

# Competency Based Curriculum Training Undertaken by Teachers on their Implementation on Grades 1, 2 and 3 in Public Primary Schools in Migori County, Kenya

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## Abstract

The twenty-first century has resulted in many challenges for educational systems. One such challenge is integrating learning experiences in educational institutions with practical realities and requirements. Implementing Competency-Based Curriculum (CBC) models for various disciplines would reduce the gap between theoretical knowledge acquired in the educational system and expenses needed in the labor market. This study, therefore, sought to establish the effects of competency based curriculum training undertaken by teachers on their implementation on grades 1, 2 and 3 in public primary schools in Migori County, Kenya. A descriptive survey design methodology was adopted. The study targeted 604 head-teachers, 1812 grade 1-3 teachers, and 8 sub-county quality assurance and standards officers from all the Sub-counties in Migori County. The sample size for the study was 180 head teachers, 8 Sub County Quality Assurance Officers (SQAOs), and 544 grade 1-3 teachers. The researcher used 30 percent to get a sample size for 180 out of 604 head-teachers and grade 1-3 teachers respectively and saturated sampling, 100 percent to include all the 8 SQAOs in the final sample resulting to a sample size of 732 out of the 2424. Questionnaires and interview schedules were used to collect data. The validity of the instrument was subjected to expert opinions, further; the questionnaire was pre-tested for coherency and comprehensiveness. Reliability was tested using a questionnaire duly completed in a pilot study. Internal consistency was determined by Cronbach's Alpha Coefficient and it yielded reliability coefficient of 0.704, and 0.690 and 0.671 respectively for teachers and principals respectively. The study applied quantitative analysis techniques using descriptive and inferential statistics to analyze data. The research was carried out ethically. Majority (56.77%) of teachers had attended training sessions and (59%) agreed to be well versed with the training themes. The study recommended increase of number of CBC in-service training sessions and use more competent facilitators, mandatory training for all teachers. The findings will be used by national education managers, the principles in the county and county education officers, Boards of Management and the community. They will contribute to the existing knowledge on teachers' preparedness to implement a competency-based curriculum.

**Keywords:** Competency, Based-Curriculum, training, teachers, implementation, Kenya.

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## BACKGROUND OF THE STUDY

Education is described as an engine for any nation's social and economic development. Most developed countries owe their source development to technical and economic innovations. From this perspective, educational reforms need curriculum change to empower its citizens with the required skills, knowledge, values, and attitudes, which enable them to be empowered for personal and national development (Gruber 2018). The twenty-first century has resulted in

many challenges for educational systems. One such challenge is integrating learning experiences in educational institutions with practical realities and requirements. Implementing competency-based curriculum models for various disciplines would reduce the gap between theoretical knowledge acquired in the educational system and expenses needed in the labor market. Scholars such as Demssie, Wesselink, Biemans, and Mulder (2019), have acknowledged that a competence-based curriculum approach is instrumental in helping students to increase their mastery of skills

and knowledge and developing self-confidence in problem-solving. Therefore, it is an approach that improves students' academic achievement and equips them with relevant skills for the job market.

A competency-based curriculum is appropriate for addressing a country's changing societal needs and technological and socio-economical demands for sustainable development. It gears towards addressing unemployment issues among youths and graduates by emphasizing the acquisition of skills, knowledge, value, and attitudes significant in carrying out various tasks (Urunana, 2018). It is an approach that focuses on learning outcomes in terms of skills, knowledge, the aptitude for understanding and the specific context and levels that a person who possesses such competence has. It emphasizes what the learners are expected to do practically after learning rather than what they are expected to teach (Sudsomboon *et al.*, 2007).

