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Teacher Preparedness to Implement Competency Based Curriculum in Public Primary Schools in Kinangop Sub County, Kenya

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Abstract

Kenya has shifted to competency based curriculum [CBC] in order to prepare learners for the 21st Century by facilitating acquisition of competencies relevant to real life and the world of work. Teachers, being products of the content based system of education, are likely to face challenges in relation to their understanding of CBC and the applicable instructional approaches. This study therefore investigated the extent of teachers' preparedness in the implementation of CBC with regard to teachers' level of awareness of the tenets of CBC and teachers' capacity to align teaching and learning approaches towards the CBC. The study used descriptive survey research design. Data were collected using a teachers' questionnaire whose validity was determined through expert judgement. The Cronbach's alpha coefficient of reliability for the questionnaire was 0.7. Data were analyzed descriptively using descriptive statistics. The study established that the teachers had low level of awareness on the tenets of CBC (M =2.10, SD = 0.21). Majority 107 (66.5%) of the teachers were not trained on CBC implementation. The teachers resorted to using strategies in the old curriculum to implement the CBC. Majority 84(52.3%) were incompetent in preparing the schemes of work. The lesson plans and records of work prepared by the teachers were defective since they originated from the schemes of work. The teachers had low capacity (M=2.42; SD=0.26) to select appropriate teaching and learning approaches in CBC classes. Consequently, the recommended CBC teaching and learning approaches were underutilized in CBC classes. Only group work (M = 2.54, SD = 0.58) and drama (M = 2.63, SD = 0.81) were fairly utilized in the classes. The study recommended that the Ministry of Education should upscale inservice training initiatives among the teachers in order to improve teachers' and capability in the implementation of CBC.

Key Words: Competency Based Curriculum, teacher preparedness, tenets of CBC, teaching and learning approaches.

1.1 Background to the Study

The 21st Century continues to evolve rapidly and dramatically forcing radical changes on the roles of education (Haug & Mrok, 2021). The Organisation for Economic Co-operation and Development [OECD] (2020) contends that the world is facing a myriad of unprecedented environmental, economic, health, technological and societal challenges. Consequently, the skills that learners acquire through the education system have attracted global attention. There has been urgency in reforming education systems with a clarion call on the need for conscious, deliberate and strategic curricular response to the demands of the 21st Century (Zhao et al., 2024). The reforms are anchored on the premise that children cannot continue learning what was taught to their parents and expect them to be strategically prepared to meet the uncertain future characterized by the ever changing knowledge based economies. Educators and workforce experts advance that without acquiring the requisite skills for the 21st century, the youth will not thrive successfully in the global economy to the detriment of sustainable development agenda (Begum & Liton, 2018).

The World Economic Forum, in their report on the strategies to align to the fourth industrial revolution, reinforced the need for learners to acquire more than the traditional and academic skills. The forum advocated for the learners to acquire 21st Century skills that can be applied in multiple areas regardless of future occupation (Ng, 2020). The 21st century skills refer to a broad set of content knowledge, literacies, proficiencies, work habits, and character attributes that must be nurtured in the learner for them to succeed in education and a competitive and ever mutating global economy (Begum & Liton, 2018). Such skills include complex problem solving skills, Information and Communication Technology [ICT] literacy, critical thinking and creativity, people management, coordinating with others, emotional intelligence, judgement and decision making, service orientation and leadership, negotiation and cognitive flexibility (Haug & Mrok, 2021).

Countries have been reviewing their curricular to make their education more relevant to the changing times including the achievement of the 2030 Sustainable Development Goals [SDGs] (OECD, 2020; Sifuna & Obonyo, 2019). In the recent past, there has been a paradigm shift from knowledge-based curriculum where emphasis has been coverage of curriculum content and knowledge to the competency based curriculum [CBC] (Gulled, 2023). According to United Nations Educational, Scientific and Cultural organization [UNESCO] (2017), a competency-based curriculum is a curriculum that emphasizes what learners are expected to do rather than prioritizing content. It stresses on the learner ability to acquire and apply desired knowledge, skills, values and attitudes to solve situations they encounter in everyday life. Learning is therefore learner centred and adaptable to changing needs of society, the learners and also teachers. The transformative CBC agenda stresses on the importance of nurturing the learners to acquire the 21st Century competencies drawing from multidisciplinary knowledge and skills. It is an instructional approach that focuses on the development of students' skills and knowledge through clear learning outcomes and performance assessments (Gulled, 2023). This is as opposed to focusing only on the mastery and memorization of knowledge structured by different subjects regardless of its practicability and direct connection to problem-solving. In competency based classrooms, learners acquire and apply knowledge, skills and attitudes to scenarios that they encounter in their everyday life (OECD, 2020).

Globally, CBC is being implemented as the panacea to the demands and aspiration of the ever evolving knowledge based economies (Andiema, 2020). Countries such as France, Finland, England, the United States of America, Indonesia, Canada, Australia, New Zealand, Sweden, Germany, the Netherlands and Norway have created their competence based frameworks for implementation in schools (Ngumbau, 2022). In the United States of America, competency-based education has been embraced as a way of providing the learner with the competencies they require to succeed in a rapidly changing job market. In 2005, China also adopted CBC in primary and secondary education with the aim of cultivating learner competencies in practical situations. In Guatemala, the competency-based curriculum is being implemented as a strategy for the expansion and democratisation of learning conditions and opportunities (Mpofu & Sefotho, 2024).

In Africa, countries such as Zambia, South Africa, Zimbabwe, Algeria, Mozambique, Ghana, Cameroon, Tanzania, Rwanda and Ethiopia have adopted CBC (Ngumbau, 2022). Rwanda shifted to the competency-based curriculum in 2015 in order to deal with scarcity in skills in the Rwandan education system with emphasis on science and technology. This was in response to Rwanda's education philosophy of making sure that every child at all levels of learning receives quality education to develop their full potential and relevant skills, knowledge and desired attitudes that will help them fit in the society and job market (Sifuna & Obonyo, 2019). In 2014, the Zimbabwean Ministry of Primary and Secondary Education embarked on a comprehensive curriculum reform process meant to enhance the quality of education in Zimbabwe. It adopted CBC in 2017 as a vehicle to motivate learners to cherish their Zimbabwean heritage, history and cultural traditions and prepare them for participatory citizenship (Mpofu & Sefotho, 2024).

Despite the high expectations that stakeholders in the education sector have on CBC, existing empirical research reveal that CBC has not registered significant positive impacts on learners' academic achievement. A study conducted in Senegal, Cameroon, Gabon, Mali and Tunisia revealed that the curriculum reforms have not yielded any improvement in students' outcomes. The study attributed the failure of the CBC to issues such as poorly designed try-out phase, introducing CBC reforms alongside other reforms, lack of clarity in the concept of CBC, lack of clear procedures in providing guidance on implementation, inadequate teacher preparation, a mismatch between learning and assessment, and inadequate budgetary management (Wafubwa, 2021). Successful implementation of curriculum reforms is influenced by a range of factors such as adequacy of resource materials and facilities, teacher preparedness, the school environment, culture and

ideology, stakeholders support, alignment to national policies and priorities, instructional supervision and learner assessment (Mukhtar et al., 2020; Kidega et al., 2023).

In particular, teachers' knowledge, attitudes and skills are the most important considerations in successful curriculum implementation since they interpret and implement the intended curriculum. Consequently, teachers should be thoroughly prepared through in-service training, seminars and workshops to implement the curriculum and tackle any emerging challenges during the implementation process (Owala, 2021; Momanyi & Rop, 2019). Kabombwe and Mulenga (2019) argue that the successful implementation of CBC requires teachers who are knowledgeable in CBC teaching and learning approaches in order to facilitate productive learner engagement in the learning process. Kitasse and Ssembatya (2024) emphasizes that teachers implementing the competency-based curriculum are responsible for designing learning tasks that facilitate the learners to acquire the desired competencies. However, most teachers may not have the required competencies to facilitate CBC since they are products of the knowledge-based curriculum. Consequently, Rwigema and Andala (2022) submit that teachers are likely to encounter challenges when implementing a new curriculum especially in relation to the content and subject demarcations, the underlying assumptions, goals, teaching approaches and assessment methods.

