teachers should be aware of the assessment of their technical skills in competency-based implementation hence determining especially the expectations in individual schools. The study adopted a descriptive research design, where thirty-eight preschool teachers, thirty-eight teachers and three hundred and twenty preschool teachers were involved in the study population. Surveys containing responses from ninety-six preschool

instructors and twelve instructors were chosen using basic random sampling. Data was obtained using questionnaires and timetabled interviews. Both quantitative and qualitative data were analysed. With the assistance of the SPSS software package, the quantitative data were collected, interpreted, and summarised into frequency charts, percentages, and bar graphs. Out of 108, one hundred and three was the response rate which was (95.4%). The research results found that most school managers and preschool instructors completed teaching practice, but most teachers decided to adopt the CBC program positively. The majority of educators were sufficiently trained and armed with topic material information from the results. The results revealed that most teachers were not compliant with ICT, and most of them were unqualified because they lacked technical know-how.

The current study was based on the relationship on teacher training on the implementation of competency-based curriculum public primary institutions in Kericho County.

RESEARCH METHODOLOGY

The study utilised a descriptive survey design. The descriptive research design was useful for educational fact-finding because it provides a great deal of information (Kombo & Tromp, 2006). The design was appropriate due to the allowance of questionnaires, interview schedules, and observation and checklist instruments of research. Questionnaires were widely used frequently in the descriptive research design because they obtained facts about current conditions and were useful in making inquiries concerning their views and opinions (Kothari, 2004). The instruments gave the school head teachers, Grade 1 teachers and CSO officers enough time to give well-thought answers on the school preparedness in the implementation of CBC in public primary schools in Kericho County.

Both quantitative and qualitative techniques guided the study. Data collection methods included the use

of questionnaires, which were both closed and open-ended. The CSOs responded to an interview schedule. The observation schedule was used by the researcher to check on the physical infrastructure and teaching and learning resources found in schools.

The study population consisted of 524 head teachers, 610 Grade 1 teachers and 24 Curriculum support officers (CSOs) in Kericho County. The county had 524 public primary schools. The researcher purposed to select the Grade 1 teachers because they are experienced since they have handled the learners through a competency-based curriculum system for the last three years. The Head teachers were also purposively selected for this study since they were the school administrators and they had experience on how schools were prepared for CBC implementation.

The instruments used included questionnaires, interview schedules and observation. The distributions of questionnaires were given to Grade 1 teachers and head teachers. Questionnaires were both open-ended and closed-ended.

Teacher Training and Implementation of Competency-Based Curriculum

Table 1 presents responses given by the head teachers and grade one teachers on whether there was an influence of teacher training on the implementation of CBC in public primary schools in Kericho County. Responding on whether they had been trained on competency-based curriculum or having basic knowledge in relation to CBC, which enhanced successful implementation. The head teachers rated at 3.94 with a standard deviation of 0.87 and 4.12 with a variance of 0.78 . Grade one

teachers rated it higher compared to the head teachers. Basic Knowledge of CBC is very important to assist in proper implementation. Though it was rated highly by the head teacher and teachers, during the interview, the CSOs revealed that not all teachers were trained. This was further clarified by one of the CSOs, who said,

“All teachers should be trained so that they should be conversant with the CBC curriculum. This will lead to proper implementation of the curriculum”.

It was also mentioned by the respondents in open-ended questions that early childhood training was one of the important trainings. Since lower grade is the foundation of the school, it important to have all teachers teaching these grades being trained in early childhood education. Since CBC curriculum involves the identification and nurturing of talents, it is important for the teachers handling lower grades to have knowledge of early childhood. This study agrees with the study done in Mogadishu, Somalia, by Makaran (2015) on the training of in-service or pre-service teachers as a fundamental process of new curriculum implementation. This study indicated that teachers should have a support system through the establishment of regional teacher resource centres and the training of facilitators. Workshops, seminars, panel discussions and orientation programs should be organised for teacher involvement being the curriculum implementers. This therefore, meat that teacher involvement in training, especially during and even before the implementation, should be given proper thought to enhance successful CBC implementation.