A sentiment supported by Gurney (2007) that teacher quality can be well understood by considering the relationship between teacher productivity and teacher training, including formal pre-service university education, in-service professional development, and informal training acquired through on the job experience, an idea that Kopelman *et al.*, (2011) who argue that under CBC teacher preparation impacts teachers with the right teaching skills and styles, materials use, teaching tools. This teacher, as a result, possesses practical knowledge on how to deliver the CBC curriculum. The competency-based curriculum has been significantly adopted by several countries worldwide in their education system. Countries such as the United States of America, Mexico, Australia, New Zealand, France, Hong Kong, and several African countries are some of the countries that have implemented CBC in their education system; each country has developed its learning outcomes and its methods of assessing student achievement to suit its own national needs (Atan, Azli, Rahman & Idrus, 2002). This was done to better prepare learners for the higher education demands and job market requirements in the 21<sup>st</sup> century, which appears as a worldwide trend in offering relevant skills that match employers' requirements. The desire to build up a scholarly society and the need to expand regional and global competition in the job markets has called for a move to a competency-based curriculum as the leading proclain for innovation. Both at the system level and the level of the learning environment (Biemans, Nieuwenhuis, Poell, Mulder & Wesselink, 2004).

In America, Bristow and Patrick (2014) observed that the CBC concept moved to Western countries due to the economic recession caused by the widespread unemployment among the young people in the United States and the concern about low student achievement and poor quality of teacher training which promoted a need to structure the outcome learning in a

manner that will encourage teachers to express their teaching objectives in terms of observable student behaviors. The main criticism was the education system, which was blamed for school graduates' low attainment of necessary skills. This has seen commendable progress in the American education system.

Regarding Africa, Cheptoo (2019) argues that CBC adoption in most African countries is an adjustment or similar model to developed countries. She explains that the implementation has either been imposed on the countries following government directives or due to the support from Western Non-Governmental Organizations (Yambo (2022a). For instance, in East Africa, they had to sign the East Africa Harmonization policies that require the countries to adopt CBC. The researcher goes on to suggest that for the adoption of CBC to succeed in Africa, there is a need to look into African Communities' actual learning environment, financial ability, human resources, ability, philosophy, job market, needs, visions, the Africans still face diverse challenges ranging from infrastructure, resources, teachers' capabilities leadership and type of student's cohorts with classes building with learners' eager to learn. The study employed secondary data as a technique for collecting data. Secondary data through cost-effective and time-saving is usually general and not tailored specifically to meet the researcher's needs, and the data may also not be authentic. However, this study used the primary data collection method to fill the gap.

As explained by Tranter and Warn (2003), Rwanda shifted to the Competency-Based Curriculum in 2015 to deal with the scarcity of skills in the Rwandan Education System with an emphasis on science and technology. The shift was brought about by the desire of Rwanda to build up a scholarly society to meet the global and local demand in the job market. Likewise, in Tanzania, a competency-based curriculum was adopted in secondary education in 2005.

A study by Msuya (2016) emphasizes that the graduates who were the products of the Curriculum did not exhibit the competencies and skills that wholly addressed the global job market demands, locally, regionally, and internationally; thus, 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, attitude and knowledge in problem-solving in meeting the changing needs and aspirations of the society. However, years later, after implementing the CBC in Tanzania, Flinkenflogel *et al.*, (2015) argued that the curriculum developers, book writers, and teachers still lacked clarity on the implementation of the CBC. They had not fully grasped the concept of CBC.

In the effort to align its graduates with the market demand and address the needs and aspirations of the Kenyan people and equip the graduates with the knowledge, appropriate attitudes, and skills that will help them fit and compete internationally, Hasan *et al.*, (2017) explain that the Kenyan government embarked on reviewing the nation's curriculum in January 2017. This was necessitated by a strong feeling by a majority of the citizens that the current 8-4-4 system of education, whose philosophy is "education for self-reliance," never achieved its mandate, a sentiment supported by the work of Yambo (2012:17); Cheptoo (2020), who posited that the practical subjects which were the essence of the reform were made optional and non-examinable making them lose their importance. This gave teachers a lee way not to emphasize the subjects; instead, they used that period to teach examinable, knowledge-based subjects, and the curriculum ended up being academic and exam-oriented. This was confirmed by findings of a summative evaluation of primary and secondary education curricula conducted by the Kenya Institute of Curriculum Development (KICD) in 2009 and a nation's needs assessment study conducted by KICD in 2016.