The Government of Kenya introduced CBC to the education system in 2016 replacing the 8-4-4 system of education that has been there for three decades (Momanyi & Rop, 2019). Implementation of the 8-4-4 system of education faced many challenges that it hardly realized its noble philosophy of education for self-reliance. The system was blamed for producing graduates who did not meet the demands of the job market (Cheptoo & Ramdas, 2020; Isaboke et al., 2021a). The introduction of CBC in Kenya is therefore seen by stakeholders as a strategic move towards resolving the problem of graduate employability. The Basic Education Curriculum Framework [BECF] (RoK, 2017) guides the implementation of CBC in Kenya. BECF envisions the development of an engaged, empowered and ethical citizen. The framework seeks to provide learners in basic education institutions with world class standard skills and knowledge that they require to thrive in the 21st century. Through the framework, the Government commits to provide excellent learning experience in a responsive school environment that values every learner. In so doing, CBC seeks to ensure that the next and future generations of Kenyan citizens shall be both patriotic and global, equipped with the skills, knowledge, attitudes and values to thrive in the modern world, confident about their proud and rich cultural heritage and contributing this heritage to make the world a better place for everyone (RoK, 2017). Although there has been commendable progress in the implementation of CBC in Kenya, there are serious

concerns from stakeholders that the curriculum reforms are not being implemented as envisaged (Momanyi & Rop, 2019; Wambua, 2019; Isaboke et al., 2021a). Momanyi and Rop (2019) research among early grade primary school teachers' in Bomet East Sub-County found that teachers were inadequately prepared to implement CBC. Their knowledge on CBC was vague and this hampered CBC delivery and learner assessment. The study recommended the Ministry of Education [MOE] and the Kenya Institute of Curriculum Development [KICD] to provide extensive and intensive inservice training for teachers in order to bridge the gaps in teacher awareness of the guiding principles of CBC, application of learner centered instruction, CBC assessment and preparation of teaching and learning materials. Wambua (2019) study on constraints facing the successful implementation of the CBC in Machakos County found out that teachers were not fully prepared for the implementation of new curriculum. The infrastructure available in schools were inadequate. The study underscores that the government hurriedly implemented CBC in schools without first addressing challenges such as understaffing, inadequacy of teaching and learning material and unfriendly teaching and learning environment.

Isaboke et. al. (2021a) explored the challenges teachers face in implementation of the CBC in public preprimary schools in Nairobi City County. The study found that the implementation of CBC was greatly challenged by lack of adequate learning facilities, lack of adequate training of teachers on how to implement the curriculum, large class sizes, understaffing in schools, inadequate instructional resources, ignorance and lack of cooperation from parents. UNESCO (2016) underscores the need for all learners to be nurtured by qualified, professionally trained, motivated, committed and well supported teachers who use relevant pedagogical approaches. Consequently, delving into the area of teacher preparedness in the implementation of CBC is crucial towards addressing any gaps that may be recorded. Gichui (2012) study in Nyandarua county reported that some teachers convincingly had difficulties adopting new instructional approaches and resulted to using outdated instructional methods. The study emphasized the need for continuous teacher professional development in Kinangop Sub County for the successful implementation of any curriculum

change. This study therefore sought to investigate teacher preparedness in the implementation of CBC in Kinangop Sub County in Kenya.

1.2 Statement of the Problem

The paradigm shift from content-based curriculum to CBC is aimed at improving the quality of education by enabling learners to develop the required competences relevant in life and the world of work in the 21st Century. Teachers must possess the requisite skills, knowledge, values and attitudes required for effective implementation of CBC. They should be knowledgeable on the basic tenets of CBC including the application of learner centred pedagogy. CBC has been implemented in Kenya since the year 2016 with the first cohort currently in junior secondary. However, there are concerns on the level of teachers' preparedness to implementing CBC. In Kinagop Sub-County, existing research underscore the need for continuous teacher professional development for effective curriculum implementation. This will ensure that CBC is implemented as envisioned. Although CBC is being implemented in schools in the sub-county, there is no known empirical study that has investigated the level of teachers' preparedness to implement CBC. This study therefore investigated teachers' level of awareness on the tenets of CBC and teachers' capacity to align teaching and learning approaches towards CBC in the sub-county.

1.3 Research Questions

This study, which was guided by the following objectives:

- 1. To appraise teachers' level of awareness of the tenets of CBC.
- 2. To determine teachers' capacity to apply CBC teaching and learning approaches.

2.0 Literature Review

The study reviewed literature on the concept of CBC, teachers' awareness on the tenets of CBC and teachers' capacity to align teaching and learning approaches towards the implementation of the curriculum. The theoretical framework for the study is also provided. The review is presented in the following sections.

2.1 The Concept of CBC

Curriculum is a Latin word which originates from the word "currere" meaning to run a race like an athlete or like a horse. In education context, a curriculum is a programme or course of study that a learner must complete within a particular period (Kimario & Otieno, 2022). According to Yaşar and Aslan (2021), a curriculum is a learner's lived experience in a learning environment. It is a framework that prepares the learner for life. It is a system, a plan to be actualized in a specific area of study, a tool for helping the teacher make decisions on the effectiveness and efficiency of the learning experience. A curriculum is therefore a written declaration by the society on the desired competencies that the learner must acquire in order to fit as a productive member of that society. It is a vehicle used by a country to equip the citizenry with the knowledge, skills, attitudes and values that prepares the learner for personal and national development. A curriculum is expected to meet the needs of the individual citizens, the nation and the dynamic global society (Kabita & Ji, 2017). It is a model, a document that outlines the organization of the educational environment and the decisions made by the teachers regarding the learning process. Karakus (2021) contends that a curriculum communicates how knowledge is perceived by the society, the types of knowledge that are most worth, the philosophical and theoretical underpinnings of curriculum decisions, the role of the teacher, the learner, the school administration and family in the teaching and learning process. The 21st Century societies are experiencing new environmental, economic, health related, or societal challenges. Climate change and the depletion of resources question the consumption habits in the society. The development of artificial intelligence and new technologies challenge our traditional conception of work. Ongoing globalization that activates migration, urbanization and increasing diversity shaping countries and economies. Due to these global trends, countries have increasingly considered reviewing the curriculum as a way to equipping the youth with the competences needed in the 21st Century (Ebu et al., 2022). Although countries have different visions for curriculum reforms that match their specific needs, there has been a global shift from the traditional content-based curriculum to CBC. The shift in curriculum vision stresses the importance of nurturing in the learner certain competencies that draw from multidisciplinary knowledge and skills. This is as opposed to focusing only on mastery and memorization of knowledge structured in different subjects regardless of its usefulness and direct connection to the learner's ability in problem-solving (OECD, 2020). According to Sadiki and Yang (2019), a competence is defined as an individual's ability to do a particular task in a prescribed standard stressing on what the learner can do rather than what they know. The Kenya Institute of Curriculum Development [KICD] (2018) defines competency as the learner's ability to put into practice learning resources and outcomes adequately in education, work, and personal or professional development.

