

**INFLUENCE OF SCHOOL-BASED FACTORS ON IMPLEMENTATION OF
COMPETENCY-BASED CURRICULUM IN PUBLIC PRIMARY SCHOOLS IN
KAJIADO NORTH-SUB COUNTY, KAJIADO COUNTY, KENYA**

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DECLARATION

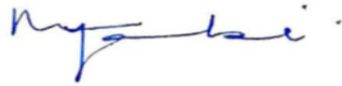
This research project is my original work and has not been presented for any award in any University.



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This research project has been submitted for examination with our approval as University Supervisors.



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DEDICATION

I dedicate this work to my family for their continued encouragement and support during my studies.

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ABBREVIATIONS AND ACRONYMS

CBC:	Competence Based Curriculum
EFA:	Education for All
FGD:	Focus Group Discussions
FPE:	Free Primary Education
ICT:	Information and Communications Technology
KICD:	Kenya Institute of Curriculum Education Development
KNUT:	Kenya National Union for Teachers
MoE:	Ministry of Education
MoNE:	Ministry of National Education
SPSS:	Statistical Package for the Social Sciences
UNESCO:	United Nations Educational, Science and Cultural Organization
UPE:	Universal Primary Education
USAID:	United States Agency for International Development

ABSTRACT

The government is working tirelessly to ensure that implementation of CBC is achieved by ensuring that it provides some of the infrastructure in schools. However, Kajiado North Sub County is one of the arid and semi -arid area that faces unique challenges and this is not an exception to the implementation of CBC. Hence, the purpose of this study was to investigate influence of school-based factors on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. Specifically, the study sought to determine influence of instructional methods, learning resources, teachers' training and school infrastructure on the implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The study adopted the constructivism theory. The study used descriptive survey research design. The target schools were 63 public primary schools in Kajiado North Sub County. The study respondents were 63 primary school head teachers, 516 teachers and 3402 grade 4 and 5 pupils. The sample size was 471. The primary data for the study was collected using focus group discussion guide, questionnaires, and interview guide. The researcher obtained a research permit from the National Council for Science and Technology (NACOSTI). The acquired permit was taken to the County Commissioner and the Sub County Director of Education of Kajiado North Sub County. The researcher then booked appointments with the head teachers to administer the questionnaires and conduct the interview. For analysis, data was first coded and entered into SPSS (version 25). Quantitative data was analyzed using both descriptive statistics (percentages, mean score and standard deviation) and inferential statistics. The findings for quantitative data are presented in tables. The qualitative data from the open-ended questions and interview guides were analyzed using thematic content analysis and presented in narrative form. The study found that instructional methods ($r=0.738$; $p=0.001$), learning resources ($r=0.756$; $p=0.000$), teacher's training ($r=0.792$; $p=0.000$) and school infrastructure ($r=0.763$; $p=0.000$) are strongly and positively correlated with implementation of CBC in public primary schools in Kajiado North Sub-County. The study concluded that school-based factors; instructional methods, learning resources, teacher's training and school infrastructure significantly influence implementation of CBC in public primary schools in Kajiado North Sub-County. The study recommends that the primary school administration should come up with strategies to ensure that teachers use experiments and role play which were established to be the least used learning methods. The study also recommends that the government of Kenya should ensure that in primary schools are adequate books in a bid to improve the pupil book- ratio. The study further recommends that the Ministry of Education should increase the period of in-service CBC training for the teachers. The study also recommends that the government should build more classrooms in all public schools to accommodate the high enrolment rates in public primary schools for successful curriculum implementation.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education is a central element in development. It is a human right and a powerful tool for the economic and social development of a given country (World Bank, 2017). Education is one of the most potent instruments that can be used to end poverty and improve health, gender equality, peace, and the stability of a nation (World Bank, 2018). The dynamic society and growing anxiety of gaining of 21st century skills, digital and the globalization affects the process involved in classroom teaching and learning, and calls for the need to guarantee to everybody the achievement of new competences for their personal and social-development (Pamia, 2017). Therefore competency-based curriculum has been proposed to ensure that the needs of the dynamic society into the job market are actually attained. It is a sensible move towards to education since it focuses on individual's skills, and evaluation of skills mastery, for the adept functioning of a person in any given society (Chaudhary, 2015).

Education is widely valued across the world as a central factor in the economic, political and social development of any country (Republic of Kenya, 2012). Education shapes the world of tomorrow. It is the most effective means that society has for mitigating the challenges of the future. Competency-based curriculum (CBC) approach reforms have been widespread. In America, the need to eliminate less skilled workers and increase the global competition required flexible, good problem solvers and life- long learners hence adopting CBC (Hitt, 2009). High unemployment among youths prompted the adoption of CBC in France which was made mandatory since 2007. In 1998, Japan promoted the

CBC reform under the slogan *ikirichikara*’ meaning zest for living. This was to give hope to learners by encouraging eagerness to learn (Hitt, 2009). CBC in Indonesia was initiated by the Ministry of National Education (MoNE) in 2007 (Utomo, 2005). According to Syomwene (2013), the government of Kenya has had policy intervention with an aim of achieving Universal Primary Education (UPE) and Education for All (EFA). In Kenya Competency Based Curriculum was started in 2017 after the pilot stage in 2016 by the Ministry of Education (MoE). Different countries are currently embracing the Competency Based Curriculum including countries such as India, Rwanda and Tanzania.

The implementation of competency-based curriculum in public primary schools across the globe is influenced by various school-based factors including instructional methods, learning resources, teachers’ training and school infrastructure. Instructional materials refer to any resource or tools a teacher uses to help him/herteach learners. In Cameroon, Esongo (2017) argued that instructional materials play a key role in the implementation of competency-based curriculum in primary schools as they are the foundation for learning and teaching. Without adequate instructional materials, it remains an impossibility to fully implement competency-based curriculum in primary schools. Abdullahi (2019) argued that ministry of education should supply more instructional resources in public primary schools in Kenya like ICT equipment and audio-visual for the effectiveness of competency-based curriculum.

Teacher training refers to the policies, procedures, and provision designed to equip teachers with the knowledge, attitudes, behaviours, and skills they require to perform their tasks effectively in the classroom, school, and wider community (Hardy, 2003).

Ben-Peretz(2011) argues that teachers know their students better than others involved in the curriculum process and hence training teachers helps them to provide insight into the types of materials, activities and specific skills that need to be included in competency-based curriculum. In United Kingdom, Utomo (2005) noted that teachers' training plays a key significant role in CBC implementation. All teachers need training and ongoing professional support. Teachers whose original training has been compromised by disruption of their own education need it more than ever. The chance to complete official teacher training, or use continuing training to upgrade their skills, are vital opportunities in these circumstances. Teachers are the implementers of the curriculum for this reason they play a vast role in improvement and transforming a learner(Mosha, 2012). The implementation of competency-based curriculum depends largely on experience and competence of the teachers. As such, teachers need to have skills on how to teach using the introduced teaching methods (Urunana, 2018).

Instructional methods are kinds of instructional ways used to guide the facilitation of learning in each phase of the instructional process. In India, Chaudhary (2015) argued that some of the instructional methods that have led to be successful implementation of competency-based curriculum include group discussion, conducting experiments, role plays and debating. Another factor affecting the implementation of competency-based curriculum is school infrastructure which refers to a key base for learning in schools and include classrooms, laboratories for the science practical, the halls and open fields for games, games equipment, dormitories, sanitation facilities and others. In Canada, Foth and Holmes (2017) argued that implementation of CBC is greatly challenged by lack of adequate learning facilities, lack of adequate training of teachers on CBC, large class

sizes, lack of adequate teachers, lack of adequate teaching-learning materials, ignorance and lack of cooperation from parents. This implies that school infrastructures significantly affect implementation of CBC.

In Kenya, CBC was started in 2017 after the pilot stage in 2016 by Ministry of Education. Kenya like other developing countries has embraced the CBC with the aim of achieving the National development. This is a crucial step in the direction of Kenya's ambition to develop a knowledge-based society and the growth of regional and global competition in the job market. An important shift has been therefore made to move away from 8-4-4 education system of knowledge and skill acquisition to Competency Based Curriculum of knowledge creation and application (Waweru, 2019).

According to Ambaa (2015), the paramount objective of 8-4-4 was to promote self-reliance to the learners. Few years later, it faced a number of problems that hampered its success. The major problem identified were irrelevancy of curriculum matter to the learner's daily life, inadequate teaching facilities and equipment, not forgetting the heavy work load bestowed on both the teachers and the learners (Ambaa, 2015). Amutabi (2003) agrees that the system was theoretically oriented due to lack of infrastructure. The 2:6:3:3:3 curriculums, also known as the Competency Based Curriculum, is the new education system that was set to replace the 32 year old 8-4-4 system. The changes mean that children will get the opportunity of being children. They will not be pressured to get high scores so that they join in the so called 'good schools'. Children will be able to learn at their pace and not be pawns in an education system that is obsessed with high mean scores. The system aims at enabling every Kenyan child to be an engaged, empowered

and ethical citizen (Abuya, 2017). The system emphasizes on the teaching approaches that engage learners in an exciting process of discovery and exploration of knowledge.

According to Peters (1967) an authoritarian teacher inhibits learners from maximizing their potential because such learners are keen to meet the teacher's expectations at the expense of their beliefs. The curriculum is moving from examination-oriented education where correct answers are given emphasis at the expense of how such can be applied outside the classroom to the pedagogy that will develop inherent abilities of learners. This is achieved by engaging learners to creatively participate in the process of learning. Ambaa (2015) asserts that both the teachers and the learners are to see themselves as partners in the discovery and extension of knowledge. Teachers are required to work towards laying foundations that will enable the learners embrace the spirit of role playing and responsibility while in schools to enable them see themselves as responsible people even after school life.

Njenga (2019) argues that the purpose of learning resources is to encourage active learning and make learning attractive. Kelly (2018) observes that teachers should receive adequate training on the new curriculum in the form of professional development to enable them effectively deliver their mandate. Despite the effort towards CBC implementation, there are some hiccups facing the implementation of the same. This is observed from a letter written by KNUT representative while addressing the Cabinet Secretary for education fearing that the new syllabus was hurriedly done, without appropriate designs, pupils' books and that the teachers were ill prepared (Sossion, 2019). In Kajiado county, the implementation of CBC has been hampered by various challenges with most recent being refusal of teachers to attend the CBC training. This prompted the

researcher to investigate the school-based factors such as the teaching methods, teaching and learning resources, teacher training, and infrastructure and how these factors influence the implementation of CBC implementation in public primary schools in Kajiado North Sub County, Kajiado County.