As conceptualized by KICD (2018), competency is the ability to put into practice learning resources and outcomes adequately in education, work, and personal or professional development. A Competency-based curriculum is a curriculum that emphasizes what learners are expected to do rather than mainly emphasizing what they are expected to know. Ideally, such a curriculum is learner-centered and adaptive to the changing needs of the students, teachers, and society. It implies that learners can acquire and apply the knowledge, skills, attitudes, and values to solve situations they encounter in everyday life (IBE-UNESCO 2015). As Wangaleja (2010) outlined, the Competency-based curriculum is one where knowledge is constructed and not transmitted and prior knowledge impacts the learning process. It is a shift from the traditional input-driven learning, whose main focus was acquiring knowledge, to competency-based Education.

In their report, KICD (2017) stated that the Kenyan CBC envisioned that at the end of the learning period, every learner should have developed competence in the seven core areas: Communication and Collaboration, Critical Thinking and Problem Solving, Imagination and Creation, Citizenship, learning to leave, self-efficacy and digital literacy. Nonetheless, Yambo (2022b); Sifuna and Obonyo (2019) argue that there is a need for criteria on how competencies are evaluated and attained during each pace or level of development. For example, clear specifications should stipulate the learner's movement from beginner, competent, proficiency, and expert levels. The new competency-based curriculum was rolled out in January 2017 and is being implemented in lower primary school and is rolled out in phases from

grades one, two and three and has proceeded to six. The 2-6-3-3 competency-based curriculum places learners' needs and interests first to ensure every Kenyan child is ethical, empowered, and engaged. It aims at equipping teachers with enough instructional materials for effective implementation. Abuya (2017) opines that for effective delivery and implementation of this curriculum, the facilitators need to be knowledgeable professionals who can apply the appropriate teaching methodology. However, for all these to be successful, it is vital to equip all the instructors and make them conversant with the new methodologies and instruction and learning. Therefore, the teacher's preparation for implementing the competency-based curriculum becomes a critical study area.

In their study Kafyulilo, Rugambaka and Moses (2012) assert that the quality of education depends largely upon the quality of the teacher, who is the implementer of the curriculum. Hence a need for highly skilled teachers in the application of teaching methods is essential to make learners learn effectively, an opinion that is supported by Abuya (2017), who affirms that for CBC to be effectively delivered and implemented, professional and knowledgeable facilitators are required, this too is supported by Casey (2018) who points out that successful realization of CBC heavily relies on the instructors, who take up the new role of coaching and facilitation rather than being transmitters of knowledge. Gathin (2009) confirms that how much the teacher knows and understands the subject matter defines how well teachers can teach the curriculum content to learners. Therefore, teachers' level of training in the implementation of CBC becomes a crucial area of study.

However, according to a report by HakiElimu (2012), the implementers, who are the teachers, lack sufficient knowledge and skills to exploit, use and integrate technology to support curriculum implementation; for effective curriculum implementation, the teacher's perception is very critical. Yamazaki and Kayes. (2004) opines that changing the teachers' attitude has been highlighted as important for a successful implementation. It involves changing the attitudes of teachers, trainers, supervisors, learners, parents, policy makers and administrators (Yamazaki and Kayes, 2004), emphasizing that positive attitudes influence the willingness of teachers to implement the curriculum and the pupils' willingness to learn.

The introduction of the competency-based curriculum in Kenya has triggered questions on capacity and teachers' preparedness to implement the CBC. According to Ngwacho (2019), the CBC was hastily crafted and rushed through a pilot done in 2017. Kaviti (2018) describes the pilot study of the new curriculum as one done in haste. Much as the government has continued offering on-the-job training to the teachers, the teachers still need more time to

unlearn the traditional teaching methods and adopt the CBC methodologies.

According to a study done in Dagoreti on teachers' preparedness in private schools by Ondimu (2018), the teachers are not well prepared to take pupils through the new curriculum. Ondimu explained that the teachers are not opposing it because they do not want it but because they do not understand it. The study was done on private schools that majorly offer education to learners from upper and middle-class backgrounds. In the current study, the researcher engaged public primary schools which school all classes of learners to fill the gap.