According to UNESCO (2017), a competency-based curriculum is a curriculum that emphasizes what learners are expected to do rather than mainly focusing on what they are expected to know. It implies that the learners should acquire and apply the knowledge, skills, values, and attitudes to emerge victorious from the situations they encounter in everyday life and across the globe. This means that learning is learner cantered and adaptable to changing needs of society, the learners and also teachers. The transformative CBC agenda stresses the importance of nurturing the learners to acquire the 21st Century competencies drawing on multidisciplinary knowledge and skills. It is an instructional approach that focuses on the development of the learners' skills and knowledge through clear learning outcomes and performance assessments (Gulled, 2023). In competency based classrooms, learners acquire and apply knowledge skills and attitudes to scenarios that the encounter in their everyday life (OECD, 2020).

Competency-based curriculum was developed as an educational trend in the United States. The U.S. Department of Education describes CBC as a shift from classroom seat time, fostering flexibility and enabling students to progress in their academic journey as they demonstrate mastery of skills irrespective of time, place or pace of learning. CBC teaching and learning approaches offer adaptable methods for learning or awarding credit to facilitate personalized learning opportunities for students. In essence, students advance in CBC upon mastering the competencies associated with a course, regardless of the time required for mastery, while institutions design competencies, content, and support structures to ensure students' success. Several studies agree that CBE is a preferred solution in the current and complex economy, which necessitates individuals to possess the essential skills for productivity (Awuonda et al., 2023). Kenya introduced CBC to her education system in 2016 as a pilot curriculum to be rolled out under 2-6-3-3-3 education system that is replacing the three decades old 8-4-4 system. CBC was introduced in order to widen global and regional competition in the job market. The main purpose of CBC is to produce graduates with skills that meet the demands of labour in the local and global market (Obuhatsa, 2020; Momanyi & Rop, 2019). CBC in Kenya is aimed at achieving the following seven core competencies; communication and collaboration, critical thinking and problem solving, creativity and imagination, citizenship, digital literacy, learning to learn and self-efficacy. Acquisition of these competencies goes alongside imparting of core values of love, responsibility, respect, unity, peace, patriotism, social justice and integrity. Learners are expected to master and incorporate these values and competencies for practical application in life and world of work (Momanyi & Rop, 2019).

According to KICD (2007), CBC is a paradigm shift from the teacher centered, knowledge based approach to teaching and learning to the application of learner-centered instructional methods such as study visits, discussions, problem based learning, role plays, projects and case studies. In the use of such methods, the teachers' role change to that of an expert, facilitator, coach and mentor who guides the learning process. The use of learner-centered instructional methods is expected to facilitate learner engagement with the content hence taking responsibility for the learning process through direct interaction and exploration of knowledge which will result in desired experiences. CBC proponents advance that it enhances the acquisition of skills and competencies that are relevant and applicable to really life situations and the world of work (Cheptoo & Ramdas, 2020). Studies assessing the impact of CBC on student achievement show that CBC has not impacted positively students' achievement. Findings from a review by Gauthier (2013) on the CBC implementation in five African countries - Cameroon, Gabon, Mali, Senegal and Tunisia revealed that the curriculum reforms have not yielded any improvement in students' learning outcomes. Gauthier (2013) attributed the failure of the CBC to issues such as poorly designed try-out phase, introducing CBC reforms alongside other reforms, lack of clarity in the concept of CBC, lack of clear procedures in providing guidance, inadequate teacher preparation, taking lightly the social changes resulting from the reforms, a mismatch between learning and assessment, and inadequate budgetary allocation (Wafubwa, 2021).

2.2 Teachers' Awareness of the Tenets of CBC

The successful implementation of CBC is to a large extent anchored on teacher preparedness in terms of knowledge, skills and attitude pertaining the curriculum. Any curriculum reforms that fail to incorporate

teachers in the decision making process and does not empower them to own the reforms is not likely to achieve the intended vision, no matter the best intentions of the reforms (Kiptoo & Kitainge, 2020). Teachers should be thoroughly prepared to implement the new curriculum and tackle challenges encountered during the implementation process through in-service training, seminars and workshops. Sensitization and empowerment through appropriate forums makes teachers own and focus on successful implementation of the new curriculum (Owala, 2021). Momanyi and Rop (2019) contends that teachers, as the curriculum implementers, should be thoroughly prepared through in-service, seminars and workshops. This sensitization is expected to make teachers own the curriculum reforms. Existing empirical evidence suggests that teachers are at varying levels of awareness on the basic tenets of CBC. Kiptoo and Kitainge (2020) reported that in Tanzania, some secondary school teachers conceived CBC as being impractical and complex. These perceptions were pointers to teachers' lack of knowledge on CBC which was likely to affect their attitude towards the curriculum and the quality of implementation. Cheptoo and Ramdas (2020) report that in South Africa, the CBC terminologies were difficult for teachers to comprehend. Consequently, CBC competencies were misrepresented, misinterpreted, misunderstood as checklists, learning targets, or mastery of outcomes.

Sifuna and Abonyo (2019) review on prospects and challenges in CBC implementation advanced that teachers were willing to implement the CBC but lacked enough knowledge and understanding of the competence-based curriculum. The review argued that teachers had not fully understood the competency-based curriculum. Teachers assumed that they understood CBC, but in reality they did not know how it is practiced. This was attributed to insufficient inservice teacher training which deprived teachers an opportunity to adjust their knowledge, skills, attitude and perceptions about CBC. Even where training was provided, training content was overloaded in two to three days training sessions which were not sufficient to completely orient the teachers to the new curriculum. In some cases, the trainers or facilitators were incompetent having not fully conceptualized and understood CBC. They were therefore unable to adequately deliver the envisioned training.

A study by Kabombwe and Mulenga (2019) focusing on the implementation of CBC by teachers of History in selected Secondary Schools in Lusaka, Zambia asked the respondents whether they understood the competency based curriculum. Most (67.0%) of the respondents indicated that they did not know what a competency-based curriculum was. The study concluded that most teachers of History in the study location were not conversant with CBC. Only a few teachers could point out the competencies or outcomes of CBC in history. Teachers' lack of knowledge of CBC could thwart the efforts of the educational system to attain national goals and provide quality education in Zambia. In Kenya, there have been concerns that teachers were left out during the formulation of Basic Education Curriculum Framework that provides the blue print for the implementation of CBC in basic education institutions in the country. Teachers feel that CBC was forced on them to implement without any consideration of their input. Such concerns raise a fundamental question on the level of teachers' awareness on the what CBC entails including the guiding principles (Owala, 2021; Isaboke et al., 2021a). Momanyi and Rop (2019) reports that a study by KICD and TSC found that only 3.0% of teachers felt adequately prepared for the new curriculum. Although it is several years since the curriculum was implemented in Kenya, existing research point to contextual variations on the level of teacher preparedness to implement CBC.

A study by Silas (2020) on teacher related factors influencing the implementation of CBC at lower primary Luanda sub-county, Kenya found that majority of the teachers did not understand the new education system. This complicated the successful implementation of the new curriculum in the study location. Momanyi and Rop (2019) survey on teacher preparedness for the implementation of CBC among early grade primary school teachers in Bomet County revealed that teachers were inadequately prepared to implement CBC in early grade learning. Teachers knowledge of CBC was vague and this hampered the implementation of the envisioned curriculum. If teachers lack adequate knowledge and skill on CBC, they experience challenges when implementing the curriculum. The study recommended that the Ministry of Education and KICD should provide more in-service training sessions for teachers. In another study conducted by Okeyo and Mokua (2023) in public secondary schools in Nyamira County, it was found that all public secondary schools in Nyamira South Sub-County were ill-prepared to implement CBC. The study established that some teachers had been trained in CBC. However, principals and teachers were not satisfied with the level of training they had received. The principals and teachers reported that the training was scheduled for a few hours did not meet their expectations. The study noted that the curriculum support officers, quality assurance

officers and the sub-county directors were not confident that the training the teachers were receiving was useful towards the successful implementation of CBC. This study noted that some of the trainers of teachers were not conversant with the training content.