Table 1: Headteachers and grade one teachers’ response on the influence of teacher training and implementation of CBC in public primary schools in Kericho County

Statement	Headteachers		Grade one teachers	
	Mean	Std. Dev.	Mean	Std. Dev.
I have basic knowledge of the new CBC	3.94	0.87	4.12	0.78
I have attended Competency-based curriculum training	3.92	1.14	4.04	0.94

I have attended computer training	3.12	1.38	2.95	1.26
I regularly use the internet to integrate learning	2.98	1.38	2.53	1.31
I have training on learner assessment on CBC	3.22	1.02	3.69	1.09

Field data, 2020

This current study does not concur with a study carried out in Tanzania by Makunja (2016) on teachers' difficulties in applying to the CBC program. The report stated that one of the key issues concerning the adequate execution of the program was the inadequate training of teachers. This was an indicator of minimal teacher preparedness and preparation during the learning processes for pedagogical application skills in CBC implementation. The findings additionally showed that teachers were willing to embrace the CBC. This is in line with the study done by Welu et al. (2018) in Makueni County, Kenya. It pointed out that teachers' training assisted in improving performance. The training was conducted through in-service and pre-service training, though the research did not investigate the implementation of CBC. The current research found that the in-servicing of teachers was also conducted to make CBC implementation successful. Therefore, the study suggests that all teachers have at least basic knowledge of CBC, and this includes teachers' training on early childhood in Kericho County.

Training on Competency-based curriculum was rated by the Head teachers with a mean of 3.92 and a standard deviation of 1.14, while grade one teachers had a mean of 4.04 with a deviation of 0.94. The teachers rated it higher compared to the head teachers. All the CSOs, head teachers and grade one teachers agreed that proper utilisation of seminars and workshops would aid the implementation of CBC in Kericho County. They indicated that the teachers were not ready for CBC implementation when it was rolled out. In fact, one of the CSO, when asked, said that;

"No, we realised that majority were not ready for implementation of competence-based curriculum, therefore, we are rolling out

training which will ensure proper competence for the implementation", according to another CSO, "we have utilised seminars and workshop to ensure that competency-based curriculum is given to all teachers in primary school."

Similar information was given by another CSO in Kericho County. Therefore, the majority claimed that they did not have sufficient training on the CBC curriculum and especially how to rate the learners. This was debated especially on how to rate a learner exceeding expectation. Further information on the preparedness of teachers in training colleges, as given by the CSO, revealed that diplomas in teacher training were being introduced CBC curriculum to meet the current education trends. This implied that despite the training, a competency-based curriculum needs further improvement of capabilities of teachers through on-job training and also inculcating the training in universities and colleges hence filling the gap of junior secondary teachers who will teach grade seven. In-service training of teachers was also mentioned. This was indicated by the head teachers and teachers' training was done every holiday in agreement with the CSO. Therefore, this implies that there is an effort that has been made by the government to improve training to ensure that all primary school teachers are well conversant with CBC. The CSOs pointed out that they have organised training on CBC for one week. It was further clarified by one of them that,

"The training were organised during every holiday session, and at least two teachers from every school were trained. It is important to have in-service training for effective implementation of the competency-based curriculum".

This was also pointed out clearly by the teachers that CBC training added more skills and knowledge to the profession. The competence of a teacher is important in that they should have the skills and knowledge to teach the learners. The head teachers and CSOs indicated that more training on CBC should be fast-tracked. This is because they felt that when the training is complete, the teachers will be more effective and conversant. In fact, one of the CSO said,

“Since there is a set programme in every session to train teachers, we intend to ensure that all teachers should be CBC compliant by the end of this year”.

This was an assurance that by providing consistent training such that most teachers would be well-equipped. This study disagreed with a study done by Ondimu (2018) on teachers' preparedness for CBC implementation in private preschools in Dagoretti North Sub County, Nairobi. The results found that most of the head teachers and preschool teachers completed in-service instruction, but most of them decided that they were able to adapt to the CBC program. It demonstrates that most of the teachers were adequately trained and equipped with knowledge of the subject content. It also concurs with the study carried out by Momanyi and Rop (2019) on Teacher preparedness for the implementation of CBC Kenya: A Survey of Early Grade Primary School Teachers' in Bomet East Sub-County. This showed that teachers are poorly trained. Their comprehension of CBC is unclear and their implementation and assessment have been impaired by this.