As argued by Sossion's, (2018) report indicates that many teacher-related factors still pose questions. The report argues that teachers do not understand the new education system, complicating the successful implementation of CBC. According to this report, several teachers are experiencing problems translating the new content to the learners due to a lack of adequate training. Therefore, there lacks clear evidence as to whether teachers have been adequately prepared for the implementation of the CBC, hence necessitating a study into the teacher's preparedness to implement the competency-based curriculum in public primary schools in Migori County.

**Table 1: represents the percentage of teachers who have been trained in the implementation of CBC in Migori County**

Sub County	Schools	Teachers	Trained Teachers	Percentage of Trained Teachers (%)
M1	69	756	276	36.51
M2	58	678	232	34.22
M3	127	1073	508	47.34
M4	68	830	272	32.77
M5	73	723	292	40.39
M6	76	686	304	44.31
M7	46	466	184	39.48
M8	31	373	124	33.24
<b>Totals</b>	<b>617</b>	<b>6232</b>	<b>2468</b>	<b>39.60</b>

Source: Migori County Educational Office (2021)

Migori County has eight sub-counties; the sub-counties have been coded M1 to M8 From table 1. Migori County teacher preparedness matrix in terms of training shows that very few teachers have been trained on CBC implementation in the County; an average of 39.6% of teachers have been trained since the introduction of CBC. The highest percentage of trained teachers is in Nyatike at 47.34%, followed by Uriri at 44.31%, Awendo (40.39%), Kuria West (39.48%), Migori (36.51%), Suna West (34.22%), Kuria East (33.24%) and Rongo at 32.77%. So far, 60.40% are not trained in CBC in this County.

**Statement of Problem**

Ideally, teachers who are the implementers of a curriculum in terms of content delivery are supposed to be conversant with the contents and pedagogies of delivery of the new curriculum for its success. This would adequately translate to enhanced implementation of the curriculum.

To help teachers prepare to implement a competency-based curriculum, the Ministry of Education Science and Technology (MOEST) has organized in-service training sessions for primary school teachers. Migori County Education office has been organizing training workshops and seminars for teachers. Despite all these, the number of teachers trained to implement CBC is still wanting; as shown in table 1 only 39.60% of the teachers have been trained.

Most of the trained teachers have been trained on at most three occasions, and the training has mainly focused on explaining the curriculum instead of equipping teachers with teaching skills. Since the introduction of CBC, there is little evidence that studies have been conducted to establish the level of teacher preparedness to implement the curriculum. Yet, it is a crucial activity towards the implementation of a curriculum. Therefore, this study seeks to establish teacher preparedness in implementing a competency-based curriculum in public primary schools in Migori County.

**Teacher Training and Implementation of the Competency-Based Curriculum (CBC)**

The work of Ornstein and Hunkins, (2004) observed that teachers have a role to influence learner's performance and therefore, teachers have key role to interpret the objectives and content during curriculum implementation for successful translation into actual practice. The statement was further supported by Gurney (2007), who opines that teachers' educational qualification strongly influences the quality of instructional delivery, and professional qualification is a proxy for quality teaching and higher learning performance. Therefore, prepared teachers are trained and equipped to respond to growing, changing societal challenges.

A study conducted by Esau and Mpofu (2017) on the preparedness of the primary school to implement the grade three new curriculums in Zimbabwe. The findings showed that teacher development training received was not equal to the teacher's needs. At the same time, some of the facilitators were not fluent with the demands of the new curriculum and the lack of textbooks and the internet, even though the new curriculum requires internet search among teachers. This factor affected the implementation process.

In the context of Tanzania, Makunja (2016) carried out a study to assess the adoption of a competence-based curriculum (CBC) to improve the quality of secondary schools in the Morogoro Region. This study employed a descriptive survey design, and 162 respondents were involved from 6 public secondary schools. The participants were selected using a purposive and simple random sampling procedure. They included 6 heads of schools, 6 academic masters, 102 teachers and 48 students. Data were collected using questionnaires, interviews and observations and were analyzed using descriptive statistics and content analysis. The study's findings showed that some teachers, 46 (45.1%), did not understand the CBC in which they participated in its implementation. The study also revealed that most teachers (73%) did not get any training before implementing the CBC.

Furthermore, most teachers (60.78%) confessed that they could not apply the competence-based teaching approach in the teaching and learning process. The study did not find teachers' preparation in terms of ICT, which is a key factor in implementing any competency-based curriculum. This study sought to fill that gap.