1.2 Statement of the Problem

The curriculum is the sum of all the experiences provided to all learners under the guidance of the school. CBC seeks to develop in learners the ability to apply appropriate skills and knowledge to successfully perform a function (Republic of Kenya, 2016). Diana (2020) argues that the government is putting more efforts to ensure that implementation of CBC is achieved by ensuring that it provides some of the infrastructure in schools. This is by building extra classrooms for CBC, supplying CBC learning materials and also conducting CBC training for teachers. However, Kajiado North Sub County is one of the arid and semi -arid area that faces unique challenges and this is not an exception to the implementation of CBC.

Researching in Kajiado North Sub County is relevant because it is in Kajiado County where 58 teachers were interdicted because they never attended the CBC training, instead they questioned the implementation of CBC. There are high possibilities that what the teachers in one of the sub counties were facing as challenges of implementing the new curriculum is a total replica of what is happening in other sub-counties of Kajiado County. Having the research done in Kajiado North Sub-County is to find out whether various school-based factors have affected the implementation on CBC in public primary schools. This is because there are limited studies linking the school-based factors and CBC implementation. Hence this propelled the need to explore school-based factors, such

as teachers' instructional methods, teaching and learning resources, teachers training, and infrastructure and find out whether they influence the implementation of CBC in Kajiado North Sub-County, Kajiado.

1.3 Purpose of the study

The purpose of this study was to investigate influence of school-based factors on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County.

1.4 Objectives of the Study

The study focused on the following objectives:

- i. To determine influence of relevance of instructional methods on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County.
- ii. To establish influence of adequacy of learning resources on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County.
- iii. To assess the extent to which teachers' training influence implementation of the CBC in public primary schools in Kajiado North Sub-County, Kajiado County.
- iv. To establish the extent to which school infrastructure influence the implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County.

1.5 Research Questions

The study was guided by the following questions:

- i. To what extent do relevance of instruction methods influence implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County?

- ii. To what extent do the adequacy of learning resources influence implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County?
- iii. In what ways does teacher training influence implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County?
- iv. In what way does infrastructure influence the implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County?

1.6 Significance of the Study

The findings of this study might be helpful to the Kenya Institute of Curriculum Development (KICD) in coming up with more CBC training programs, CBC workshops, and CBC in-service trainings for teachers on the implementation of CBC. The study may also come up with the information that can assist policymakers in developing improved policies and strategies towards the improved implementation of CBC. To the educational planners, the study may be valuable in assessing the availability and adequacy of the teaching and learning resources and also help them in making more accurate estimates and allocation of the same. Scholars might use the study as a point of reference in their studies on the same note, the study might provide more ideas on the areas of CBC implementation that require further studies to be done by scholars. The study would also help teachers to improve on the implementation of CBC since the study would identify problems facing CBC implementation and provide suggestions on possible solutions for teachers to implement. Finally, but equally important, researchers might get knowledge to supplement the existing research.

1.7 Limitation of the Study

The researcher had no control over the attitudes of the respondents, which affected the validity of the responses. This was mitigated by using a large sample size to ensure complete and effective generalization of findings. The attitude of the respondents affected the validity of the responses since some of the respondents were unwilling to participate in the study. The researcher, however, mitigated this by explaining to the respondents the purpose of the study and assure them that their identity was not revealed during the report writing and that the information provided was used for academic purposes only.

1.8 Delimitation of the Study

Matula et al (2018) asserts that delimitation is identifying and specifying what the study included and what it left out to help avoid misunderstanding by the reader. The study was confined to public primary schools in Kajiado North Sub County, Kajiado County. The study was delimited to the school factors influencing implementation of CBC. The respondents in the study were the primary school head teachers and teachers because they play a very key role in the implementation of CBC. The learners from grade five and six were allowed to participate in the study as they had already been in CBC for long enough during its implementation.

1.9 Basic Assumptions of the Study

The assumptions of the study were that:

- i. The respondents had knowledge and perception on how school-based factors how influence the implementation of CBC.
- ii. The respondents gave appropriate responses.

- iii. The school-based factors like adequacy of learning materials and school infrastructure have significant effect on CBC implementation

1.10 Definitions of Significant Terms

Competency-based curriculum- Refers to a curriculum that put more weight on the practical application of the knowledge, skills, attitudes, and values to make life more real as compared to the content acquisition curriculum.

Education –Refers to the acquisition of knowledge, skills, and attitude that changes one’s behaviour.

Implementation- Refers to the processes and practices of putting CBC plan into execution.

Instructional materials –Refers to any resource or tools a help a teacher uses to help him teach his students.

Learning resources-Refers to materials that aid the teaching and learning process such as classrooms, libraries, desks, chairs, textbooks, exercise books, computer laboratories, playing fields that can accommodate learners.

School based factors - Refers to factors found within the school environment that affects the implementation of competency-based curriculum in Kenya

1.11 Organization of the Study

The study is organized in five chapters whereby chapter one is introduction to the study. Chapter two covers literature review for the study variables, that is CBC implementation, instructional methods, teachers’ training, learning resource and school infrastructure. Chapter three is research methodology which covers introduction, research design, target population, sample size and sampling procedures, research instrument, validity and

reliability, data collection procedures, data analysis techniques, and ethical considerations. Chapter four covers data presentation, interpretation and discussion of the findings. Finally, chapter five presents summary, of the study, conclusion, recommendations, and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Chapter two contains a review of related literature on the topic under study and includes the meaning of CBC and the meaning of implementation, instructional methods when implementing the CBC, teachers' training, learning resource and how school infrastructure influence implementation of CBC. A summary of literature review, theoretical and conceptual frameworks are included in this section.

2.2 Implementation of Competency-Based Curriculum

Competency-Based Curriculum is a curriculum that emphasizes the complex outcomes of a learning process (that is, knowledge, skills and attitudes to be applied by learners) rather than mainly focusing on what learners are expected to learn about in terms of traditionally-defined subject content. Chaudhary (2015) argues that curriculum implementation involves putting into practice the officially prescribed courses of study, syllabuses and subjects. The process includes helping the learner to acquire knowledge or experience. Curriculum implementation therefore, revolves around the learner because it can only take place when the learner is involved. He further notes that there are a variety of factors that influence curriculum implementation and that all these factors interact with each other bringing an influence that cannot be attributed to one factor but instead, they are viewed as a whole. Curriculum implementation can also refer to the stage when the curriculum as an educational program is put into effect. Implementation takes place when the teacher constructed syllabus, the teaching materials and the environment interact with the learner. In other words, curriculum implementation refers to how designed course of

study is translated by the teacher into the schemes of work and lesson plan to be delivered to the learner (Chaudhary, 2015).

Competency is the attaining of sufficient skills and knowledge to perform the activity or service to a level and quality that is acceptable in a time within which a competent person at the same level could reasonably be expected to perform the task (Makunja, 2015). CBC is a type of curriculum that stresses on holistic interdisciplinary approach to develop the skills and knowledge desired for sustainable development as well as changes in values, behavior and lifestyle in order to enable everybody to make decisions to mitigate the challenges that threaten the future that is to be sustained (Ngwacho,2019). According to KICD (2017), in a major departure from the 8.4.4 system, the proposed CBC system was launched in 2017 and is designed to comprise two years of pre- primary education, six years of primary education, three years of junior secondary education, three years of senior secondary education and three years of university education (2.6.3.3.3.) CBC is designed to connect with Vision 2030 to help our economy grow and our society to flourish. From an economic perspective, CBC aims to fix the disconnection between the world of school and the world of work. More creative workers are needed to think for themselves, with 21st Century skills to make Kenya compete on the global stage.

The CBC is advancing across the country as a critical component of creating an education system that is able to personalize education while remaining focused on the vision of an equitable system (Waweru, 2018). In CBC approach, learners are expected to be presented with resources where they interact and construct meaning out of the very knowledge (Barman, 2011). Jenge're (2017) asserts that learners have different abilities and therefore, very important to consider that Competency Based Curriculum requires

learning to be hands on instead of mere observation. Previously, the 8.4.4 system emphasized on content-based teaching and learning which involves the rote memorization of factual knowledge but now the education is shifting to 2.6.3.3 system which emphasizes on competency-based teaching and learning which deals with understanding the concepts, skills and competencies which in turn calls for changes in teaching, learning and assessment approaches (KICD, 2017).

According to Urunana (2018), CBC in Rwanda is aimed at producing a generation of school leavers with the right skills, values, knowledge and attitudes to effectively deal with the local, regional and global, social, cultural, economic and technological demands. In Tanzania, Makunja (2015) contends that CBC involves learning through presentation encouraging learners to demonstrate ability to apply knowledge and skills learnt in a real-life situation. The curriculum further enables the learner to perform and function independently while exploring their own knowledge. The new curriculum is a welcome initiative as it is a progressive system with a focus on essential requirement on skills for 21st century and beyond. Mululei (2019) contends that the curriculum is set to improve the economy of the country. He further notes that the system is set to ease the academic pressures in form of examinations from the learners' shoulders.

Learners will be assessed on their ability to apply the acquired skills and knowledge to perform the relevant tasks that they are trained on and hence determining the individual strengths (Mululei ,2019). Chaudhary (2015) asserts that school environment influences curriculum implementation. Schools located in rich social economic environment and those that have adequate human and material resources can implement the curriculum to an extent that would be difficult or impossible for schools in poor economic environment.

This simply means that in spite of embracing the current CBC, there are some factors that can hinder the smooth implementation of the same. He further notes that there are factors that always work together to bring the desired influence for a complete working of curriculum. The research therefore, focuses on influence of school-based factors such as instruction methods, learning resources, teachers' training and school infrastructure on implementation of CBC.

2.3 Instructional Methods and Implementation of Competence-Based Curriculum

Instructional methods are kinds of instructional ways or activities used to guide the facilitation of learning in each phase of the instructional process. In India, Chaudhary (2015) argued that for the competency-based methods to be successful, instructors should be knowledgeable sufficiently to let their rookies get concerned within the gaining knowledge of system on account that instructors are fundamental gamers in curriculum implementation. According to Kafyulelo et al (2012), for effective learning especially under the CBC, a good choice and application of various teaching methods is necessary to make students learning effective. This calls for changes in the instructional approaches and the need to equip teachers with the necessary competencies for handling new teaching paradigm. In India, Chaudhary (2015) conducted a study on factors affecting curriculum implementation for students. He established that CBC involves the application of various teaching methods that can only be realized if teachers have the ability to apply a range of teaching methods.

Different teaching methods are used during the teaching and learning process especially lecture methods, being alternated with question-and-answer methods. Other teaching methods such as role play, experiment, field trips, problem solving, debate and

observation are in most cases not used. (Chaudhary, 2015). In her study on Adopting CBC to improve quality in Secondary Education in Tanzania, Makunja (2015) asserts that for effective learning as far as CBC is concerned, a good choice and application of a variety of teaching methods is paramount. Therefore, teachers need to be well conversant with the application of teaching methods necessary to make students' learning effective.