Computer training is necessary to improve teachers' delivery of ICT integration. The head teachers rated it with a mean of 3.12 with a variation of 1.38, while grade one teachers had a mean of 2.95 with a variation of 1.31. The head teachers rated it highly compared with grade one teachers on having basic knowledge of computers. Similarly, the use of the internet to integrate learning was rated at a mean of

2.95 with a variation of 1.38 by the head teachers. Grade one teachers had a mean rate of 3.53 with a deviation of 1.31. Grade one teachers rated the use of the internet to integrate learning highly compared to the head teachers. The interview findings revealed that most teachers are not well conversant with the use of computers. This was clarified by a CSOs', who said,

“During the lessons, some teachers integrate ICT during the teaching and learning process. It is evident that further training is required and provision of ICT gadgets to aid the lessons”.

To improve the integration of ICT training of teachers is very important to enhance efficiency and confidence. It agrees with a study undertaken by Nasara and Agbo (2019) on the comparative level of expertise needed in computer use in the assisted design for pattern drafting in Nigeria by lecturers and students. The study found that in teaching and studying pattern drafting using Computer Assisted Design for pattern drafting, both lecturers and students have low levels of competence. In order to boost computer training in Computer Assisted Design for pattern drafting in tertiary institutions in Nasarawa Province, Nigeria, the study proposed that school administration should have effective personnel development policies. It also disagrees with the research undertaken by Ondimu (2018) on Teachers' Preparedness in Dagoretti North Sub County, Nairobi for the introduction of the CBC in private preschools. The study showed that most teachers were not introduced to ICT and that most were not qualified because they lacked technical knowledge. This agrees with the research on Teachers' Computer Literacy in Selected public primary schools in Ainamoi Sub County in Kericho County, Kenya, conducted by Ngeno et al. (2020). It demonstrated that the training of computer teachers that was done on May 2015 did not appeal to all the teachers in the sector. The study found out that the government wanted to conduct workshops and in-service services to cater to teachers who are

still in the sector but are non-compliant with ICT integration in learning.

Training on Learner assessment based on the new curriculum was rated at a mean of 3.22 with a variation of 1.02 by the head teachers. Grade one teachers had a mean of 3.69 with a variation of 1.09. Grade one teachers rated it slightly higher than the head teachers. This was further revealed during an interview that teachers have been trained in the assessment of learners. It was cited that,

“Training on assessment has been done, but some teachers need to be trained more for smooth implementation of CBC”.

Teachers mentioned that there is a need to examine the CBC curriculum at every level for healthy completion among learners. This could be one of the core reasons teachers have a negative attitude

towards the new curriculum. Since 8-4-4 was exam oriented, the teachers felt like the students needed to be examined so that they were able to determine the learners’ abilities. This concurs with the study done by Waweru (2018) on the influence of CBC implementation on teacher preparedness in public primary schools in Nyandarua Sub-County, Kenya. This study recommended that training programmes should be carried out by the ministry of education on assessment, lesson preparation and infusion. CBC instructional materials should be delivered to schools on time to facilitate instruction. Training teachers on assessment is very important because it enables teachers to do proper evaluations of learners’ progress.

The results were further analysed using Pearson Product Moment Correlation. It was interpreted using below *Table 2*.