A study conducted in Tanzania by Nyagiati and Yambo (2018) was interested in quality education. Similarly, Komba and Mwandaji (2015) examined the issues surrounding the implementation of the CBC in secondary schools located in the Morogoro Region. The design used was a case study, and the sample was composed of 180 teachers selected randomly from 13 Secondary Schools. The study found that most teachers (86%) did not properly understand the CBC objectives. The majority of lesson plans (78%) did not reflect the qualities of CBC, and the involvement of learning in classroom activities was very low. The study employed purposive and simple random sampling to select the respondents; in the current study, the researcher used stratified random sampling to fill the gap.

Mosha (2012) revealed that teachers had not received any training on the new curriculum, although the education officials claimed the teachers had been trained. Lack of teacher preparation made it difficult for the teachers to use the competency-based curriculum materials like textbooks as they lacked competencies. Therefore, teachers should be inducted and trained in

the new curriculum to ensure the successful implementation of the competency-based curriculum. This opinion was supported by Msuya (2016), who conducted a study on facilitators' and learners' perceptions of implementing the Competency-Based Curriculum in adult programs in Tanzania; the findings showed that since the competence-based curriculum was introduced in secondary schools in the year 2005, there was no evidence that teacher education curriculum at the University of Dar es Salaam where secondary school teachers are trained had changed to cater for new demands arising from the introduction of the competence-based curriculum in secondary schools. According to Paulo (2014) who further conducted a study on teachers training on preparedness on implementation of competent based curriculum in secondary schools in Tanzania. The study purposively sampled 16 pre-service teachers from the University of Dar es Salaam. The study used interview guide and observation checklist. The study revealed that the classroom teaching and assessment modes of teachers did not comply with the competence based curriculum. It was also noted that trained teachers continue to use the traditional mode of teacher centred approach as opposed to competence based curriculum that demands the learner centred approach (Nyagiati & Yambo 2018). The study recommended that all the universities in Tanzania introduce the competence based curriculum

In a study conducted by Koskei and Chepchumba (2020) on teacher competence and preparedness, the purpose was to investigate Teacher preparedness in implementing the early childhood education development curriculum in Kenya. While the study established that majority of preschool teachers in the country were not well prepared for the implementation of the ECDE curriculum. The current study filled the gap by evaluating teacher preparation in Primary Schools in Migori County.

According to Waweru (2018), his study carried out on the influence of teacher preparedness on the implementation of the competency-based curriculum in public primary schools in Nyandarua North Sub County, Kenya. The study established that teachers need more training because the in-service programs were inefficient for implementing a competency-based curriculum. It was further revealed that inadequate instructional materials, over-emphasis on lesson planning and mode of learner's assessment were still waiting for effective implementation of the competency-based curriculum. Momanyi and Rop (2019) supported this study on teacher preparedness to implement the competency-based curriculum in lower primary schools in Bomet East Sub-County, Kenya. The study concluded that teachers are ill-prepared for efficient competency in assessing learners' performance. The study recommended the Kenya Institute of Curriculum Development and the ministry of education mount adequate training sessions to bridge

capacity gaps identified in methodology, evaluation, and preparation of professional documents.

In Baringo North Sub County, Kenya, Kimosop (2019) investigated how pre-school teachers are prepared to teach the curriculum in public learning institutions. This study employed a descriptive survey design and a sample of 72 pre-school teachers selected using convenience sampling, 36 head teachers and 1 Sub-County Director. The study found that most respondents (94%) were not prepared before implementing the ECDE curriculum before introducing the ECDE curriculum in 2008. This study used a sample of 180 head teachers, 1812 grade 1-3 teachers, 8 SQAOs and 180 PA chairs to fill the gap.

### RESEARCH METHODOLOGY

This study employed a descriptive survey research design.

According to Kothari and Garg (2014), a research is descriptive when it is concerned with why and how a variable influence another variable and a survey if it uses questionnaires, interview guides, and checklists to collect data. Migori County has 604 primary schools. The target population of the study was 2,424 respondents consisting of 604 head teachers, 1812 grade 1-3 teachers and 8 Sub County Quality Assurance Officers (SQASO) in Migori County.