Another study conducted in Tanzania by Muneja (2015) on Secondary School teachers' implementation of CBC in Arusha, points out that 53% of the teachers who did not manage to attend any specific training on competency-based curriculum rely on their teaching experience and knowledge acquired from college and 47% of teachers use traditional teaching methods such as lecture method. Omondi (2014) conducted a study in Ukwala Division on factors influencing implementation of curriculum in public primary schools. The study established that most teachers use the old pedagogical methods of imparting knowledge to learners. The study further found out that most teachers were not keen enough to use innovative methods such as ICT in impacting the learning process. This impacted negatively on the implementation of curriculum in primary education. Most of the reviewed studies suffered from conceptual, contextual and methodological gaps. The studies also failed to extensively illustrate how instructional methods influence the implementation of CBC in public primary schools. This study intends to fill the gap by determining how instructional methods influence implementation of CBC in public primary school in Kajiado North Sub County, Kajiado County.

2.4 Adequacy of Learning Resources and Implementation of Competence Based Curriculum

Learning resources are any resource or tools a help a teacher uses to help him teach his students. In Cameroon, Esongo (2017) argued that instructional materials play a key role in the ongoing implementation of competency-based curriculum in primary schools as they are the foundation for learning and teaching. Without adequate instructional materials, it remains an impossibility to fully implement competency-based curriculum in primary schools. Abdullahi (2019) argued that ministry of education should supply more instructional resources in public primary schools in Kenya like ICT equipment and audio-visual for the effectiveness of competency-based curriculum

A study conducted in India by Chaudhary (2019) on factors affecting implementation of curriculum established that no meaningful teaching can take place without adequate learning resources and CBC is not an exception. For the CBC to be fully implemented according to the plan, the Ministry of Education should provide schools with necessary and adequate resource materials such as textbooks, teaching aids and stationery in order to implement the curriculum. The availability and quality of resource materials has a great influence on curriculum implementation. Eshiwani (1983) asserts that lack of textbooks and teaching materials makes teaching difficult since students find it hard to do a written work during class lessons. Mwana (2013) observes that teaching and learning materials such as textbooks enhance curriculum implementation and that the shortage and lack of text books hamper teaching and learning.

According to the study conducted by Urunana (2018) in Rwanda, Teaching aids facilitates children to easily learn and understand the lesson better. Inadequate learning

resources push teachers to go back to the old methodology. Learning resources are very important as they assist learners to actively participate in the learning process (Ngwacho, 2019). UNESCO (2004) notes that few schools and colleges have access to computer internet and email facilities which are essential for research and learning process. A study on CBC in Tanzania by Makunja (2016) points out that inadequate learning resources are some of the challenges teachers encounter in implementing CBC and that challenges vary from one school to the other. Adequate learning resources enable smooth delivery of content as well as promote the motivation of both teachers and learners (Njenga, 2019). Most of the reviewed studies suffered from conceptual, contextual and methodological gaps. The studies also failed to extensively illustrate how teaching and learning resources influence the implementation of CBC in public primary schools. The study seeks to fill the gap by establishing the influence of how teaching and learning resources influence the implementation of CBC in Kajiado North Sub County, Kajiado County.

2.5 Teachers' Training and Implementation of Competence-Based Curriculum

Teacher training refers to the policies, procedures, and provision designed to equip teachers with the knowledge, attitudes, behaviours, and skills they require to perform their tasks effectively in the classroom, school, and wider community (Hardy, 2003). Utomo (2005) noted that teachers' training plays a key significant role in CBC implementation. All teachers need training and ongoing professional support. Teachers whose original training has been compromised by disruption of their own education need it more than ever. In a study conducted in Canada by Hardy (2003) it was established that pre-service and in-service teachers felt that they were not well equipped and sufficiently prepared with the ICT skills fundamental for handling and using technological tools for

effective implementation of technology in their classrooms. According to the study conducted in Tanzania by Makunja (2012), it was found out that the majority of teachers implemented the CBC without being oriented with the new approaches. The study further indicated that the duration of CBC training was too short to equip teachers with knowledge and skills about competence-based curriculum.

In Rwanda as much as all teachers were trained, some resisted change. Regardless of the many training the teachers were exposed to, they decided to stick by the old methods (Urunana, 2018). The CBC requires teachers who are professionals, knowledgeable and competent in their work, especially in implementing school curricular. Knowledgeable and conversant CBC teachers becomes an important factor in improving the quality of education (Makunja, 2015). Teachers can only become knowledgeable by being exposed to as much training as possible to be equipped with the necessary knowledge and skills for implementing CBC effectively and efficiently.

According to Matara (2014), pre-service training is the course undertaken by teachers before entering the classroom as full responsible teachers. It mainly takes place in institutions of higher learning. On the other hand, in-service teacher training is a course conducted continuously in order to update teachers with skills to promote efficiency implementation. The in-service courses equip teacher with the knowledge, skills and attitude necessary for the implementation of any given education program and sensitize them to any changes in the curriculum. Mwanja (2018) asserts that Education is the key to success and success comes only when one is educated with a person who has knowledge and is highly qualified. Transition to the CBC might be hindered by shortage of qualified teachers and poor learning environment (KICD, 2017). Teachers ought to be

trained and retrained whenever there is a curriculum innovation so that they successfully carry out the innovation (Mosha, 2012). Bishop (1986) points out that for a teacher to be able to educate others, he must be educated.

Kanyonga, Mtana and Wendt (2019) conducted a study on implementation of competence-based curriculum in technical colleges in the case of Arusha City, Tanzania. The study adopted a qualitative approach through the use of case study design in order to get an in-depth understanding of the CBET implementation process. The findings indicated that, though majority of the trainers got in-service training, more than half had limited awareness and understanding about the meaning and aim of the CBET curriculum. Also, trainers showed little knowledge and skills for employing CBET teaching and learning methods as well as conducting students' assessment and evaluation.

Waweru (2018) asserts that a well-trained teacher under the CBC is able to organize content to be taught in advance, focusing clearly on the scope to which subject matter is supposed to be covered and in the way it should be taught. The aim of training is to adequately prepare teachers for national roll out, equip teachers with necessary skills to implement the competence-based learning approach. Training also helps equip teachers to facilitate differentiated learning and to ensure that all learners are wholly engaged in learning (KICD, 2017). Ngwacho (2019) agrees that before any implementation of the new curriculum, the government should make sure that they train all teachers to equip them with the knowledge and skills.

A study conducted by Abdullahi (2019) on school-based factors influencing implementation of CBC in public pre-schools in Garissa Sub County, revealed that most

of the teachers had not undergone any specialized course to empower them to conduct the competency-based curriculum. In Tanzania, only few teachers got trained because of lack of funds to train all teachers and the few that attended the training were expected to train their fellow colleagues, who did not attend the training. This makes teachers use the old experience and knowledge gained from colleges. Training is important because the change of curriculum systems comes with the change in instructional approaches that makes in-service for teachers more important. In-service training provides significant knowledge and skills to understand CBC and to implement it confidently, effectively and successfully. For a clear understanding teacher need at least an extended period of training (Makunja ,2015)

Urunana (2018) contends that most training are organized in holidays when teachers have a right to their holidays. Some teachers feel demotivated and refuse to attend. Maluei (2019) argues that the government through the Ministry of Education has undertaken an induction of teachers at all levels on the new curriculum through primary education supported by the World Bank to train teachers in the field on methodological approaches used in teaching numeracy and literacy. Most of the reviewed studies suffered from conceptual, contextual and methodological gaps. The studies also failed to extensively illustrate how teacher training influence the implementation of CBC in public primary schools. This study intends to fill the gap by establishing the influence of teacher training on the implementation of CBC, in Kajiado North Sub County, Kajiado County.

2.6 Infrastructure and Implementation of Competency Based Curriculum.

School infrastructure is a key base for learning in schools and include classrooms, laboratories for the science practical, the halls and open fields for games, games

equipment, dormitories, sanitation facilities and others. In Canada, Foth and Holmes (2017) argued that implementation of CBC is greatly challenged by lack of adequate learning facilities, lack of adequate training of teachers on CBC, large class sizes, lack of adequate teachers, lack of adequate teaching-learning materials, ignorance and lack of cooperation from parents.

According to World Bank (2021), buildings, classrooms, laboratories and educational infrastructure are crucial elements of learning environment. Sossion (2019) proposes provision of small class size in Kenya according to UNESCO recommendation standards for personalized learning to take place. He further recommends for the provision of infrastructures such as Computer Laboratories, workshops, Libraries and construction of more classes to cater for the rising number of the learners, 100% transition policy from primary to secondary by the government. Hawa (2018) agrees that classroom is a backbone of any school resources and that schools should have adequate classes with a pleasant look, well painted walls and spacious to accommodate learners adequately. The study further points out that the government should provide physical facilities such as classrooms, laboratories, workshops, libraries and sport fields in order to create an environment in which implementation can take place.

Syomwene (2013) argues that for learners to be healthy, enhanced and adequate, sanitation facilities should be put in place to cater for the increased enrolment. Inadequate latrines, toilets, bathrooms and water pose a threat to the health of learners. Kenyan schools have high enrolment as a result of free primary education (FPE) program, yet water and sanitation facilities remain the same. These mainly affect adolescent girls. Furthermore, most schools lack chalkboards and visual aids (Syomwene, 2013). This

indicates that lack of facilities in school is a major problem that affects teachers in implementing educational reforms and policies. However, a study conducted by Abdullahi (2019) on school-based factors influencing implementation of CBC in public pre-schools, established that teaching and learning resources were adequately available in Garissa, except for ICT and audio-visual equipment.

Muasya and Waweru (2019) carried out a study on the constraints facing competence-based curriculum implementation in Machakos County, Kenya. Despite getting huge groups of students, most schools have had a crisis of staff shortages of insufficient laboratories and inadequacy of learning and teaching materials, among others. Kigwilu and Akala (2017) carried out a study on the utilisation of resource implementation of the curriculum in Community Colleges in Kenya. The study revealed that learning and teaching materials were inadequate. These included lecture halls, workshops and experimental training raw materials. The reference books were enough though still underutilized. Although there were inadequate playing grounds, insufficient course books and libraries, insufficient resources have been done through co-sharing agreements of signing related learning institutions on equipment local firms. Most of the reviewed studies suffered from conceptual, contextual and methodological gaps. The studies also failed to extensively illustrate how school infrastructure influence the implementation of CBC in public primary schools. This study intends to fill the gap by establishing the extent to which infrastructure influence the implementation of CBC in Kajiado North Sub County, Kajiado.

Your voice is lacking in this chapter

2.7 Summary of literature review

Based on the review of literature from various scholars and past researches collected, it can be noted that there are significant number of factors affecting implementation of CBC in public primary schools. Chaudhary (2019) and Urunana (2018) agree that availability of teaching and learning resources are a major challenge that hinders the implementation of CBC in schools. Poor Instructional methods that teachers use in class contribute poorly to the implementation of CBC. Scholars have also found out that teacher training and infrastructure play a significant role in influencing the implementation of CBC.