2.3 Teachers' Capacity to Apply CBC Teaching and Learning Approaches

Capacity may be defined as ability to apply related knowledge and skills needed to perform tasks in a defined work setting. Teachers' capacity serves as the basis for skill standard that specify skills the knowledge and abilities necessary for success in the workplace and also measure the criteria for competence attainment. The main idea in CBC is to assist learners develop their own knowledge and make use of other peoples' optimal competence in their learning journey (Akala., 2021). In CBC, teachers ought to provide a conducive learning environment, attend to learner's academic needs and provide the required time for the learner to demonstrate the expected competencies. Indah (2020) asserts that the teacher is expected to facilitate dialogue with the learners about the need, expectations, and the choices of the content being explored. The teacher should guide the learner in the discovery of knowledge as opposed to receptive learning. They should facilitate the learner to discover theories, rules and patterns in the learning content as they interact with the environment, teachers and peers.

Cheptoo and Ramdas (2020) postulates that CBC requires teachers to be role models, caring, and inspiring each learner to identify and nurture their talents and attain their full potential. Teachers need to be competent in making teaching and learning contextually relevant to the learners' holistic intellectual growth and development. It shifts the focus of learning encounter to achievement of standards where learners can demonstrate acquisition of skills, attitudes, abilities, and competencies. The teacher needs to provide opportunities for the learners to actively engage in reflective lessons as they provide regular informative feedback. This implies that learning can no longer be achieved through traditional teacher-centered approaches but requires the adoption of more synergetic pedagogies. CBC brings a change in the preconceived roles of the teacher and the learner. Teachers ought to play the role of the facilitator while learners drive the learning progress. The learners participate in the construction of knowledge as opposed to rote learning.

Sifuna (2019) also asserts that CBC puts weight on development of competence rather than mastery of content knowledge. Consequently, the teaching and learning process has to change its orientation from rote memorization of content knowledge to acquisition of skills and competencies useful for solving real life problems. Gulled (2023) avers that the competency-based curriculum is designed to provide learners with opportunities to demonstrate their understanding of a subject through practical application and hands-on experiences. Learners actively seek meaning in their experiences and knowledge is developed through a process of reflection and inquiry. The development of competencies is facilitated by creating learning environments that encourage learners to actively engage with the subject matter. The curriculum is designed to promote active learning, collaborative problem-solving and the integration of knowledge across disciplines. According to Kimario and Otieno (2022), role-play, problem-solving, projects, case studies, and outdoor activities, discussions, among other learner-centered strategies are some of the teaching and learning approaches applicable in a CBC classroom since they enable the teacher to transform from the role of an expert to that of a facilitator who guides the learning process.

Chunga (2020) stresses that teachers should be conversant with the application of learner centered teaching and learning methods which encourage learning by doing, discovery learning, case studies, practical activities and other activities which are based on creating, thinking, discovery and doing. Mirza et. al. (2023) upholds that the teachers' role transitions from being the providers of knowledge to facilitators, guides and scaffolders who design interrelated lessons that sequentially progress towards short-term goals and long-term competencies. To achieve this, teachers must devise and contextualize tasks and activities that allow students to practice and enhance real-world reading, writing, speaking, and listening communication skills. Teachers also need to supplement and modify the textbook to plan tasks promoting cooperative, collaborative, and autonomous learning. Despite CBC placing learner centred teaching and learning approaches as the cornerstone in the acquisition of desired competencies, existing empirical evidence raises questions on the level of teacher preparedness in the application of the approaches. Some scholars have revealed that teachers continue using the traditional teacher centered instructional methods to the detriment of the learners (Kimario & Otieno, 2022; Sadiki & Yang, 2019).

According to Kimario and Otieno (2022), teacher appears not to have been trained on the appropriate teaching and learning methods in CBC. This reduces the variation of teaching styles which would support the learners to develop the different competencies as targeted by the CBC. The authors vouch for continuous teacher professional development through seminars, in service training programs and workshops in order to empower teacher effectiveness in CBC implementation. Kabombwe and Mulenga (2019) study in implementation of CBC by teachers of History in selected Secondary Schools in Zambia found that the teachers were not using CBC approaches in History classes. The teachers were still using teacher-centered methods thus implementing a content-based curriculum and not CBC. A scrutiny of the teachers' lesson plans, schemes of work and assessment items revealed that some teachers were not using competency/outcomes-based approaches in the teaching and learning of History. Teachers were using different types of lesson plans. Some teachers were still using lesson plans that stated behavioural objectives while others were using lesson plans that outlines the expected learning outcomes. Thus, there was no uniformity among the teachers on the type of lesson plan that they used in implementing CBC. Some teachers were still using the old syllabus. The study attributed the teachers' non-compliance to CBC teaching methodologies inadequate in-service training.

Mirza et. al. (2023) study in Algeria focusing on teachers' perspectives on CBC revealed that the teachers prioritized traditional teaching methods over CBC approaches. They considered the CBC approaches ineffective and incompatible with Algerian educational context. The teachers advocated for an approach which would resonate with the Algerian context citing overcrowded classrooms, curriculum overload in CBC and inadequate teaching and learning resources. The teachers opined that their teaching experiences, coupled with their deep understanding of the CBA principles, led them to the conclusion that the Algerian CBA did not enhance the teaching-learning processes and unsuitable for language education. Sadiki and Yang (2019) exploration on teachers' values, opinions and experiences in the implementation of CBC in Tanzania found that the majority of the teachers did not actually comprehend what was to be achieved in the curriculum. A review of teachers' professional documents, specifically the schemes of works and lesson plans, revealed that the teachers were still implementing the content based curriculum thus compromising the central objective of CBC. The study found out that most of the teachers lacked proper knowledge of developing CBC lesson plans. Some objectives in the lesson plans did not show the specific skills that learners were expected to have attained by the end of a lesson. Additionally, the study reported that most of the teachers were concerned with the content to be delivered in the classes and did not prepare teaching and learning activities aligned to the skills that the learners were to acquire from the content.

Momanyi and Rop (2019) study in Kenya found that teachers were still using teacher centered approaches as opposed to discovery methods that allow learners to utilize their interest and talents to acquire skills and competencies through personalized learning. Majority of the teachers who participated in the study had challenges preparing the schemes of work and lesson plans that conform to CBC. The teachers reported challenges in preparing CBC lesson plans including determining learner and teacher activities that would facilitate the learner to acquire the predetermined competencies. Orina (2022) research on teachers' preparedness in implementation of CBC in science learning areas in public primary schools in Nairobi County also found that the majority of the teachers relied on the lecture and question and answer method. The study concluded that teachers in Nairobi County were progressively gaining skills for implementing Competency Based Curriculum. They were already conversant with making schemes of work, lesson planning and keeping various records in the new curriculum. However, they needed more training in other thematic areas. The study recommended that KICD intensifies teacher training to cover formative assessment, technology integration and how to choose and apply learner centric teaching and learning methods in facilitating knowledge construction among learners

2.4 Theoretical Framework

This study was anchored on Gross 1971 theory of curriculum implementation (Chacha & Onyango, 2022). The theory advances that the successful implementation of any curriculum depends on several interrelated factors which include teachers' competence; clarity and awareness of the curriculum by the implementers; capability of the implementers; attitude of the teachers, learners and stakeholders; quantity and quality of resources devoted to the programme; and management support (Obuhatsa, 2020; Mutua & Waweru, 2023). The theory postulates that the teacher as the curriculum implementer must be competent, aware of the underlying principles of the curriculum and what is to be implemented. The theory argues that when the

implementers are not aware of the changes of the curriculum, they may not effectively and sufficiently implement it. The implementer should also have a positive attitude towards the new curriculum and the changes therein (Ojung'a, 2023). According to Gross theory, capacity of implementers and schools is important for effective curriculum implementation. The teachers executing the curriculum should have sufficient knowledge to effectively execute the curriculum outcomes. Continuous professional development of teachers is vital for equipping teachers with skills and knowledge necessary for handling a new curriculum. The teachers should therefore be trained for the CBC through seminars, workshops and inservice training to acquire the requisite skills, knowledge and favourable attitude for implementing CBC. Schools should be allocated sufficient resources that are relevant to the new curriculum (Chacha & Onyango, 2022). Curriculum implementation theory was relevant to this study because it places teachers' preparedness at the heart of successful curriculum implementation. Therefore, the theory was used to appraise the level of teachers' preparedness to implement Competency-Based Curriculum in the study location.