Table 2: Pearson Product Moment Correlation Coefficient (r) Matrix for Teacher training and Implementation of CBC for both head teachers and grade one teachers

	Teachers training	Implementation of competency-based curriculum
Head Teachers training	Pearson Correlation	+0.494*
	Sig. (2-tailed)	0.00
	N	50
Teacher Training	Pearson Correlation	+0.369**
	Sig. (2-tailed)	0.005
	N	57

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Field data, 2020

Table 2 presents the Pearson *r* correlation of the influence of teacher training on the implementation of a competence-based curriculum. Headteachers training Pearson correlation to the implementation of the competency-based curriculum was +0.494 with a calculated value of 0.00. This was a moderate positive influence based on the interpretation given by Leedy and Ormrod (2005) in *Table 2*. The set *p*-value was *p*<0.05. This means that any value below the set value is significant. Hence, the calculated value is significant. Grade one teacher’s correlation was +0.369** with a calculated value of 0.005. This

means it was a moderate positive influence. The calculated *p*-value, which is 0.005, is significant. The influence of teacher training on CBC implementation was significant. Hence, an alternative hypothesis was accepted. According to the study teacher training has a moderate positive relationship with the implementation of CBC as indicated by the correlation of both the head teachers and grade one teachers. Therefore, teacher training has an influence on CBC implementation in Kericho County.

Based on the head teachers' and grade one teacher's responses on teacher training, it was very important and it had an influence on the implementation of the CBC curriculum. This disagrees with the study done by Mandukwini (2016) in South Africa on challenges towards CBC implementation in high schools, Mount Fletcher, Eastern Cape. It also correlates with the competency-based program implementation analysis undertaken in Cameroon by Chu et al. (2018). It proved that most teachers really needed to learn more on CBC content. It was observed that even for those with a strong understanding of the successful implementation of the CBC, due to inadequate resources and insufficient knowledge and resource uses, was a big obstacle in most cases.

The research on the relationship between teachers' standards and student academic successes and student academic success in STMA by Bonney (2015) Junior high school in Western Region, Ghana is not in accordance with the present report. The study showed that instructor competence had no major impact on the success of students. It also concurs with the research undertaken by Makaran (2015) on factors affecting methods of curriculum creation in secondary education in Mogadishu, Somalia. This study showed that in-service or pre-service teacher preparation is a central phase in the introduction of modern curricula. It coincides with the research by Mwoma et al. (2020) on the study on experience of implementing early childhood development assistance in rural Kenya's Baby Friendly Neighbourhood Initiative. The study showed that more realistic educational opportunities and an organised approach to training, refresher training be appropriate. The availability of materials to facilitate the programme would contribute to more support to CBC curriculum in Kenya. It is also in accordance with the research undertaken by Sifuna and Obonyo (2019) in Kenya on competency-based education in primary schools. The study showed that it was not designed and executed consistently and further noted that a number of teachers had

insufficient instruction on its contents and instructional techniques, which continues to impede the implementation of critical curriculum information and skills. It is really important to educate teachers based on the results of this report since it will contribute to the effective adoption of the CBC curriculum. Dewey (1938) pointed out that the subjects' area activities to learning life. This theory supports continuous, participatory, and experimental learning hence, give light to continuous training of teachers for successful implementation of CBC.

CONCLUSION AND RECOMMENDATION

Based on the findings, the following conclusions were made; Pearson correlation was +0.494 with a calculated significance value of 0.00. This is a moderate positive influence. The set p-value was $p < 0.05$. This means that any value below the set value is significant. Pearson correlation for grade one teachers was done. The correlation was +0.369** with a calculated significance value of 0.005. This also was a moderate positive influence. Teacher training is critical in the implementation of the competency-based curriculum. The findings indicated that teacher training had a moderate positive influence on CBC implementation. This was also significant, and the hypothesis accepted the findings revealed that proper utilisation of seminars and workshops will aid the implementation of CBC in Kericho County. There is a need to employ upgraded trained CBC compliant teachers to fast-track CBC implementation. More time was required during training, and the requirement for a resource person in the class was vital. ECD training was a requirement. The current research also found that the in-servicing of teachers was also conducted. This was a positive indication showing how the teacher was a preparedness to implement CBC. Dewey (1938) noted that learning should be continuous and participatory. Continuous training is vital in any change in curriculum. This study concludes that there is a need to properly utilise seminars and workshops, employ trained teachers to

speed up CBC implementation, more time required during training, and requires a resource person in the class. ECD training was a requirement.