Most of the reviewed studies like Muasya and Waweru (2019), Kanyonga, Mtana and Wendt (2019) and Abdullahi (2019) used one research design which may not be effective to evaluate the influence of school-based factors on implementation of competency-based curriculum in public primary schools. Moreover, there is contradictions among the literature making it unclear if school-based factors have a positive or negative influence on implementation of competency-based curriculum in public primary schools. From the review of literature, it is clear that there are a number of studies that have been conducted on instructional methods, teaching and learning resources, teacher training and infrastructure. However, the previous studies do not answer the question of school-based factors influencing the implementation of CBC in public primary schools in Kajiado North Sub County. This study therefore, is to examine the influence of school-based factors on implementation of CBC in public primary schools in Kajiado North Sub County.

2.8 Theoretical framework

The study adopted the constructivism theory. The origin of the theory is linked to Jean Piaget 1896-1980. Constructivism theory is a theory in education that recognizes the learners understanding and knowledge based on their own experience prior to entering school. It states that individuals construct new knowledge from their experiences. Constructivism is often associated with pedagogic approaches promoting active learning by doing. The theory suggests that learning is accomplished best using a hands-on approach. Learners learn by experimentation and not by being told what will happen, and are left to make their own inferences, discoveries and conclusions (Hein, 1991).

The role of the teacher in a constructivist class is to organize information around big ideas that engage the learners in developing new insights, and to connect them with their previous. The activities are learner centered, and learners are encouraged to ask their own questions, carry out their own experiments, and make their own analogies and to come to their own conclusions. This theory is relevant to the study because it allows the learners to develop skills and confidence to analyze the world around them, create solutions or support developing issues, and then help them justify their words and actions. The teacher in this theory, function as a facilitator, taking away the focus on the teacher and putting on the learner and their learning. The teacher challenges the learners by making them effective critical thinkers Brooks & Brooks (1993).

This theory encourages the implementation of CBC, since it encourages the learners to discover the knowledge for themselves. It encourages teachers to involve different methodologies that can enable the learners to discover for themselves instead of being pumped with the knowledge as mere containers. The teacher plays a role of an expert

learner, whereby, the teacher facilitates the learning by continually conversing with the learner, creating the learning experience that is open to the new directions depending on upon the need of the learner in the learning process. This theory is relevant to the study as it highlights how various of school-based factors influence the ongoing implementation on CBC in public primary schools in Kajiado North Sub-County, Kajiado County.

2.9 Conceptual framework

Matula et al (2018) defines conceptual Framework as a graphic form or diagram representing the main concept or variables and their presumed relationship with each other. Dependent variable is implementation of competence-based curriculum in public primary schools the independent variables include the instructional methods, learning resources, teachers' training, and infrastructure. The conceptual framework was developed basing on input- process- output model. The input was the independent variables, that is, instructional methods, teaching and learning resources, teacher training, and infrastructure. The process was compliance with teaching and learning with competence CBC. The output was the implementation of CBC. Implementation of CBC can only be achieved by considering all the independent variable through the process of teaching and learning.

the independent variable through the process of teaching and learning.

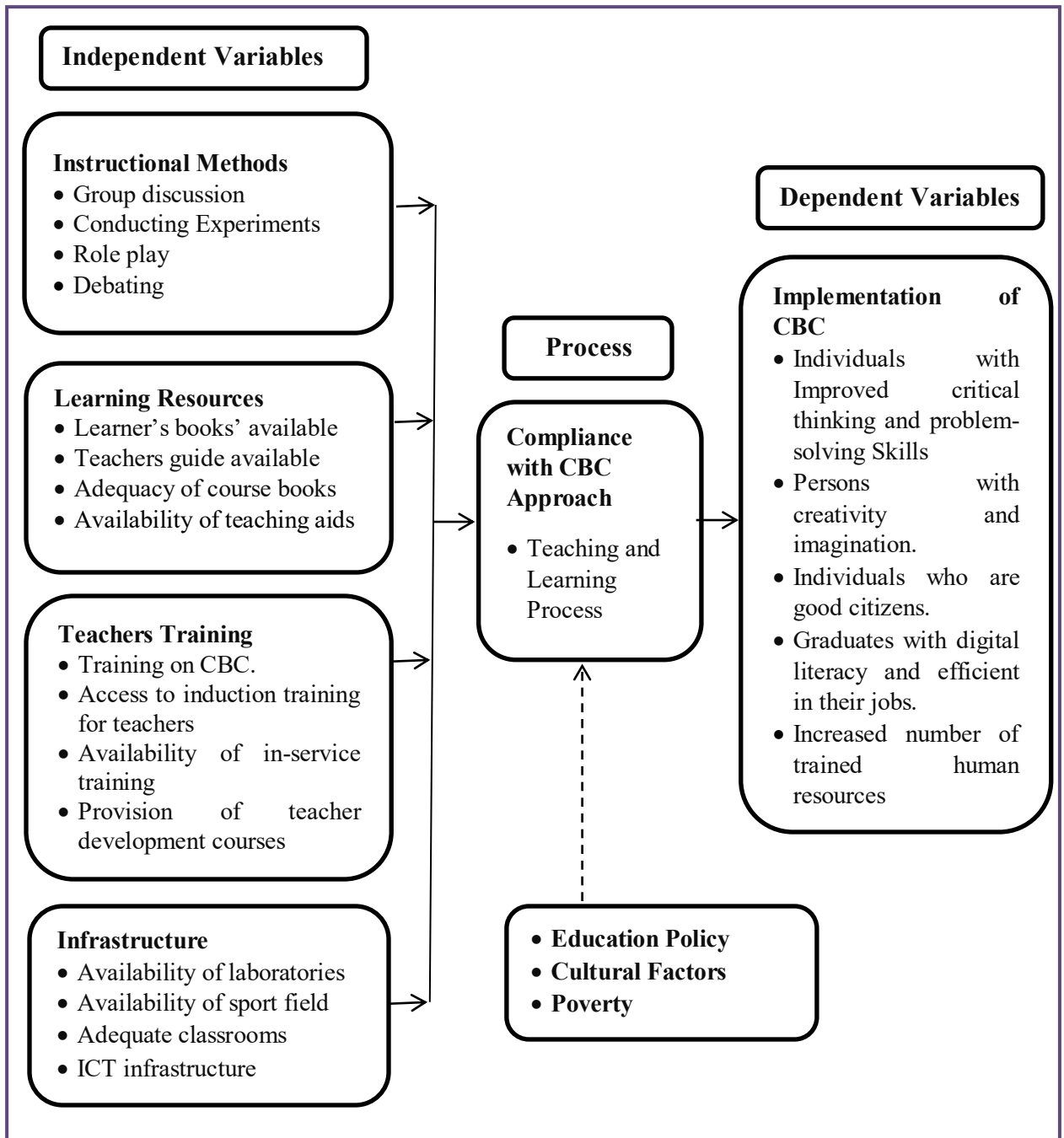


Figure 2. 1: Conceptual Framework

All the variables are interrelated since each play a distinctive role during the implementation of CBC. A trained teacher is well equipped with the subject matter and is able to use the right instructional methods for the implementation of the curriculum. Without the learning resources, the learning cannot be performed effectively and efficiently. The learning resources are very important in the implementation of CBC. Teacher training for the implementation of CBC is very crucial. Training equips the teacher with subject content knowledge which includes pedagogical content and teaching–learning methodologies which are necessary for effective implementation of curriculum. A trained teacher is well equipped with the subject matter and is able to rightfully use the instructional method required for specific lessons. With the required knowledge on instructional methods, the teacher is well vast with the knowledge required for the implementation of CBC and hence the teachers’ attitude towards curriculum implementation changes positively. A prepared teacher impacts the syllabus effectively and teaches with much confidence. Any teaching and learning process require proper application of instructional methods, availability of learning resources, well trained teachers and good infrastructure. When all these are considered in a significant manner, there is always a realization of curriculum implementation that is, significant and valuable. The curriculum that is able to impact an individual, a nation and even the world.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology that the researcher adopted in his investigation. The researcher discusses research design, target population, sample size and sampling procedures, research instruments, validity, reliability procedures, data collection procedure and data analysis techniques.

3.2 Research Design

The study used descriptive correlational research design which aims to describe two or more variables and how they influence each other. Orodho (2004), notes that, descriptive correlational research design involves the collection of information through interviews and administration of questionnaires to the target population. The descriptive correlational research design was selected because the study involves describing, recording, analyzing and reporting conditions, as they currently exist. The study is convenient because of its appropriateness in establishing relationship between variables and facilitating the collection of the information for determining the population parameters.

3.3 Target Population

A target population is the sum total of individuals to whom the research results are generalized (Mugenda & Mugenda, 2003). The study was conducted in Kajiado North Sub County because it's one of the sub counties are facing a lot challenges with the ongoing implementation of competency-based curriculum in public primary schools. The target schools were 63 public primary schools in Kajiado North Sub County. The study

respondents were 63 primary school head teachers, 516 teachers and 3402 grade 4 and 5 pupils (SCDE Kajiado North, 2022).

3.4 Sample Size and Sampling Procedures

The three educational zones in the sub county were included in the study. Rongai zone has 21 schools, Kiserian zone has 23 schools, while Ngong zone has 19 schools. Cluster sampling was employed to select schools for participation by listing down all the schools in the sub county according to their zones. Simple random sampling was used on selecting 16 schools from the 63 schools. This ensured that all educational zones were involved in the study and that all the social dynamics of the sub county is captured. The sample size was based on Guy (2010) who recommends at least 20 percent of the sample size for the research. The study purposively selected 16 head teachers because the head teachers oversee curriculum delivery and implementation in school. Simple stratified sampling was used to select 98 teachers since they interact with the learners on daily basis at the same time implementing the CBC. The researcher also selected Grade 4 and 5 pupils randomly from the schools participated because they are the chief recipient of the curriculum. The sample size is illustrated in table 3.1.

Table 3. 1: Sample Size

	Target population	Sample	Sampling technique
Headteachers	63	16	Purposive sampling
Teachers	516	98	Random sampling
Grade 4 and 5 pupils	3402	357	Random sampling
Total	3981	471	

SCDE Kajiado North, Basic Education Statistical Booklet (2021)

3.5 Research Instrument

Research instrument are the tools or devices that are used to collect the data needed to address the research questions (Matula,*et al*, 2018). The research instruments used in this study was three that is, an interview guide for head teachers, a questionnaire for teachers and a focused group interview for pupil. Each of these instruments were divided into five sections. Each section addressed different issue in relationship with implementation of the competence Based Curriculum. Section A addressed he background information, section B covers teaching and learning methodologies, section C comprised of teaching and learning resources, section D obtained information on teacher training and lastly section E extracted information on infrastructure. An interview guide was used on head teachers because an interview allows the researcher to get an in-depth information. Since the head teachers are assumed to have a lot of information on school, this instrument is considered relevant as it allows the head teacher to give more detailed information about the school. Questionnaires were used on teachers because they have the ability to collect a large amount of information in a reasonable short time. The focused group discussion guide was used to collect the data from the pupils because it is considered appropriate to get different views of information from a group of respondents.