A sample design is a framework that serves as the base from which a researcher might be able to select a sample and other vital aspects of the study. According to Kothari (2004), sampling is when a relatively small number of individuals, objects, or events are selected and analyzed to determine description of the entire population from which it is selected. It usually is not possible to question every member of the target group, hence the need for sampling (Salkind, 2009).

**Table 2: Target population, sampling technique, and respondents' Sample Size**

Respondents	Target Population	Technique	Sample Size
Head teachers	604	30%	180
Grade 1-3 Teachers	1,812	30%	544
SQAOs	08	100%	08
<b>Total</b>	<b>2,424</b>		<b>732</b>

Source: Authors Data (2021)

The work of Best and Khan (2006); Bloomberg and Volpe (2008) agree that 30 percent is considerable and convenient; as represented in table 3.1, the researcher, therefore, used 30 percent to get a sample size for 180 out of 604 head-teachers and grade 1-3 teachers respectively and saturated sampling to include all the 8 SQAOs in the final sample resulting to a sample size of 732 out of the 2424.

Validity of the study was done by soliciting the experts' opinions, who were the supervisors from the department of curriculum, instruction and media in the school of education of Kisii University. Reliability of the instruments was addressed through piloting and test-retest in 5 schools and reliability coefficients obtained was 0.721 which indicated that the instruments were reliable. For social science research purposes, tests with reliability score of 0.7 and above are accepted as an indication of reliability (Kurpius & Stafford, 2006). Data was analyzed using both qualitative and quantitative methods. Qualitative data was analyzed

using an ongoing process as themes and sub-themes emerged. Quantitative data was analyzed using descriptive statistics.

### RESULTS AND DISCUSSIONS

#### Relationship between CBC Training and CBC Curriculum Implementation

The study's first objective sought to establish the effect of CBC training undertaken by teachers on implementing the competency-based curriculum in public primary schools in Migori County. The training was measured in terms of the frequency of attendance of the training, perceived adequacy of the training and teachers' attitude towards the training.

#### Frequency of CBC Training

To determine how frequently teachers had attended, teachers were requested to indicate the number of CBC training sessions out of the mandatory three. Their responses are shown in Table 3.

**Table 3: Frequency of Training for Grade 1-3 Teachers and Head Teachers**

Number of Training Sessions	Frequency	Percent
1	142	24.65
2	327	56.77
3	107	18.58
Total	576	100.00
Mean	<b>1.939</b>	
Standard Error	<b>0.0273</b>	
Standard Deviation	<b>0.6552</b>	
95% CI	<b>1.939 ± 0.054</b>	

The results of the analysis in table 4.5 show that 142 teachers representing 24.65% had attended one training session, 327, representing 56.77%, had attended two sessions, while 107 teachers representing 18.59% surveyed, had attended 3 CBC training sessions. The mean attendance frequency was 1.939(1.939  $\mp$  0.054), with values deviating from the mean to the extent of 0.6552. The results indicate that teachers had attended two CBC training sessions on average. The study findings were similar to findings by Isaboke *et al.*, (2021), who established that only 34.1% of the teachers had received training on CBC.

Considering the maximum of three training sessions, the results by Isaboke *et al.*, (2021) indicated that majority of the teachers (65.9%) had attended two or fewer than two training sessions.

**Adequacy of CBC Training Programme**

To determine the adequacy of the CBC training program offered, the teachers were requested to rate on a five- point Likert scale their level of agreement with the various statements, which were indicators of how adequate they considered the training received. Their responses are analyzed in Table 4.