REFERENCES

- Bonney, E. A., Amoah, D. F., Micah, A. Ahiameny, C., & Lemaire, M. B. (2015). The Relationship between the Quality of Teachers and Pupils Academic Performance in the STMA Junior High Schools of the Western Region of Ghana. *Journal of Education and Practice*, 6(24) 139-150.
- Christensen, N. & Lane, J. (2016). *Development of competencies in Canada's school children*. Canada West Foundation.
- Chu, A. M., Nnam, K. I., & Faizefu, A. R. (2018). The Competency Based Curriculum implementation: Appraisal from the perspective of teachers use of resources. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, 2(4), 2278-2288.
- Council of Governors. (2019). *Consultative forum on the Competency based curriculum and the vocational training centres conditional grants guideline*. Nairobi: News Highlights.
- Dewey, J. (1938). *Experience and Education*. New York: Macmillan Company.
- European Union (2018). Teaching and Learning in Primary Education. Retrieved on 14th September 2018 <https://eacea.ec.europa.eu/national-policies/eurydice/content/teaching-and-learning-primary-education-20>
- Gutek, G. (2014). *Philosophical, Ideological Perspectives on Education*. (2nd Ed.) New York: Pearson.
- Hernández, M. & Menéndez, R. M. M. (2017). *Competency-based Education – Current Global Practices*.
- Kabombwe, Y. M., & Mulenga, I. M, (2019). *Implementation of the Competency based curriculum by teachers of History in selected Secondary Schools in Lusaka district, Zambia*. SCIELO. South Africa.
- Kenya National Examinations Council (KNEC) - National Assessment System for Monitoring Learner Achievement KENYA
- KICD. (2017). *Facilitator's Training Manual for Early Years Education Curriculum*. Nairobi; Kenya: Kenya Institute of Curriculum Development.
- Kiruy, F., Manduku, J., & Ngeno, V. (2020). Parents' Economic Status and Academic Performance in Public Primary Day Schools in Multinational Tea Estates Kericho County, Kenya. *East African Journal of Education Studies*, 2(1), 38-46.
- Kombo, D. S., & Tromp, D. L. (2006). *Proposal and Thesis Writing. An Introduction*. Nairobi: Paulines Publications Africa.
- Kothari, C.R. (2004). *Research methodology. Methods and techniques* (2nd revised). Kuba, E. (2020) *Factors Limiting The Use Of Ict In Teaching Mathematics At Secondary Level In Nairobi County, Kenya*. <https://doi.org/10.17605/OSF.IO/2K5PW>
- Leedy, P.D. & Ormrod, J.E. (2005). *Practical Research: Planning and design*. New Jersey: Pearson Merrill Prentice Hall.
- Lewis, B. (2018). TLM - *Teaching/Learning Materials*. Retrieved on 4th September 2018 from <https://www.thoughtco.com/tlm-teaching-learning-materials-2081658>.