3.5.1 Validity of the Instrument

Validity refers to the degree the instrument generates data that it was meant to generate. In other words, it's the meaningfulness and accuracy of the data that has been generated by a given instrument (Matula et al, 2018). To ensure validity, expert judgment was sought from the supervisors and adjustment done to ensure the content validity. The advice given was used to improve the instruments. Modification and removal of unclear

items such as inaccurate responses or responses indicating weakness was done. In other words, appropriate adjustments were done to the items in the instruments in preparation for the main research.

3.5.2 Reliability of the Instrument

Matula et al (2018) asserts that reliability is the extent to which a measuring tool and procedure produce the same results on repeated trials. Orodho (2004), reliability measures the degree to which the research instruments give consistent results in the subsequent trials. The researcher used test re-test reliability test where the researcher administered the test twice to the same participants but at different time interval of one week. The collected scores were computed by use of Pearson Moment Correlation Coefficient (r) that presented the test- retest reliability coefficient. According to Mugenda and Mugenda (2003), a correlation coefficient of 0.7 or above is appropriate and therefore a correlation of 0.7 and above was considered adequate for data collection instrument. The following is Pearson's correlation coefficient formula:

$$r = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

Where:

N = Number of pairs of scores; $\sum XY$ = sum of the products of pairs of scores

$\sum X$ = sum of x scores; $\sum Y$ = sum of y scores; $\sum X^2$ = sum of squares x scores

$\sum Y^2$ = sum of squared y scores

The computed values for Cronbach's Alpha using SPSS, are as illustrated in Table 3.2.

Table 3. 2: Reliability Analysis

	Cronbach's Alpha	N of Items
Instructional methods	0.871	8
Learning resources	0.756	7
Teachers' training	0.769	8
School infrastructure	0.797	7
Implementation of CBC	0.722	4

From the findings, instructional methods had a Cronbach alpha of 0.871, learning resources had a Cronbach alpha of 0.756, teachers' training had a Cronbach alpha of 0.769, school infrastructure had a Cronbach alpha of 0.797 and Implementation of CBC had a Cronbach alpha of 0.722. This demonstrates that the research instrument was reliable because their values of reliability exceeded the prescribed limit of 0.7 (Orodho, 2004). Hence this shows that the research tool was reliable and no changes were needed.

3.6 Data Collection Procedures

The researcher obtained a research permit from the National Council for Science and Technology (NACOSTI). The acquired permit was taken to the County Commissioner and the Sub County Director of Education of Kajiado North Sub County. A prior visit to the sampled schools was done in order for the researcher to familiarize herself with the respondents and explain to the head teachers the procedure and the purpose of the study. The researcher then booked appointments with the head teachers to administer the questionnaires and conduct the interview. Grade three teachers gathered pupils in a group of 5-7 for FGD. Both the questionnaires and interviews were administered and conducted in person respectively. The data collection instruments were returned back immediately after being filled.

3.7 Data Analysis Technique

Data analysis is the process of systematically organizing summarizing and scrutinizing responses obtained from respondents, whether in text format or numbers in order to make decision (Matula, et al, 2018). The data was first coded and entered into SPSS (version 25). Quantitative data was analyzed using both descriptive statistics (percentages, mean score and standard deviation) and inferential statistics. The findings for quantitative data are presented in tables. The qualitative data from the open-ended questions and interview guides were analyzed using thematic content analysis and presented in narrative form. The influence of independent variable (school based factors) on dependent variable (implementation of competency based curriculum) was established using Pearson correlation analysis.

3.8 Ethical Considerations

The participants were fully informed about the general purpose of the study and any possible factors that can affect their willingness to participate was explained before they are allowed to participate in the research. The researcher ensured that all the participants are safe and free from any harm that might come as a result of participating in the research. The researcher also ensured that participants participate in the research freely with no force.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATIONS

4.1 Introduction

This chapter illustrates the findings, interpretations and discussion as per the objectives, research questions and hypotheses. The study sought to investigate influence of school-based factors on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The chapter covers findings on data collection tools' response rate, background information, descriptive statistics on instructional methods, learning resources, teachers' training, school infrastructure and implementation of CBC in public primary schools and finally the inferential statistics. The findings are illustrated in tables and data interpretation is provided in as per study objectives. Additionally, the researcher provides discussions of findings by linking the findings with literature.

4.2 Instruments Response Rates

The researcher used both focus group discussions for pupils, questionnaires for teachers and interview guides for head teachers. The response rate for the research tools was as shown in Table 4.1.

Table 4. 1: Response Rate

	Sample	Frequency	Response Rate
Headteachers	16	11	68.8%
Teachers	98	77	78.6%
Grade 4 and 5 pupils	357	274	76.8%
Total	471	362	76.9%

The findings shows that the researcher was able to interview 11 out of 16 headteachers and this gave a response rate of 68.8%. The researcher also got back 77 out of 98

questionnaires administered to teachers and this gave a response rate of 78.6%. Moreover, the findings show that only 274 out of from 357 grade 4 and 5 pupils participated in focus group discussions and this gave a response rate of 76.8%. This implies that the responses rate for all the data collection tools were adequate for statistical data analysis. This concurs with Mugenda andMugenda (2003) who noted that any rate of response above 60% is acceptable statistically.

4.3Background Information

The section captures teachers’ background information including the gender, age bracket, highest academic qualification and how long they have been a teacher.The analysis of data and the presentation was in form of tables.

4.3.1 Gender of the Teachers

The researcher requested the teachers to indicate their gender. The results are illustrated in Table 4.2.

Table 4. 2: Gender of the Teachers

	Frequency	Percent
Male	47	61.0
Female	30	39.0
Total	77	100

From the findings, the male teachers were more as shown by 61% than female teacher who were 39%. This implies that data oninfluence of school-based factors on implementation of CBC in public primary schools was obtained from every respondent regardless of their gender.

4.3.2 Age Bracket of the Teachers

The teachers were requested by the researcher to indicate their age bracket. The findings were illustrated in Table 4.3.

Table 4. 3: Age Bracket of the Teachers

	Frequency	Percent
Below 30 years	24	31.2
31-40 years	29	37.7
41-50 years	19	24.7
51-60 years	5	6.5
Total	77	100

From the findings in Table 4.3, majority of the teachers indicated to be aged between 31 and 40 years as illustrated by 37.7%. Other teachers indicated to be aged below 30 years as illustrated by 31.2%, between 41 and 50 years as illustrated by 24.7% while 6.5% of the teachers were aged between 51 and 60 years. The study covered all the relevant age groups for data collection on influence of school-based factors on implementation of CBC in public primary schools.

4.3.3 Highest Academic Qualification

Further, the teachers were asked to indicate their highest academic qualifications. The findings are illustrated in Table 4.4.

Table 4. 4: Highest Academic Qualification of the Teachers

	Frequency	Percent
Certificate	47	61.0
Diploma	17	22.1
Degree	11	14.3
Master	2	2.6
Total	77	100

From the findings in Table 4.4, most of the teachers indicated to have a certificate as shown by 61% and least were those with master's degree (201%). This shows all the teachers had attained the minimum requirement of being a primary school teacher. It also implies that teachers were in a position to understand and respond comprehensively on questions regarding influence of school-based factors on implementation of CBC in public primary schools.

4.3.4 Working Experience of the Teachers

The teachers were asked to indicate how long they have been a teacher. The findings are illustrated in Table 4.5.

Table 4. 5: Working Experience of the Teachers

	Frequency	Percent
1-5 years	25	32.5
6-10 years	29	37.7
11-20 years	19	24.7
21 years and above	4	5.2
Total	77	100

From the findings in Table 4.5, most of the teachers indicated that they have been a teacher for a period of 6 to 10 years as shown by 37.7%. Other teachers indicated that they have been a teacher for a period of 1 to 5 years as shown by 32.5%, for a period of 11 to 20 years as shown by 24.7% and for a period of 21 years and above as shown by 5.2%. This implies that most of the respondents had been teachers for long enough to be able to provide information on influence of school-based factors on implementation of CBC in public primary schools.

4.4 Instructional Methods and Implementation of CBC

The study sought to determine influence of instructional methods on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The teachers were asked to indicate the extent to which instructional methods influence the implementation of CBC. The findings are shown in Table 4.6.

Table 4. 6: Extent to which Instructional Methods Influence CBC Implementation

	Frequency	Percent
Small extent (Little influence)	13	16.9
Neutral (Moderate influence)	15	19.5
Large extent (Significant influence)	49	63.6
Total	77	100

From the findings, most of the teachers indicated that instructional methods influence the implementation of CBC to large extent as shown by 63.6%. Other teachers indicated that instructional methods influence the implementation of CBC to neutral extent as shown by 19.5% and to a small extent as shown by 16.9%. This implies that instructional methods influence the implementation of CBC to a large extent.

Further, the teachers were asked to indicate how often they vary their teaching and learning method while implementing CBC. The findings are shown in Table 4.7.

Table 4. 7: Varying Teaching and Learning Method while Implementing CBC

	Frequency	Percent
Always	56	72.7
Rarely	14	18.2
Never	7	9.1
Total	77	100

From the findings in Table 4.7, majority of the teachers indicated that they always vary their teaching and learning method while implementing CBC as shown by 72.7%. Other teachers indicated that they rarely vary their teaching and learning method while implementing CBC as shown by 18.2% and never vary their teaching and learning method while implementing CBC as shown by 9.1%. This implies that teachers vary their teaching and learning method while implementing CBC.

Further, the teachers were asked to indicate their favorite teaching method. Most teachers indicated that their favorite teaching methods was teacher-centered instruction as it facilitates them in controlling over changes in student behavior through direct instruction. Other teachers indicated that their favorite teaching method was small group instruction because it helps them to evaluate more closely what each pupil is capable of and construct strategic plans around the assessments. Moreover, other teachers indicated that their favorite teaching was role plays because it helps the pupils to develops speaking and listening skills, as well as giving children the opportunity to reflect on and develop their knowledge of a topic, whilst sparking and enhancing creativity and imagination.

The teachers were also asked to indicate the teaching and learning method they least use and why. Majority of the teachers indicated that the teaching and learning method they use is conducting experiments and role play because of lack of adequate resources such as science laboratory and sports fields.

Moreover, the teachers were asked to indicate the extent to which various instructional methods influence the implementation of CBC in their school using 1-5 Likert scale where a mean less than 1.5 means very low extent (VLE), a mean greater than 1.5 but less than 2.5 means low extent (LE), a mean greater than 2.5 but less than 3.5 implies

moderate extent (ME), a mean greater than 3.5 but less than 4.5 implies great extent (GE) and a mean greater than 4.5 implies very great extent (VGE). The findings are shown in Table 4.8.