**Table 4: Adequacy of Training Received by Grade 1-3 Teachers and Head Teachers**

	SA	A	N	DA	SDA		
The CBC trainers are well versed in the training themes	215	129	78	121	33	576	3.647569
The training I have attended has enabled me to prepare well for my CBC lessons	215	132	125	59	45	576	3.717014
The training I have attended has enabled me to prepare the required professional record easily	105	101	112	134	124	576	2.876736
I now understand that continual education improves one's knowledge and understanding of the CBC curriculum.	273	109	88	90	16	576	3.925347
The training I have attended has enabled me to appropriately choose teaching/learning resources.	164	169	107	98	38	576	3.560764

Whether the CBC trainers are well versed with the training themes, 154 respondents representing 26.7%, disagreed, 78, representing 13.5%, were uncertain, while 344, representing 59.8%, agreed. With a mean of 3.65 representing 'Agree' on the scale, the study findings indicate that the teachers who attended the CBC training were confident in the trainers. Whether the training they have attended has enabled them to prepare well for the CBC lessons, 104 respondents representing 18.1% disagreed, 125 representing 21.7% were uncertain, while 347 representing 60.2% agreed. The study findings show that the teachers were confident in being versed with the training themes. This was supported by the weighted average of 2.90. The findings discussed above are consistent with those of Eleweke and Rodda (2007), who found that adequately trained professionals are required for proper implementation of any curriculum. Hossain (2004) and Kibria (2005) proposed a solution to this problem, which included selecting teachers using the quota criterion.

Whether the training they attended enabled them to easily prepare the required professional record, 258 respondents representing 44.8% disagreed, 112 representing 19.4%, were uncertain, and 206

representing 35.8%, agreed. On whether they now understand that continual education improves one's knowledge and understanding of the CBC curriculum, 106 respondents representing 18.4% disagreed, while 88, representing 15.3%, were uncertain, and the remaining 382 representing 66.3%, agreed. Whether the training they attended enabled them to choose teaching/learning resources appropriately, 333 respondents representing 57.8% agreed, 136 representing 23.6%, disagreed, and 107, representing 18.6%, were uncertain. These findings were similar to Abebe (2012) findings in Ethiopia, which revealed that teachers were not trained in various teaching strategies and were not confident in handling learners with special needs in inclusive classes, resulting in ineffective inclusion education implementation.

**Attitude of Teachers towards the CBC Training**

To ascertain the attitude teachers had towards the training program, which was a key determinant of how much they gained from the training and hence the training outcomes, the teachers were requested to rate on a 5-point Likert scale their level of agreement with the various items measuring their attitude towards the CBC training program. The analyses of their responses are presented in Table 5.

**Table 5: Attitude of teachers towards the CBC Training**

	SDA	DA	N	A	SA		
The CBC training is objective and informative	48	71	120	187	150	576	3.56
I enjoy the CBC training sessions whenever they are held	41	91	109	191	144	576	3.53
I fully support the CBC training programme	46	101	88	109	232	576	3.66
I will always readily attend the CBC training sessions whenever they are held	69	88	88	142	189	576	3.51
I will be happy if extra training sessions are introduced	63	77	137	117	182	576	3.48

The study results show that the teachers agreed that the CBC training was objective and informative, as indicated by a mean value of 3.56, which represents agree on the scale. Three hundred and thirty-seven respondents either agreed or strongly agreed, compared with 119 who disagreed or strongly disagreed. Whether the teachers enjoy CBC training sessions whenever they are held, 335 respondents agreed (4 and 5 on the scale) compared to 132 who disagreed (1 and 2 on the scale). A mean value of 3.53 indicates that the teachers agreed that CBC training sessions were enjoyable. On whether

they fully support the CBC training program and whether they will always readily attend the CBC training sessions whenever they are held, mean values of 3.66 and 3.51 were obtained, implying that the grades 1, 2 and 3 fully supported the CBC training program and were ready to attend the CBC training sessions. The results show that the teachers were indifferent to whether they would be happy if extra training sessions were introduced, as indicated with a mean value of 3.48. However, 299 teachers agreed compared to 140 who disagreed.