- Makaran, D. M. (2015). *Factors Influencing Curriculum Development Process in Secondary School Education in Mogadishu, Somalia*. Unpublished Thesis. University of Nairobi.
- Makunja, G. (2016). Challenges facing teachers in implementing competence-based curriculum in Tanzania: The case of community secondary schools in Morogoro Municipality. *International Journal of Education and Social Science*, 3 (5)
- Mandukwini, N. (2016). *Challenges Towards Curriculum Implementation in High Schools in Mount Fletcher District, Eastern Cape*. Unpublished Master's Thesis. University of South Africa.
- Mbarushimana, N., & Allida, D. (2018). Curriculum change and teacher participation in Technical and Vocational Education Training Programs (TVET): Experiences of Groupe Scolaire Aiper Nyandungu, Rwanda. *Baraton Interdisciplinary Research Journal*, 7, 1-10.
- Ministry of Education. (2017). *Kericho District Educational Day*. A report by DEO's Office Kericho.
- Momanyi, J., & Rop, P. (2019). Teacher Preparedness for the Implementation of Competence Based Curriculum in Kenya: A Survey of Early Grade Primary School Teachers' in Bomet East Sub-County. *African Journal of Educational and Social Science Research*, 7(1), 10-15.
- Muasya E. W., & Waweru S. N. (2019). Constraints Facing Successful Implementation of the Competency-based curriculum in Kenya. *American Journal of Educational Research*. 2019, 7 (12), pp 943-947.
- Mulenga, I. M., & Kabombwe, Y. M. (2019). A Competency-based Curriculum for Zambian Primary and Secondary Schools: Learning from Theory and some Countries around the World. *International Journal of Education and Research*, 7, 2
- Mwoma, T., Wekulo, P.K., Haycraft, E., Murage, E K., Wanjohi, M., Kimiywe, J., Kinuthia, Muriuki, P., Pearson, N., Okelo, K., Onyango, S., Kadenge, O., Betty Samburu, B., Mwangi, S., Kabaka, S., Tauta, C., & Griffiths, P. (2020). Experiences of incorporating support for early childhood development into the Baby Friendly Community Initiative in rural Kenya. *Journal of the British Academy*, 8(s2), 103–132.
- Nasara, E.S., & Agbo, D.A. (2019) A Comparative Study on Level of Competence Required by Lecturers and Students in the Use of Computer Aided Design for Pattern Drafting in Tertiary Institutions Nasarawa State, Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)*. ISSN No. 2454-6186.
- Ngeno, B., Sang, H., & Chemosit, C. (2020). Teachers' Computer Literacy in Selected Public Primary Schools in Ainamoi Sub-County in Kericho County, Kenya. *East African Journal of Education Studies*, 2(1), 1-7. <https://doi.org/10.37284/eajes.2.1.111>.
- Ogutu, W. (2020). The Dynamics of Art and Craft Curriculum in Enhancing Child Growth and Development. *East African Journal of Education Studies*, 2(1), 18-24. <https://doi.org/10.37284/eajes.2.1.134>
- Ondimu, S. (2018). *Teachers' preparedness for Implementation of the Competency Based Curriculum in Private Preschools in Dagoreti North Sub-County, Nairobi City County*. Nairobi; Kenya: University of Nairobi.
- Republic of Kenya, (1984). *Presidential working party on Curriculum Reform*. Nairobi. Government Printer.

- Republic of Kenya, (2017). County Government of Kericho Annual Development year for financial year 2018/2019. Government Printers. Retrieved on 4th September 2018 from <https://learningportal.iiep.unesco.org/en/issue-briefs/improve-learning/curriculum-and-materials/supplementary-learning-and-teaching>.
- Republic of Kenya. (2017). *Basic Education Curriculum Framework*. Nairobi; Kenya: Kenya Institute of Curriculum Development.
- Republic of Kenya. (2017). *The Kenya Secondary Education Quality Improvement Project*. Nairobi: Government of Kenya Printers.
- Rw'abarezi, U. (2018). Implementation CBC: Successes and Challenges. Kigali, Rwanda. *UrunanaRw'abarezi*, pp. 6-9.
- Sifuna, D. N & Obonyo, M. M. (2019). Competency based curriculum in Primary Schools in Kenya - Prospects and Challenges of Implementation. *Journal of Popular Education in Africa*.3(7), 39 – 50.
- UNESCO, (2017). *Competency-based Approaches*. International Bureau of Education. [http://www.ibe.unesco.org/en/topics/competency based-approaches](http://www.ibe.unesco.org/en/topics/competency-based-approaches).
- Wanjohi, A.M. (2018). Critical Review of 8-4-4 Education System in Kenya. Schools Net Kenya.
- Waweru, J. W. (2018). Influence of Teacher Preparedness on Implementation of Competence Based Curriculum in Public Primary Schools in Nyandarua North Sub-County, Kenya. University of Nairobi.
- Welu, E. K., Mutua, F., & Mulwa, D. (2018) Influence of teachers' subject matter knowledge on students' academic achievement of Kiswahili Language in Public Secondary Schools in Kathonzweni Sub-County, Kenya.
- SRJ'S for Humanity Sciences & English Language 6 (29).
- World Bank, (2019). Learning Assessment Platform (LeAP). World Bank Group. <https://www.worldbank.org/en/topic/education/brief/learning-assessment-platform-leap>