3.1 Research Methodology

This research adopted a descriptive survey research design. The design was considered appropriate for the study because it sought to describe teacher preparedness in the implementation of CBC in Kinangop Sub County. The target population of the study was 46 public primary schools in Kinangop sub county (MOE, 2018). In the schools, 268 lower primary school teachers were involved in the implementation of Competency Based Curriculum. According to Krejicie and Morgan (1970) table for determining the sample size, 42 schools were sampled. In the schools, 161 teachers were sampled. In each school, two (2) male and two (2) female Grade 1 to 3 teachers were randomly sampled. The required data were collected using a questionnaire for the teachers. Content validity of the questionnaire was ensured through thorough literature review to ensure the study variables were fairly captured by the questionnaire items. The questionnaire was also appraised by the research supervisors. The reliability for the questionnaire was assessed using Cronbach's alpha index which was .73 and therefore acceptable. Data were analyzed using frequencies, percentage, mean and standard deviation. The composite mean scores for the variables measured using items on a four point Likert and Likert scale was interpreted as follows; 0 - 1.74 [very low], 1.75 - 2.49 [low], 2.50 - 3.24 [high] and 3.25 - 4.0 [very high] (Estrada-Madronero, 2018). The study adhered to research ethics including citing all sources of the reviewed literature.

4.0 Results and Discussion

This section discusses the results of the study in line with the research objectives which were to appraise teachers' level of awareness of the tenets of CBC and to assess teachers' level of competence in applying teaching and learning approaches required during CBC implementation.

4.1 Response Rate

The study collected data from 161 teachers. All the teachers responded to the questionnaire resulting to a response rate of 100.0%. The response rate was considered adequate for the research to proceed to data analysis. The following sections presents the results and discussions guided by the research objectives.

4.2 Teachers' Awareness of the Tenets of Competency Based Curriculum

The first objective of the study was to appraise teachers' level of awareness of the tenets of CBC in public primary schools in Kinangop Sub-County. To achieve this objective, the teachers were provided with a 4 point Likert and Likert Scale items that was presumed to measure a composite score of their level of awareness of the tenets of CBC curriculum. Further, the study sought to establish the extent of teacher inservice training on CBC considering that teacher professional development has a bearing on teacher awareness of the tents of CBC (Kiptoo & Kitainge, 2020; Owala, 2021; Momanyi & Rop, 2019). The results and discussions are presented in the following sections.

4.2.1 Teachers' Awareness of the Tenets of CBC

The teachers were provided with a list of items measuring their level of awareness on the tenets of CBC. The items were placed on a four (4) point Likert and Likert scale of Strongly Disagree (SD), Disagree (D), Agree (A) and Strongly Agree (SA). They were asked to rate their level of agreement with the items. The

frequency, percent for each item and the composite mean for all the items measuring the level of teachers' awareness of the tenets of CBC were summarized on Table 1. The results show that the majority (82.6%) of the teachers disagreed with the statement that they did not understand the term CBC. This implies that most of the teachers had an idea of what CBC entails. The finding contradicts Sadiki and Yang (2019) who reported that the majority of the teachers did not have an idea of the concept of CBC.

Table 1: Level of Teachers' Awareness on the Tenets of CBC

| Statement | Rating | | | | Cumul | | |
|--|--------|-------|-------|-------|-------|-------|--------|
| | SD | D | A | SA | D | A | Total |
| I do not understand the term CBC | 47 | 86 | 27 | 1 | 133 | 28 | 161 |
| | 29.2% | 53.4% | 16.8% | 0.6% | 82.6% | 17.4% | 100.0% |
| I understand all the CBC | 18 | 98 | 44 | 1 | 116 | 45 | 161 |
| competences | 11.2% | 60.9% | 27.3% | 0.6% | 72.1% | 27.9% | 100.0% |
| I feel adequately prepared in | 59 | 82 | 20 | | 141 | 20 | 161 |
| implementing CBC | 36.6% | 50.9% | 12.4% | | 87.5% | 12.4% | 100.0% |
| I can effectively teach the CBC | 27 | 99 | 34 | 1 | 126 | 35 | 161 |
| competences | 16.8% | 61.5% | 21.1% | 0.6% | 78.3% | 21.7% | 100.0% |
| I find it easy to adapt my teaching | 101 | 32 | 3 | 25 | 133 | 28 | 161 |
| styles to children's individual | 62.7% | 19.9% | 1.9% | 15.5% | 82.6% | 17.4% | 100.0% |
| needs | | | | | | | |
| CBC will cater for all the | 28 | 74 | 59 | 0 | 102 | 59 | 161 |
| individual needs of all the learners | 17.4% | 46.0% | 36.6% | 0.0% | 63.4% | 36.6% | 100.0% |
| CBC will discourage dependency | 3 | 64 | 91 | 3 | 67 | 94 | 161 |
| among learners | 1.9% | 39.8% | 56.5% | 1.9% | 41.7% | 58.4% | 100.0% |
| CBC will improve the standards of | 6 | 34 | 101 | 20 | 40 | 121 | 161 |
| academic achievement in our | 3.7% | 21.1% | 62.7% | 12.4% | 24.8% | 75.1% | 100.0% |
| education system | | | | | | | |
| Mean $(M) = 2.10$ Standard Deviation $(SD) = 0.21$ | | | | | | | |

Source: Field Data (2024)

The study also found that the majority 116 (72.1%) of the teachers disagreed that they understood all the CBC competencies implying that most of the teachers did not have sufficient knowledge of the various competencies that the learners were expected to acquire in the new curriculum. Similarly, majority 126 (78.3%) of the teachers indicated that they could not effectively teach the CBC competencies. The findings imply that teachers did not have adequate knowledge of the CBC competencies pointing to difficulties in interpreting and facilitating acquisition of the competencies among the learners. It was therefore highly likely that the teachers did not implement the competencies as envisioned in the CBC. A high proportion 133 (82.5%) of the teachers agreed that they had difficulties adapting their teaching styles to children's individual needs. This was interpreted to mean that most of the teachers did not have sufficient knowledge of competency based teaching approaches. It was therefore not surprising that the majority 102 (63.4%) of the teachers also disagreed that CBC would cater for all the individual needs of all the learners. This was a negative perception towards CBC probably because of teachers' inadequate understanding of the curriculum or a feeling that the curriculum as currently being implemented may not cater for the individual needs of all the learners. Similar findings were reported by Moshi (2012) study in Tanzania which found that most teachers were not using the recommended child-centered approaches in CBC. Probably, this could be mitigated through offering in service training for the teachers in order to empower them to effectively facilitate the acquisition of the desired CBC competencies among the learners.