Table 4. 8: Extent to which Instructional Methods Influence CBC Implementation

	VLE	LE	ME	GE	VGE	Mean	Std.
	(%)	(%)	(%)	(%)	(%)		Dev.
Group discussion	0.0	5.2	13	64.9	16.9	3.935	0.713
Conducting experiments	0.0	3.9	10.4	66.2	19.5	4.013	0.678
Role play	11.7	61	14.3	9.1	3.9	2.325	0.938
Debating	0.0	5.2	9.1	67.5	18.2	3.987	0.698

From the findings in Table 4.8, most of the teachers indicated that conducting experiments as shown by 66.2% and a mean of 4.013 and that group discussion as shown by 64.9% and a mean of 3.935 influence the implementation of CBC in their school to a great extent. Moreover, most of the teachers indicated that debating as shown by 67.5% and a mean of 3.987 influence the implementation of CBC in their school to a great extent. However, most of the teachers indicated that role play as shown by 61% and a mean of 2.325 influence the implementation of CBC in their school to a low extent.

From the focus group discussions, the pupils indicated that some of teaching and learning methods used by their teachers include role plays, modelling, debates, conducting experiments and social interactions. The pupils also clarified that some of activities that are associated with various instructional methods used by their teacher included making observations and answering the questions based on observations, clay modelling and conducting regular group discussions. The pupils also insinuated that the subjects that are taught using experiment method included home science, agriculture and science and

technology. The pupils also said that instructional methods have affected implementation of CBC by making it easy for students to participate in learning as well as making learning more enjoyable.

From the interviews, the headteachers said that teachers are using the right teaching and learning methods to implement competence-based curriculum. The headteachers also said that teaching and learning methods greatly influence the implementation of competence-based curriculum as it makes teaching more enjoyable for both the pupils and teachers. The head teachers also said that the teaching and learning methods which are commonly used during the implementation of competence-based curriculum in their school included group discussion, conducting experiments, role play and debating. In support of this one of the headteacher said,

Among the teaching and learning methods which are commonly used during the implementation of competence-based curriculum conducting experiments and role play. This is because they are more involving and pupils interact freely during teaching and learning. They also make learning more enjoyable and captivating for pupils (Source: Interviewee 9).

Finally, the teachers were asked to indicate ways in which various instructional methods have affected implementation of CBC in their school. Majority of the teachers indicated that role plays greatly affects implementation of CBC by ensuring that there is development of communicationskills and enhancing creativity and imagination amongst the pupils. The teachers also indicated that group discussion and debating have been

enjoyable learning methods for most students and this have made it easy and effective to implement the CBC in primary schools.

The findings Kafyulelo et al (2012) who asserts that for effective learning especially under the CBC, a good choice and application of various teaching methods is necessary to make students learning effective. This calls for changes in the instructional approaches and the need to equip teachers with the necessary competencies for handling new teaching paradigm. Chaudhary (2015) also argues that CBC involves the application of various teaching methods that can only be realized if teachers have the ability to apply a range of teaching methods.

4.5 Learning Resources and Implementation of CBC

The study sought to establish influence of learning resources on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The teachers were asked to indicate how the pupil book- ratio in their class in all subjects is. The findings are illustrated in Table 4.9.

Table 4. 9: Pupil Book-Ratio in all Subjects

	Frequency	Percent
Excellent	5	6.5
Good	9	11.7
Average	15	19.5
Poor	48	62.3
Total	77	100

From the findings, most of the teachers indicated that the pupil book- ratio in their class in all subjects is poor as shown by 62.3%. Other teachers indicated that the pupil book- ratio in their class in all subjects is average as shown by 19.5%, good as shown by 11.7%

and excellent as shown by 6.5%. This shows that in most public primary schools in Kajiado North Sub-County, pupil book- ratio in all subjects is poor.

The teachers were also requested to rate the state of the availability of learning resources towards the implementation of competence-based curriculum in their school. The findings are shown in Table 4.10.

Table 4. 10: Availability of Learning Resources

	Frequency	Percent
Excellent	5	6.5
Good	8	10.4
Average	17	22.1
Poor	47	61
Total	77	100

From the findings, the teachers indicated that state of the availability of learning resources towards the implementation of competence-based curriculum in their school is poor as shown by 61%, is average as shown by 22.1%, good as shown by 10.4% and excellent as shown by 6.5%. This implies that state of the availability of learning resources towards the implementation of competence-based curriculum in their school is poor.

Further, the teachers were requested to indicate the extent to which various learning resources influence the implementation of CBC in their school using 1-5 Likert scale where a mean less than 1.5 means very low extent (VLE), a mean greater than 1.5 but less than 2.5 means low extent (LE), a mean greater than 2.5 but less than 3.5 implies moderate extent (ME), a mean greater than 3.5 but less than 4.5 implies great extent (GE)

and a mean greater than 4.5 implies very great extent (VGE). The findings are shown in Table 4.11.

Table 4. 11: Extent to which Learning Resources influence CBC Implementation

	VLE (%)	LE (%)	ME (%)	GE (%)	VGE (%)	Mean	Std. Dev.
Learner’s books’ available	0.0	6.5	9.1	61	23.4	4.013	0.769
Teachers guide available	2.6	14.3	66.2	16.9	0.0	2.974	0.648
Adequacy of course books	0.0	5.2	6.5	66.2	22.1	4.052	0.705
Availability of teaching aids	0.0	7.8	2.6	64.9	24.7	4.065	0.767

As per the findings, most of the teachers indicated that learner’s books’ available as shown by 61% and a mean of 4.013 and that adequacy of course books as shown by 66.2% and a mean of 4.052 influence the implementation of CBC in their school to a great extent. Moreover, the teachers indicated that availability of teaching aids as shown by 64.9% and a mean of 4.065 influence the implementation of CBC in their school to a great extent. However, most of the teachers indicated that teachers guide available as shown by 66.2% and a mean of 2.974 influence the implementation of CBC in their school to a moderate extent.

From the focus group discussions, the pupils said that some of learning resources available in their school included pupils text books, teachers guide, course books, teaching aids, radio programs, animations and images. Moreover, pupils indicated that some learning resources like course books and teaching aids are not very adequate. The pupils

also said that learning resources have affected implementation of CBC by helping pupils to understand and enjoy the lesson and by making it easy for teachers to effectively teach all subjects.

From the interviews, the head teachers said that there are inadequate teaching and learning resources adequate in their school. The head teachers also said that teaching and learning resources have a great influence implementation of competence-based curriculum in their school. For effective implementation there must be adequate teaching and learning resources like revision materials, teaching guides, course books and teaching aids

The findings correlate with Esongo (2017) who argued that instructional materials play a key role in the ongoing implementation of competency-based curriculum in primary schools as they are the foundation for learning and teaching. Without adequate instructional materials, it remains an impossibility to fully implement competency-based curriculum in primary schools. Chaudhary (2019) asserts that for the CBC to be fully implemented according to the plan, the ministry of education should provide schools with necessary and adequate resource materials such as textbooks, teaching aids and stationery in order to implement the curriculum. Moreover, Makunja (2016) points out that inadequate learning resources are some of the challenges teachers encounter in implementing CBC and that challenges vary from one school to the other. Adequate learning resources enable smooth delivery of content as well as promote the motivation of both teachers and learners.

4.6 Teacher’s Training and Implementation of CBC

The study further sought to assess the extent to which teachers’ training influence implementation of the CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The teachers were asked to indicate whether they have ever attended any in service training in readiness for the implementation of CBC. The findings are shown in Table 4.12.

Table 4. 12: Whether Teachers attended any In-Service Training in Readiness for CBC

	Frequency	Percent
Yes	68	88.3
No	9	11.7
Total	77	100

From the findings, most of the teachers indicated that they have ever attended any in service training in readiness for the implementation of CBC as shown by 88.3% while 11.7% indicated to have not attended any in service training in readiness for the implementation of CBC. This implies that primary school teachers are being trained in readiness for the implementation of CBC.

Further, the teachers were asked to indicate how beneficial the training was. The teachers indicated that the training was very beneficial. The teachers explained that training has been beneficial because it has equipped them with the requisite skills and competencies

relevant under the competency-based curriculum currently being rolled out in the country.

Moreover, the teachers were asked to indicate which area of the training concerning CBC implementation they think they need some more training. Majority of the teachers indicated that they need more training on teaching methods. This is because the teaching methods being used in CBC are new and more student centered contrary to the traditional methods adopted in 8.4.4 system.

In addition, the teachers were asked to indicate whether they think teachers are given enough time to train on CBC. All the teachers indicated that teachers have not been given enough time for training. This is because the CBC implementation has been rushed without adequate participation of teachers. The teachers also explained that one month training for teachers is not enough to equip the teachers with skills and competence to effectively implement an entirely new curriculum.

Further, the teachers were asked to indicate the extent to which various teacher’s trainings influence the implementation of CBC in their school using 1-5 Likert scale where a mean less than 1.5 means very low extent (VLE), a mean greater than 1.5 but less than 2.5 means low extent (LE), a mean greater than 2.5 but less than 3.5 implies moderate extent (ME), a mean greater than 3.5 but less than 4.5 implies great extent (GE) and a mean greater than 4.5 implies very great extent (VGE). The findings are shown in Table 4.13.

Table 4. 13: Extent to which Teacher’s Trainings Influence CBC Implementation

	VLE	LE	ME	GE	VGE	Mean	Std.
	(%)	(%)	(%)	(%)	(%)		Dev.

Training on CBC.	0.0	5.2	15.6	61	18.2	3.922	0.739
Access to induction training for teachers	0.0	0.0	15.6	64.9	19.5	4.039	0.595
Availability of in-service training	0.0	14.3	22.1	50.6	13.0	3.623	0.889
Provision of teacher development courses	0.0	0.0	15.6	51.9	32.5	4.169	0.677

From the findings, most of the teachers indicated that provision of teacher development courses as shown by 51.9% and a mean of 4.169 and that access to induction training for teachers as shown by 64.9% and a mean of 4.039 influence the implementation of CBC in their school to a great extent. Moreover, most of the teachers indicated that training on CBC as shown by 61% and a mean of 3.922 influence the implementation of CBC in their school to a great extent. Finally, most teachers indicated that availability of in-service training as shown by 50.6% and a mean of 3.623 influence the implementation of CBC in their school to a great extent.

From the interviews, the headteachers said that teacher training influences the implementation of competence-based curriculum in public primary schools by equipping them with appropriate skills about competence-based curriculum and by giving teachers insights on new teaching approaches and prepares the teachers. Moreover, the headteachers said that the training offered towards competence-based curriculum is very effective as the teachers are coping well with the implementation of competence-based curriculum.