**Table 6: Descriptive Statistics of Aggregated Adequacy of training and teachers' attitude towards the training**

	N	Min	Max	Mean	Std. Dev
Adequacy of Training programmes	576	5.00	25.00	19.9311	8.3237
The attitude of teachers towards the CBC training	576	7.00	0.00	16.0788	7.004

The findings in Table 6 indicate that CBC training has a mean index of 19.9311, with the values deviating from the mean to the extent of 8.3237. Since the mean index was more than 15, the study concludes that teachers perceived the training they were being offered to be adequate enough. On teachers' attitude towards the CBC training, a composite mean index of 16.0788 was established with a standard deviation of 7.004, implying that a majority of the teachers had a positive attitude towards the CBC training program. These findings concur with Isaboke, Mweru, and Wambiri (2021) who conducted a research on the relationship between teachers' attitudes and the use of instructional materials in Kenyan pre-primary schools. According to their findings, teachers with positive

attitudes achieved higher levels of instructional content application in their classes than their peers with negative attitudes. This study found that teachers' mind-sets were a critical factor in encouraging the use of instructional techniques in Early Years Education (EYE) practices.

**Correlation Analysis of the Relationship between CBC Training and Implementation of CBC**

The Pearson's Correlation analysis results, which measure the nature and strength of the relationship between implementation of the CBC curriculum, frequency of training, adequacy of the training program, and teachers' attitude towards the CBC training program, are illustrated in Table 7.

**Table 7: Correlation Analysis of the Relation between CBC Training and CBC Implementation**

	Frequency of Attendance	Adequacy of training	Attitude of teachers	CBC implementation
Frequency of Attendance	1			
Adequacy of training	0.323**	1		
Attitude of teachers	0.578**	0.690**	1	
CBC implementation	0.516**	0.704**	0.635**	1

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

The findings in Table 7 show a moderately strong positive correlation between the frequency of CBC training by teachers and CBC implementation among the Grade 1,2, and 3 teachers, as indicated by the positive Pearson's correlation coefficient value of 0.516 significant at a 1% level of significance. The positive correlation indicates that teachers who attended more training sessions were better placed to carry out effectively the various CBC implementation activities than those who attended fewer training sessions.

A strong positive correlation significant at a 1% level of significance was established between the adequacy of the CBC training program and CBC implementation as indicated by a Pearson's correlation coefficient of 0.704. This indicated the more adequate the CBC training program was, the better the teachers

trained were in carrying out the various CBC implementation activities hence the need for the trainers to be more equipped to better train the teachers and for the training curriculum to be more relevant in addressing the needs of the teachers in their effort to implement the CBC curriculum.

A moderately strong positive correlation between teachers' attitudes towards the CBC training program and CBC implementation among the Grade 1,2 and 3 teachers was established as indicated by the positive Pearson's correlation coefficient value of 0.635 significant at a 1% level of significance. The positive correlation indicates that teachers who had a positive attitude towards the training program gained more. Hence, they were better placed to carry out effectively the various CBC implementation activities than those



who had a negative attitude towards the training. The findings are supported with a study done by Chemangosi (2020) on teachers' and students' attitudes as correlates of arithmetic performance. According to the study's findings, attitudes and performance are related. As a result, enthusiastic instructors and students produced better work.

The results further indicate that there was a positively strong and significant correlation between teachers' attitude towards the training program and teachers' frequency of attendance of CBC training and the perceived adequacy of the CBC training as indicated by correlation coefficients of 0.578 and 0.690, respectively both significant at 1% level. This indicates that the attitude teachers held towards the CBC training program will influence teachers' willingness to attend the CBC training sessions and their perceived adequacy of the same. This study contradicts the Rwandan study on CBC implementation by Rubagumya *et al.*, (2018). The key issue was that most teachers anchored to the knowledge-based curriculum and resisted change. The new curriculum was seen by the teachers as being more complex and time-consuming than the knowledge-based curriculum.

## CONCLUSION

The study's objective sought to establish the effect of CBC training undertaken by teachers on the implementation of the competency-based curriculum in public primary schools in Migori County. Based on the study findings that showed that the three CBC training constructs had a significant favorable influence on the CBC implementation among the grades 1, 2 and 3 teachers in Migori County, the study concludes that CBC training is a key undertaking that could facilitate effective implantation of CBC in primary schools. Such training should be adequate and done regularly.

## RECOMMENDATION

The Teacher Service Commission should increase the number of CBC in-service training sessions and use more competent facilitators. The training should be mandatory for all teachers, and proper financial and material facilitation will help reduce the negative attitude most teachers harbor toward the CBC curriculum. The regular in-service training program will equip teachers with the necessary knowledge and skills to implement the curriculum effectively.

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