Data summarized on Table 2 show that the majority 94 (58.4%) of the teachers agreed that CBC would discourage dependency among learners. The finding implies that teachers were aware that the CBC was aimed at making the learner more independent such that they become active participants in the learning process. The majority 121 (75.1%) of the teachers perceived that CBC would improve the standards of academic achievement in education system in Kenya. Majority of the teachers therefore had a positive view of CBC in terms of improving the quality of education in the country. This implies that the teachers were aware that the CBC is indeed a remedy to persistent concerns on low quality education as a result of overemphasis on masterly of content at the expense of acquisition of the desired competencies. The

composite mean for the level of teachers' awareness of the tenets of CBC was [M=2.10, SD=0.21]. This was interpreted to mean that the teachers had low level of awareness of the tenets of CBC. The finding seems to suggest that teachers were implementing a curriculum that they did not fully understand. Teachers' inadequate knowledge of CBC could frustrate the Government's effort to provide quality education and attain the national sustainable development goals. The finding agrees with Sifuna and Abonyo (2019) who reported that teachers lacked enough knowledge and understanding of the competence-based curriculum. Similarly, a study by Silas (2020) also found that most of the teachers lacked an understanding of the new education system. Upon determining the level of teachers' awareness on the tenets of CBC, the study sought to establish the extent of teacher professional development on the implementation of CBC.

4.2.2 Extent of Teachers' Professional Development on the Implementation of CBC

The teachers were asked whether they had undergone any training on the implementation of CBC and the results were as summarized on Figure 1.

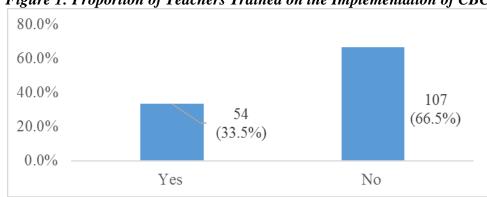


Figure 1: Proportion of Teachers Trained on the Implementation of CBC

Source: Field Data (2024)

The results summarized on Figure 1 show that the majority 107 (66.5%) of the teachers had not attended any CBC implementation training. This could result to teachers struggling to grasp the guiding principles of CBC and the appropriate teaching and learning methodologies to apply in class. This was likely to bring a disconnect between the expected and achieved CBC implementation goals. The finding concurs with Isaboke (2021) and Waweru (2018) who found that the majority of the teachers had not received any training on CBC implementation. Inadequate teacher professional development affects teachers' ability to implement the new curriculum since the teachers were not equipped with the necessary knowledge and skills.

Asked to indicate the entities which had organized the CBC training that they had attended, all the 54 (100%) of the teachers reported that trainings were conducted by the Ministry of Education Officials. Other stakeholders were yet to come on board in supporting teachers' inservice training towards the implementation of CBC.

| Theme of training | Frequency | Percent |
|----------------------------------|-----------|---------|
| Teaching and learning strategies | 54 | 100.0 |
| Methods of learner assessment | 54 | 100.0 |
| Use of teaching tools | 54 | 100.0 |

Table 2: Areas Covered During the CBC Training

Source: Field Data (2024)

Further, the teachers were asked to indicate the areas that they covered during the trainings. The results presented on Table 2 revealed that 54(100.0%) of the teachers were trained on teaching and learning strategies in CBC, 54(100.0%) were trained on assessment tools and lastly 54(100.0%) were trained on the use of teaching tools to implement CBC. Although only a small portion of the teachers had been trained, the findings suggest that indeed the main areas that would enable the teachers to have a grasp of the CBC were

covered. Consequently, those who missed the training were not empowered in those areas. Inadequate training has been identified as the major factor influencing teacher understanding and implementation of the CBC (Kisirkoi & Kamanga, 2018).

Further, the study explored the coping mechanisms adopted by the teachers to deliver CBC curriculum to their learners in the absence of adequate CBC training. Results summarized on Table 3 revealed that the majority 64(40.3%) of the teachers implemented the old curriculum. Some 32(20.1%) of the teachers reported that they sought advice from other teachers who had been trained on CBC.

Table 3: Coping Strategies Adopted by Teachers in the Absence of Adequate CBC Training

| Coping strategy | Frequency | Percent |
|------------------------------------|-----------|---------|
| Using the strategies in the old | 64 | 40.3% |
| curriculum | | |
| Seeking guidance from those who | 32 | 20.1% |
| have been trained | | |
| Using trial and error method | 32 | 20.1% |
| Following CBC textbooks guidelines | 25 | 15.7% |
| Seeking guidance from the internet | 6 | 3.8% |
| Total | 161 | 100.0% |

Source: Field Data (2024)

A similar proportion (20.1%) also reported that they used trial and error method to implement the CBC curriculum. Similarly, 25(15.7%) of the teachers stated that they follow CBC textbooks guidelines as a coping strategy. Some 6(3.8%) of the respondents stated that they sought guidance from the internet. The findings indicate that the majority of teachers use strategies from the old curriculum to implement the CBC and this was likely to compromise effective implementation of the curriculum innovation. The finding resonates with Wambua (2019) study in Machakos which found that to a large extent, teachers were still using the traditional teaching and learning approaches which were more teacher rather learner centred contrary to what is envisioned in CBC. Similarly, Nyoni (2018) study in Tanzania revealed that due to inadequate in-service training on CBC implementation, most of the teachers were still using traditional teaching approaches. Having determined the level of teachers' awareness on the tenets of CBC, the study proceeded to analyze the second objective of the study.

4.3 Teachers' Level of Competence in Applying CBC Teaching and Learning Approaches

The second objective of the study was to determine the level of teachers' competence in applying CBC teaching and learning approaches in public primary schools in Kinangop Sub-County. To achieve this objective, the study focused on teachers' level of competence in preparation of professional documents for implementation of CBC, the extent to which teachers applied CBC teaching and learning approaches in class and teachers' capacity to select appropriate teaching and learning approaches in CBC Classes. The results are presented in the following sections.

4.3.1 Level of Teachers' Competence in Preparation of Professional Documents for Implementation of CBC

The teachers were asked to rate their level of competence in preparing the documents guided by the following key where 1= Incompetent; 2 = Somewhat competent; 3 = Competent and 4 = Very competent. The responses "Incompetent" and "Somewhat competent" were interpreted as incompetent and "Competent" and "Very competent" were interpreted as competent in terms of preparation of the documents. The results were as summarized on Table 4.

Table 4: Teachers' Rating of their Capacity to Prepare Professional Documents

| Professional | 1 | 2 | 3 | 4 | Cumulative | | Total |
|--------------|------|-------|-------|-------|-------------|-----------|--------|
| Document | | | | | Incompetent | Competent | |
| Schemes of | 14 | 70 | 76 | 1 | 84 | 77 | 161 |
| work | 8.7% | 43.5% | 47.2% | 0.6% | 52.3% | 47.8% | 100.0% |
| Lesson plans | 7 | 27 | 98 | 29 | 34 | 127 | 161 |
| | 4.3% | 16.8% | 60.9% | 18.0% | 21.1% | 78.9% | 100.0% |
| Record of | 1 | 23 | 93 | 44 | 24 | 137 | 161 |
| work | 0.6% | 14.3% | 57.8% | 27.3% | 14.9% | 85.1% | 100.0% |

Source: Field Data (2024)

Data summarized on Table 4 show that the majority 84(52.3%) of the teachers rated themselves as incompetent in preparing the schemes of work. The finding implies that most of the teachers had inadequacies in preparation of CBC schemes of work probably due to lack of training as earlier findings in the study conveyed. The results further indicate that the majority 127(78.9%) of the teachers claimed to be competent in lesson planning. A high proportion 137(85.1%) of the teachers reported to be competent in preparing the records of word in CBC. The results imply that though the teachers had challenges in preparing the schemes of work, they were competent in preparing the lesson plan and the records of work. The findings raise serious questions on teacher preparedness in instructional planning for the implementation of CBC. According to Musingafi et. al. (2015), an effective and efficient teaching and learning process requires proper selection and sequencing of learning content and methodologies which takes place in the curriculum, syllabus, scheme of work and lesson plan stages. The curriculum and syllabus are official documents provided by the Ministry of Education. The teacher is expected to prepare the schemes of work, lesson plan and records of work. The scheme of work is an important tool to the teacher because it is a guide for planning the unit of instruction in line with the time available for each subject per term. The scheme of work shows what the teacher must cover in each term or the year and also the sequence of how each of the topics must be taught. The lesson plan is the lowest or most specific level of instructional plans. It is derived from the analysis of the scheme of work (Musingafi et al., 2015). A situation where teachers are incompetent in preparing the schemes of work but competent in preparing the lesson plan and records of work therefore implies that the lesson plans and records of work prepared by the teachers were defective since they originate from the schemes of work.