The findings concur with Hardy (2003) who established that pre-service and in-service teachers felt that they were not well equipped and sufficiently prepared with the ICT skills fundamental for handling and using technological tools for effective implementation of technology in their classrooms. Matara (2014) argued that in-service

courses equip teacher with the knowledge, skills and attitude necessary for the implementation of any given education program and sensitize them to any changes in the curriculum. Moreover, the findings agree with Waweru (2018) who asserts that the aim of training is to adequately prepare teachers for national roll out, equip teachers with necessary skills to implement the competence-based learning approach. Training also helps equip teachers to facilitate differentiated learning and to ensure that all learners are wholly engaged in learning.

4.7 School Infrastructure and Implementation of CBC

The study also sought to establish the extent to which school infrastructure influence the implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The teachers were asked to rate the availability of the infrastructure in their school toward implementation of competence-based curriculum. The findings are illustrated in Table 4.14.

Table 4. 14: Availability of the Infrastructure toward CBC Implementation

Infrastructure	Not available	Available but not adequate	Available and adequate
Taps	63.6%	26.0%	10.4%
Latrines	0.0%	67.5%	32.5%
Classrooms	0.0%	70.1%	29.9%
Computer laboratories	66.2%	29.9%	3.9%
Workshops	71.4%	24.7%	3.9%
Libraries	80.5%	18.2%	1.3%

Sports field	0.0%	42.9%	57.1%
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From the findings, majority of the teachers indicated that sports field in most primary schools in Kajiado North Sub-County is available and adequate as shown by 57.1%. In addition, most of the teachers indicated that in most primary schools in Kajiado North Sub-County classrooms as shown by 70.1% and latrines as shown by 67.5% is available but not adequate. However, in most primary schools in Kajiado North Sub-County, teachers indicated that taps (63.6%), computer laboratories (66.2%), workshops (71.4%) and libraries (80.5%) are not available.

Moreover, the teachers were asked to indicate the extent to which various school infrastructure influence the implementation of CBC in their school using 1-5 Likert scale where a mean less than 1.5 means very low extent (VLE), a mean greater than 1.5 but less than 2.5 means low extent (LE), a mean greater than 2.5 but less than 3.5 implies moderate extent (ME), a mean greater than 3.5 but less than 4.5 implies great extent (GE) and a mean greater than 4.5 implies very great extent (VGE). The findings are shown in Table 4.15.

Table 4. 15: Extent to which School Infrastructure Influence CBC Implementation

	VLE (%)	LE (%)	ME (%)	GE (%)	VGE (%)	Mean	Std. Dev.
Availability of laboratories	0.0	2.6	10.4	53.2	33.8	4.182	0.721
Availability of sport field	0.0	3.9	14.3	58.4	23.4	4.013	0.734
Adequate classrooms	0.0	6.5	14.3	53.2	26.0	3.987	0.819
ICT infrastructure	0.0	11.7	55.8	26	6.5	3.273	0.755

From the findings, most of the teachers indicated that availability of laboratories as shown by 53.2% and a mean of 4.182 influence the implementation of CBC in their school to a great extent. Moreover, the teachers indicated that availability of sport field as shown by 58.4% and a mean of 4.013 influence the implementation of CBC in their school to a great extent. Further, the teachers indicated that adequate classrooms as shown by 53.2% and a mean of 3.987 influence the implementation of CBC in their school to a great extent. However, most of the teachers indicated that ICT infrastructure as shown by 55.8% and a mean of 3.273 influence the implementation of CBC in their school to a moderate extent.

From the focus group discussions, the pupils were of the opinion that latrines, classrooms and Sports fields are adequate. They also indicated that they think school infrastructure affect implementation of CBC in their school. This is because something like classrooms make it pupils comfortable during the lessons while sport field give the pupils a good environment to learn through role plays. The pupils also said that school infrastructure like library and laboratory affect implementation of CBC since it provides students with extra learning materials to augment what is taught in class.

From the interviews, the headteachers indicated that there are no enough infrastructures in the school since some are adequate and others are inadequate. The headteachers also said that they have been receiving funding towards increasing the infrastructure in school although it's not enough to ensure the school have all the relevant infrastructure. The head teachers also said that they are experiencing resistance from teachers towards the implementation of competence-based curriculum because of the insufficient infrastructures in school. This is because some teachers feel that the school does not have

what it takes in terms infrastructure to fully and effectively implement competence-based curriculum.

Finally, the teachers were asked to indicate ways in which various school infrastructure have affected implementation of CBC in their school. Majority of teachers indicated that CBC implementation have been affected greatly by school infrastructure by making it hard for teachers to use new teaching methods like experiments in situation where there are no science laboratories. Moreover, inadequate infrastructure like classrooms have made it hard to implement CBC in some schools. Additionally, Implementing Physical Education which is part of CBC is ineffective when there is lack of sporting facilities and a playfield.

The findings concur with Foth and Holmes (2017) who argued that implementation of CBC is greatly challenged by lack of adequate learning facilities, lack of adequate training of teachers on CBC, large class sizes, lack of adequate teachers, lack of adequate teaching-learning materials, ignorance and lack of cooperation from parents. Hawa (2018) agrees that classroom is a backbone of any school resources and that schools should have adequate classes with a pleasant look, well painted walls and spacious to accommodate learners adequately. Syomwene (2013) argues that for learners to be healthy, enhanced and adequate, sanitation facilities should be put in place to cater for the increased enrolment. Inadequate latrines, toilets, bathrooms and water pose a threat to the health of learners

4.8 Implementation of Competency Base Curriculum

The respondents were requested to indicate their level of agreement with various statements regarding the implementation of competency base curriculum in their school using a Likert scale 1 to 5 where 1 is strongly disagree, 2 is disagree, 3 is undecided, 4 is agree and 5 is strongly agree. The findings are illustrated in Table 4.16.

Table 4. 16: Agreement with Statements Regarding Implementation of CBC

	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	Std. Dev.
The pupils are smoothly adapting to the new curriculum	0.0	5.2	7.8	74	13	3.948	0.647
The pupils have improved their critical thinking and problem-solving Skills	0.0	9.1	6.5	54.5	29.9	4.052	0.857
The pupils have shown creativity and imagination through the activities they prompted to undertake in CBC	0.0	5.2	5.2	59.7	29.9	4.143	0.738
The teachers are able to determine the pupils' interests and skills	0.0	6.5	10.4	64.9	18.2	3.948	0.742
The CBC prepares pupils with the necessary skills to succeed as adults	0.0	5.2	5.2	67.5	22.1	4.065	0.695

From the findings, most of the teachers agreed that the pupils have shown creativity and imagination through the activities they prompted to undertake in CBC as shown by a mean of 4.143 and that the CBC prepares pupils with the necessary skills to succeed as adults as shown by a mean of 4.065. The teachers also agreed that the pupils have improved their critical thinking and problem-solving skills as shown by a mean of 4.052, that the teachers are able to determine the pupils' interests and skills as shown by a mean of 3.948 and that the pupils are smoothly adapting to the new curriculum as shown by a mean of 3.948.

4.9 Pearson Corelation Analysis

The study conducted Pearson’s product moment correlation analysis to establish the influence of school-based factors on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The results are show in Table 4.17.

Table 4. 17: Correlation Matrix

		Instructional methods	Learning resources	Teacher’s training	School infrastructure	Implementation of CBC
Instructional methods	Pearson Correlation	1				
	Sig. (2-tailed)	-				
	N	77				
Learning resources	Pearson Correlation	.611**	1			
	Sig. (2-tailed)	.000	-			
	N	77	77			
Teacher’s training	Pearson Correlation	.634**	.506**	1		
	Sig. (2-tailed)	.000	.000	-		
	N	77	77	77		
School infrastructure	Pearson Correlation	.723**	.701**	.681**	1	
	Sig. (2-tailed)	.000	.000	.000	-	
	N	77	77	77	77	
Implementation of CBC	Pearson Correlation	.738**	.756**	.792*	.763**	1
	Sig. (2-tailed)	.001	.000	.000	.000	-
	N	77	77	77	77	77

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

The findings in Table 4.17 shows that instructional methods have a strong positive correlation with implementation of CBC in public primary schools in Kajiado North Sub-County (r=0.738; p=0.001). Moreover, learning resources is strongly positively correlated with implementation of CBC in public primary schools in Kajiado North Sub-County (r=0.756; p=0.000). In addition, teacher’s training is strongly positively correlated with

implementation of CBC in public primary schools in Kajiado North Sub-County ($r=0.792$; $p=0.000$).

Finally, school infrastructure is also strongly positively correlated with implementation of CBC in public primary schools in Kajiado North Sub-County ($r=0.763$; $p=0.000$). The findings imply that school-based factors such as instructional methods, learning resources, teacher's training and school infrastructure significantly influence implementation of CBC in public primary schools in Kajiado North Sub-County.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The purpose of the study was to investigate influence of school-based factors on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. This chapter covers introductions, summary, conclusion and recommendation of the study founded on the objectives. The findings are based on instructional methods, learning resources, teacher's training and school infrastructure.

5.2 Summary of the Study

The purpose of this study was to investigate influence of school-based factors on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. Specifically, the study sought to determine influence of instructional methods, learning resources, teachers' training and school infrastructure on the implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The study adopted the constructivism theory. The study used descriptive survey research design. The target schools were 63 public primary schools in Kajiado North Sub County. The study respondents were 63 primary school head teachers, 516 teachers and 3402 grade 4 and 5 pupils. The sample size was 471. The primary data for the study was collected using focus group discussion guide, questionnaires, and interview guide. Data was analyzed using narratives, descriptive and inferential statistics. Findings are summarized in the subsequent sub sections:

5.2.1 Instructional Methods and Implementation of CBC

The study sought to determine influence of instructional methods on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The study established that instructional methods have a significant influence on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County ($r=0.738$, $p=0.001$). The study found that instructional methods influence the implementation of CBC to a large extent and that teachers vary their teaching and learning method while implementing CBC. The study found that conducting experiments and that group discussion influence the implementation of CBC in their school to a great extent. Moreover, the study found that debating influences the implementation of CBC in their school to a great extent. The study also revealed that role play influences the implementation of CBC in their school to a low extent.

5.2.2 Learning Resources and Implementation of CBC

The study sought to establish influence of learning resources on implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The study established that learning resources have a significant influence on implementation of CBC in public primary schools in Kajiado North Sub-County ($r=0.756$; $p=0.000$). The study established that in most public primary schools in Kajiado North Sub-County, pupil book- ratio in all subjects is poor and that state of the availability of learning resources towards the implementation of competence-based curriculum in schools is poor. The study established that learner's books' available and that adequacy of course books influence the implementation of CBC in their school to a great extent. Moreover, the teachers indicated study found that availability of teaching aids influence the

implementation of CBC in their school to a great extent. The study revealed that teachers guide available influence the implementation of CBC in their school to a moderate extent.