The findings concur with Momanyi and Rop (2019) study in Bomet which found that the majority of the teachers had challenges in preparing schemes of work that conforms to the CBC. Contrary to the current research, the study in Bomet also found that the majority of the teachers couldn't adequately prepare a lesson plan. The teachers reported challenges in choosing teaching and learning activities that would enable learners to acquire the envisioned competencies. Isaboke et. al. (2021) research in Nairobi demonstrated the importance of teachers training in the preparation of professional documents in CBC. In their study, the majority of teachers who had attended CBC training reported that they could easily prepare schemes of work and lesson plans without support while those who had not attended any training on CBC indicated that they had difficulties preparing the professional documents even with support. It would be inferred that the teachers who received training on CBC were better equipped in lesson preparation compared to their colleagues who had not received training on CBC. This means that the training was beneficial to the teachers in supporting teachers to prepare professional documents required for implementation of CBC. Therefore, the high number of primary school teachers who had not received any training in the study area were negatively affecting the implementation process. Further, the study sought to establish the challenges that teachers encountered in the preparation of the professional documents. The findings are presented in the following sections.

4.3.2 Teachers' Application of CBC Teaching and Learning Approaches

The teachers were provided with a list of CBC teaching and learning approaches. They were required to indicate the extent to which they applied the approaches in CBC classis on a scale of 1 = Never, 2 = Occasionally, 3 = To a considerable degree and 4 = Almost always. The mean rating of each of the

approaches was interpreted as follows: 4.0 - 3.25 = Highly utilized; 3.24 - 2.50 = Moderately utilized; 2.49 - 1.75 = Slightly utilized and 1.74 to 1.0 = Not utilized. The results were as summarized on Table 5.

Table 5: Extent of Teachers' Application of CBC Teaching and Learning Approaches in Class

| Teaching and | Frequen | cy of app | lication in | class | | | |
|----------------------|--|-----------|-------------|-------|------|-----------------------|-------------------|
| Learning Approach | 1 | 2 | 3 | 4 | Mean | Standard Deviation | Interpretation |
| Teacher | 14 | 83 | 60 | 4 | 2.34 | 0.67 | Slightly utilized |
| Exposition | 8.7% | 51.5% | 37.3% | 2.5% | 2.54 | 0.07 | Slightly utilized |
| Project | 12 | 74 | 75 | 0 | 2.39 | 0.62 | Slightly utilized |
| 110,000 | 7.5% | 46.0% | 46.6% | 0% | 2.37 | 0.02 | Singhtly defined |
| Group Work | 2 | 75 | 79 | 5 | 2.54 | 0.58 | Moderately |
| 1 | 1.2% | 46.6% | 49.1% | 3.1% | | | utilized |
| Question and | 6 | 97 | 57 | 1 | 2.33 | 0.56 | Slightly utilized |
| answer | 3.7% | 60.2% | 35.4% | 0.6% | | | |
| Classroom | 38 | 71 | 46 | 6 | 2.12 | 0.81 | Slightly utilized |
| discussion | 23.6% | 44.1% | 28.6% | 3.7% | | | |
| Debate | 21 | 104 | 31 | 5 | 2.12 | 0.66 | Slightly utilized |
| | 13.0% | 64.6% | 19.3% | 3.1% | | | |
| Drama | 10 | 64 | 63 | 24 | 2.63 | 0.81 | Moderately |
| | 6.2% | 39.8% | 39.1% | 14.9% | | | utilized |
| Role Play | 22 | 71 | 64 | 4 | 2.31 | 0.74 | Slightly utilized |
| | 13.7% | 44.1% | 39.8% | 2.5% | | | |
| Field trip | 3 | 81 | 76 | 1 | 2.47 | 0.55 | Slightly utilized |
| | 1.9% | 50.3% | 47.2% | 0.6% | | | |
| Problem | 14 | 92 | 54 | 1 | 2.26 | 0.62 | Slightly utilized |
| solving | 8.7% | 57.1% | 33.5% | 0.6% | | | |
| Overall | Overall Mean $(M) = 2.35$; Standard Deviation $(SD) = 0.21$ | | | | | | |

Source: Field Data (2024)

The results summarized on Table 5 convey that teacher exposition (M = 2.34, SD = 0.67), project (M = 2.39, SD = 0.62), question and answer (M = 2.39, SD = 0.62), classroom discussion (M = 2.12, SD = 0.81), debate (M = 2.12, SD = 0.66), role play (M = 2.32, SD = 0.74), field trip (M = 2.47, SD = 0.55) and problem solving (M = 2.26, SD = 0.62) were slightly used in the CBC classes. Group Work (M = 2.54, SD = 0.58) and drama (M = 2.63, SD = 0.81) were moderately utilized. The composite mean score of (M = 2.35; SD) = 0.21)suggests that CBC teaching and learning approaches were slightly utilized in teaching and learning in the study location. The findings imply that teachers were not adequately utilizing the CBC teaching and learning approaches in class probably due to lack of skills and knowledge on the teaching and learning approaches to apply. The findings from the current study therefore imply that teachers were still using the traditional teacher centered approaches where the learner is considered an empty vessel to be filled with knowledge from the teacher. The findings are in agreement with Wambua (2019) study in Machakos County which found that majority of the teachers were still using traditional instructional approaches and students learn through memorization. The researcher argued that majority of the teachers were not thoroughly trained on teaching approaches aligned to CBC hence the difficulties in adapting their teaching styles to learners' individual learning style. Similarly, Momanyi and Rop (2019) study on teacher preparedness for the implementation of CBC in Boment East Sub – County found that teachers were still using teacher centered approaches as opposed to the discovery methods that allow learners to utilize their interest and talents to acquire skills and competencies through personalized learning. The following section presents findings on teachers' capacity to select appropriate teaching and learning approaches in CBC classes.

4.3.3 Teachers' Capacity to Select Appropriate Teaching and learning Approaches in CBC Classes The teachers were provided with statements measuring their capacity to select appropriate teaching and learning approaches in CBC classes. Their results of their responses were as summarized on Table 6.

Table 6: Teachers' Capacity to Select Appropriate Teaching and learning Approaches in CBC Classes

| Statement | Rating | | | | Cumula | | |
|--|--------|-------|-------|------|--------|-------|--------|
| | SD | D | A | SA | D | A | Total |
| I can easily select a suitable | 20 | 82 | 59 | 0 | 102 | 59 | 161 |
| teaching approach for a given | 12.4% | 50.9% | 36.6% | 0% | 63.3% | 36.6% | 100.0% |
| subject topic | | | | | | | |
| I can adapt my teaching based | 1 | 64 | 96 | 0 | 65 | 96 | 161 |
| upon what students currently | 0.6% | 39.8% | 59.6% | 0% | 40.4% | 59.6% | 100.0% |
| understand or do not understand | | | | | | | |
| I can use teaching approaches | 4 | 81 | 75 | 1 | 85 | 76 | 161 |
| that support learners' creativity | 2.5% | 50.3% | 46.6% | 0.6% | 52.8% | 47.2% | 100.0% |
| I can use teaching approaches | 24 | 67 | 66 | 4 | 91 | 70 | 161 |
| that facilitate higher order | 14.9% | 41.6% | 41.0% | 2.5% | 56.5% | 43.5 | 100% |
| thinking | | | | | | | |
| I can use teaching approaches | 22 | 82 | 54 | 3 | 104 | 57 | 161 |
| that enable learners to solve | 13.7% | 50.9% | 33.5% | 1.9% | 64.6% | 35.4% | 100.0% |
| their problems | | | | | | | |
| I know the teaching approaches | 9 | 66 | 69 | 17 | 75 | 86 | 161 |
| that can support students in | 5.6% | 41.0% | 42.9% | 10.6 | 46.6% | 53.4% | 100.0% |
| learning complex concepts | | | | % | | | |
| I can use teaching approaches | 23 | 58 | 77 | 3 | 81 | 80 | 161 |
| that make the learner an active | 14.3% | 36.0% | 47.8% | 1.9% | 50.3 | 49.7% | 100.0% |
| agent in the teaching-learning | | | | | | | |
| process | | | | | | | |
| Mean $(M) = 2.42$; Standard Deviation $(SD) = 0.26$ | | | | | | | |

Source: Field Data (2024)

Results summarized on Table 6 show that the majority 102(63.3%) of the teachers reported that they could not easily select a suitable teaching approach for a subject topic. The finding implies that the teachers had difficulties choosing appropriate teaching approaches that fits the lesson contents. Majority 96(59.6%) of teachers reported that they could adapt their teaching based on learner progress in learning. Additionally, 85 (52.8%) of teachers claimed they could not use teaching approaches that support learners' creativity. This could lead to potential challenges in nurturing creativity among the learners. Majority 91 (56.5%) of teachers reported they could not use teaching approaches that facilitate higher order thinking. A high proportion 104(64.6%) of the teachers reported that they could not use teaching approaches that enable learners to develop problem solving skills. Similarly, 86(53.4%) of teachers reported that they knew the teaching approaches that could support students in learning complex concepts while 75(46.6%) of teachers claimed that they did not know the teaching approaches that can support students in learning complex concepts. Lastly, 81(50.3%) of teachers reported that they could not use teaching approaches that make the learner an active agent in the teaching-learning process while 80(49.7%) of teachers reported they could use teaching approaches that make the learner an active agent in the teaching-learning process.

The composite mean score of (M=2.42; SD) = 0.26) suggests that teachers had low capacity to select appropriate teaching and learning approaches in CBC classes in the study location. The finding implies that in most of the classes, teachers ended up using trial and error method in selecting the most appropriate approach to facilitate teaching and learning or resorted to the traditional teaching and learning approaches. The finding concurs with Kimario and Otieno (2022) who observed that teachers lacked a variety of the CBC teaching and learning approaches that would make learners more involved and engaged in various ways for effective learning and developing different competencies as targeted by the CBC. This indicates that teachers need to align the teaching and learning approaches to the new CBC curriculum for effective and efficient implementation of the new CBC curriculum. The following section presents and discusses results on the challenges that teachers encountered in realigning teaching and learning approaches to CBC.

4.3.4 Challenges that Teachers Encounter in Realigning Teaching and Learning Approaches to CBC The teachers were asked to indicate the challenges they encounter in re-aligning teaching and learning approaches in CBC classes. The responses were summarized on Table 7 below.

Table 7: Challenges Teachers Encounter in Re-Aligning Teaching and Learning Approaches to CBC

| Statement | Frequency | Percent |
|--|-----------|---------|
| Difficulties in time management | 77 | 47.8 |
| Lack of training | 24 | 14.8 |
| Lack of assessment skills | 9 | 5.6 |
| Lack of funds to implement CBC | 8 | 5.0 |
| Lack of interest in CBC implementation | 9 | 5.6 |
| Lack of support from school administration | 8 | 5.0 |
| Limited understanding of CBC | 9 | 5.6 |
| Learners lack cooperation and interest | 8 | 5.0 |
| Teachers lack experience in CBC | 9 | 5.6 |
| implementation | | |
| Total | 161 | 100.0 |

Source: Field Data (2024)

The results summarized on Table 7 show that most 77(47.8%) of the teachers had difficulties in time management. They found it challenging to balance their numerous responsibilities which include lesson planning, learner instruction and assessment among other administrative duties. Some 24(14.8%) of teachers reported that they lacked training on CBC implementation. Similarly, 8(5.0%) of the teachers reported that lack of funds, lack of support from the administration and lack of cooperation among the learners. According to Amunga et. al. (2020), the content in the new curriculum demands for modern boards, technology gadgets classrooms, laboratories, such smart as laptops, computers and projectors among others. These resources are lacking in most public schools in Kenya. Since CBC is learner centred adequate teaching and learning materials are important to enable learners' active participation in the learning process. Therefore, lack of these resources interferes with effective implementation of the new CBC curriculum. Lastly, 9(5.6%) of teachers reported that inadequate assessment skills, lack of interest from the learners and teachers in implementation of CBC, and teachers lack of experience in implementing. The findings agree with Gulled (2023) who reported that the implementation of CBC in East Africa was adversely affected by inadequate teacher training, infrastructure and resources required for the implementation. In their review, Kitasse and Ssembatya (2024) reasons that CBC implementation in developing countries is affected by lack of teaching and learning resources, inadequate funding, teachers' lack of knowledge and skills about CBC due to inadequate training, and inadequate use of CBC instructional strategies. Mirza et. al. (2023) also submits that despite CBC having been implementing in Algeria for nearly two decades, its implementation continued being affected by lack of practical training among the teachers, absence of clear competency performance criteria, heaviness of the curriculum, over crowdedness of classrooms, and scarcity of resources. This affected the realization of the desired outcomes with the implementation of CBC. Similarly, Opondo et. al. (2023) study in Kajiado concluded that teachers were inadequately trained to deliver and assess CBC which affected their teaching and assessment of CBC. CBC implementation was also affected by inadequate staffing, class size, resources needed for CBC assessment, and lack of support from parents.

5.0 Conclusions

Based on the findings, the study concluded that teachers had low level of awareness on the tenets of CBC. Consequently, the teachers lacked an understanding of the Basic Education Curriculum Framework. This was occasioned by inadequate inservice training among the teachers on the implementation of CBC. The teachers resorted to use of strategies in the old curriculum to implement the new CBC curriculum while others sought advice from other teachers who had been trained on CBC. The study also concluded that the teachers had low capacity to prepare teacher professional documents such as schemes of work and lesson plan. This compromises the quality of CBC syllabus implementation since an effective and efficient teaching and learning process requires proper selection and sequencing of learning content and methodologies which takes place in the scheme of work and lesson plan stages. The teachers were not adequately utilizing the CBC teaching and learning approaches in class due to inadequate skills and knowledge on teaching and learning approaches to apply in CBC classes. The teachers were faced with challenges of aligning their methods of teaching with the learning activities during implementation of CBC which encouraged them to adopt unconventional mechanisms to implement CBC. This was attributed to inadequate preparation of teachers by the government to implement CBC.

6.0 Recommendations

Considering the findings and conclusions of the study, the following recommendations were made:

- i. The Ministry of Education through its agents such as Kenya Institute of Curriculum Development and the Teachers' Service Commission should upscale inservice training initiatives among the teachers. This is expected to improve their level understanding of the tenets of CBC, the preparation of CBC teacher professional documents and the appropriate teaching and learning methodologies to use in CBC classes.
- ii. Headteachers and Curriculum Support Officers should encourage and mentor teachers to use relevant and practical learning experiences during the teaching and learning process to convey abstract concepts and make learning real.
- iii. The Government should provide adequate instructional materials and also ensure reasonable staffing levels in schools to support the implementation of CBC. The new curriculum is resource intensive and sufficient instructional resources and adequate number of teachers are required in schools if indeed CBC is to achieve the intended purpose.

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