5.2.3 Teacher's Training and Implementation of CBC

The study further sought to assess the extent to which teachers' training influence implementation of the CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The study revealed that teacher's training has a significant influence on implementation of CBC in public primary schools in Kajiado North Sub-County ($r=0.792$; $p=0.000$). The study found that primary school teachers are being trained in readiness for the implementation of CBC. The study established that provision of teacher development courses and that access to induction training for teachers influence the implementation of CBC in their school to a great extent. Moreover, the study found that training on CBC influence the implementation of CBC in their school to a great extent. The study revealed that availability of in-service training influences the implementation of CBC in their school to a great extent.

5.2.4 School Infrastructure and Implementation of CBC

The study also sought to establish the extent to which school infrastructure influence the implementation of CBC in public primary schools in Kajiado North Sub-County, Kajiado County. The study established that school infrastructure have a significant influence on implementation of CBC in public primary schools in Kajiado North Sub-County ($r=0.763$; $p=0.000$). The study found that sports field in most primary schools in Kajiado North Sub-County is available and adequate. In addition, the study found that in most primary schools in Kajiado North Sub-County classrooms and latrines is available but not adequate. The study established the in most primary schools in Kajiado North Sub-

County, teachers indicated that taps, computer laboratories, workshops and libraries are not available.

The study found that availability of laboratories influences the implementation of CBC in their school to a great extent. Moreover, the study revealed that availability of sport field influences the implementation of CBC in their school to a great extent. Further, the study established that adequacy of classrooms influences the implementation of CBC in their school to a great extent. However, the study found that ICT infrastructure influence the implementation of CBC in their school to a moderate extent.

5.3 Conclusions

The study concluded that school-based factors such as instructional methods, learning resources, teacher's training and school infrastructure significantly influence implementation of CBC in public primary schools in Kajiado North Sub-County. This is why teachers need to be aware and equipped with skills to adopt all instructional methods including conducting experiments, group discussion and debating and role plays. Moreover, CBC implementation depends on adequacy of learning resources in schools ranging from learner's books, teaching aids as well as course books. It was also established that for effective CBC implementation, teachers need to be trained by ensuring teacher development courses are provided and teachers have access to CBC induction training. Finally, it was established that the challenge of school infrastructure needs to be dealt with to ensure there are laboratories, sport field and adequate classrooms in every public primary school in Kajiado North Sub-County.

5.4 Recommendation of the Study

Based on the findings of the study, the following recommendations were made:

- i. The study recommends that the primary school administration should come up with strategies to ensure that teachers use experiments and role play which were established to be the least used learning methods due to lack of adequate resources such as science laboratory and sports fields. This will improve the implementation of competency-based curriculum in all primary schools in Kenya.
- ii. The study also recommends that the government of Kenya should ensure that in primary schools are adequate books in a bid to improve the pupil book- ratio. There is also a need for government of Kenya to ensure that all primary schools have adequate teacher guides, course books and teaching aids. This will ensure effective implementation of competency-based curriculum.
- iii. The study further recommends that the Ministry of Education should increase the period of in-service CBC training for the teachers. The teachers service commission should make it compulsory that all teachers must go for in-service competency training after every three years before they can be allowed to move to the next grade on promotion.
- iv. The study also recommends that the government should build more classrooms in all public schools to accommodate the high enrolment rates in public primary schools for successful curriculum implementation. There is also a need for government of Kenya through the ministry of education to ensure that every primary school have a fully equipped computer laboratory, science laboratory and a library.

5.5 Suggestions for Further Research

The study makes the following suggestions:

- i. Since this study only focused on public primary schools in Kajiado North Sub-County, future studies should look at influence of school-based factors on implementation of CBC in public primary schools in other sub-counties in Kajiado county.
- ii. The study also suggests that future studies should seek to examine the influence of pupil related factorson implementation of CBC in public primary schools in Kajiado North Sub-County.
- iii. The study also suggests that should also seek to examine the preparedness of pupils and teachers towards implementation of CBC in public primary schools in Kenya.

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APPENDICES

Appendix I: Letter of Introduction

University of Nairobi,
College of Education and External Studies,
P.O Box 92-00,
KIKUYU.

Dear Sir/Madam,

REF: PERMISSION TO COLLECT THE DATA IN YOUR SCHOOL

I am a Masters of Education student from the University of Nairobi currently carrying out research on influence of school-based factors on implementation of competency-based curriculum. The purpose of this research is to find out the views of the pupils and teachers on influence of school-based factors affecting the implementation of Competence Based Curriculum in Kajiado North Sub County in order to help me complete my research.

Any assistance accorded to me will be highly appreciated.

Yours faithfully,

Velma Okello

Appendix II: Focus Group Discussion Guide for Pupils

This group discussion guide is for the purposes of collecting information on school-based factors influencing implementation of competence-based curriculum in public primary schools. All the information provided will be used for the purposes of the study. Kindly respond to the questions as honestly as possible. Your cooperation will be highly appreciated.

1. What are some of teaching and learning methods used by your teachers?
2. Please clarify some of activities that are associated with various instructional methods used by your teacher
3. Which subjects does your teacher teach using experiment method?
4. State two reasons that make the subject mentioned above to be your best subject?
5. In which ways do you think instructional methods have affected implementation of CBC in your school?
6. Please highlight some of learning resources available in your school?
7. Do you think learning resources in your school are adequate? Please explain
8. In which ways do you think learning resources have affected implementation of CBC in your school?
9. In which ways do you think teachers training have affected implementation of CBC in your school?
10. In your opinion, which school infrastructure is inadequate in your school?
11. Do you think school infrastructure affect implementation of CBC in your school? If yes, In which ways?

Thank you so Much for your Cooperation

Appendix III: Questionnaire for Teachers

I appreciate your acceptance to take part in this research whose intention is to investigate school-based factors influencing implementation of competence-based curriculum in public primary schools in Kajiado North Sub County. The information gathered through this questionnaire is for the purposes of research only and the data you provide will be treated with utmost confidentiality. Kindly respond to the questions as truthfully as possible. Do not write your name on the questionnaire.

Section A: Background Information

1. Kindly indicate your gender
Male Female
2. What is your age bracket?
Below 30 years 31-40 years 41-50 years 51-60 years
3. What is your highest academic qualification?
Certificate Diploma Degree Master Doctorate
4. How long have you been a teacher?
1-5 years 6-10 years 11-20 years 21 and above

Section B: Instructional Methods and Implementation of CBC

1. To what extent do instructional methods influence the implementation of CBC?
Small extent Neutral Large extent
2. How often do you vary your teaching and learning method while implementing CBC?
Always Rarely Never
3. What is your favourite teaching method? Explain.....
4. Which teaching and learning method do you least use? Why.....
5. To what extent do the following instructional methods influence the implementation of CBC in your school?

	Very low extent	Low extent	Moderate extent	Great extent	Very great extent
Group discussion					
Conducting Experiments					
Role play					
Debating					

6. In which ways do you think various instructional methods have affected implementation of CBC in your school?.....

Section C: Learning Resources and Implementation of CBC

7. How is the pupil book- ratio in your class in all subjects?
Excellent Good Average Poor
8. Kindly rate the state of the availability of learning resources towards the implementation of competence-based curriculum in your school.
Excellent Good Average Poor
9. To what extent do the following learning resources influence the implementation of CBC in your school?

	Very low extent	Low extent	Moderate extent	Great extent	Very great extent
Learner's books' available					
Teachers guide available					
Adequacy of course books					
Availability of teaching aids					

10. In which ways do you think various learning resources have affected implementation of CBC in your school?.....

Section D: Teacher's Training and Implementation of CBC

12. Have you ever attended any in service training in readiness for the implementation of CBC? Yes No
11. How beneficial was the training? Explain.....
12. Which area of the training concerning CBC implementation do you think you need some more training? Explain.....
13. Do you think teachers are given enough time to train on CBC? Explain.....
14. To what extent do the following teacher's trainings influence the implementation of CBC in your school?

	Very low extent	Low extent	Moderate extent	Great extent	Very great extent
Training on CBC.					
Access to induction training for teachers					
Availability of in-service training					
Provision of teacher development courses					

15. In which ways do you think various teacher's trainings have affected implementation of CBC in your school?.....

Section E: School Infrastructure and Implementation of CBC

16. Rate the availability of the infrastructure in your school toward implementation of competence-based curriculum by ticking the appropriate choice.

Infrastructure	Not available	Available but not adequate	Available and adequate
Taps			
Latrines			
Classrooms			
Computer laboratories			
Workshops			
Libraries			
Sports field			

17. To what extent do the following school infrastructure influence the implementation of CBC in your school?

	Very low extent	Low extent	Moderate extent	Great extent	Very great extent
Availability of laboratories					
Availability of sport field					
Adequate classrooms					
ICT infrastructure					

18. In which ways do you think various school infrastructure have affected implementation of CBC in your school?.....

Section F: Implementation of Competency Base Curriculum

19. Please indicate your level of agreement with various statements regarding the implementation of competency base curriculum in your school using a Likert

scale 1 to 5 where 1 is strongly disagree, 2 is disagree, 3 is undecided, 4 is agree and 5 is strongly agree

	1	2	3	4	5
The pupils are smoothly adapting to the new curriculum					
The pupils have improved their critical thinking and problem-solving Skills					
The pupils have shown creativity and imagination through the activities they prompted to undertake in CBC					
The teachers are able to determine the pupils' interests and skills					
The CBC prepares pupils with the necessary skills to succeed as adults					

Thank you for your cooperation

Appendix IV: Interview Guide for Head Teachers

All the information provided will be used for the purposes of the study. Kindly respond to all questions as honest as possible. Your cooperation will be highly appreciated.

Respondent:	Gender:
Date.....	School:
Name of Data Collector:	

1. Are teachers using the right teaching and learning methods to implement competence-based curriculum?
.....
2. To what extent do teaching and learning methods influence the implementation of competence-based curriculum?.....
3. Which teaching and learning methods are commonly used during the implementation of competence based curriculum in your school?Why.....
4. Are teaching and learning resources adequate in your school?
5. To what extent do you think teaching and learning resources influence implementation of competence-based curriculum in your school?Explain
6. Are teachers’ guides available for all the subjects?
7. How does teacher training influence the implementation of competence-based curriculum in public primary schools?
.....
8. Do you think the training offered towards competence based curriculum is effective? Explain.....
9. What subjects are the teachers finding it hard to teach in the concerned grade?
.....
10. In your own opinion, do you think there are enough infrastructures in the school?
.....
11. Have you ever received any funding towards increasing the infrastructure in school? If yes, by who.....
12. Are you experiencing any resistance from teachers towards the implementation of competence based curriculum because of the insufficient infrastructures in school? Explain.....

Thank you for your Cooperation.