

**ASSESSMENT OF THE TEACHER PREPAREDNESS ON COMPETENCY BASED
CURRICULUM PERFORMANCE IN PUBLIC JUNIOR SECONDARY SCHOOLS
IN MAKINDU SUB COUNTY, MAKUENI COUNTY, KENYA.**

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**A DISSERTAION SUBMITTED IN PARTIAL FULFILLMENT OF THE
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JUNE, 2024

DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

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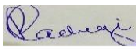
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ABSTRACT

This study aimed to assess teacher preparedness on Competency-Based Curriculum performance in public junior secondary schools of Makindu Sub-County, Makueni County, Kenya. The study intended to establish the level of teacher preparedness for effective implementation of CBC in public junior secondary schools in Makindu Sub-County. The research aimed to answer the questions: how teachers' attitude, Assessment of learners, Information Communication Technology skills and the Instructional resources affect the performance of Competency-Based Curriculum in public junior secondary schools of Makindu Sub-County. The study was specifically conducted within Makindu Ward, Nguumo Ward, and Kikumbulyu South Ward. The study adopted the Concern-Based Adoption Model (CBAM). This research targeted 400 respondents which included: 260 junior secondary school teachers, 136 head teachers and 4 curriculum support officers. The research sampled 120 individuals, consisting of 78 junior secondary school teachers, 41 primary school head teachers, and 1 curriculum support officer. The research simple random sampling and purposive sampling. Data was collected using questionnaires and interviews. Thematic analysis was used to analyze qualitative data while quantitative data was analyzed using descriptive statistics. The results of the study revealed that most of junior secondary school teachers were not well conversant with the CBC system of education. Also, the findings established that junior secondary teachers were not well prepared to implement CBC. The study revealed that implementation of Competence-Based Curriculum brings benefits to education as it's tailored to meet individual student's needs. The results further proved that CBC promotes critical thinking and problem-solving skills among the learners. The findings equally indicated that CBC promotes higher students' engagement and motivation since it was well aligned with real world skills. Furthermore, it was confirmed that respondents had a positive attitude towards CBC as its benefit outweigh the potential challenges. The study found out that technological aspects significantly influenced CBC implementation. The study revealed that challenges of implementing a Competency-Based Curriculum (CBC) can significantly impact its effectiveness. These challenges are designing assessment, conducting assessment, fair grading, individualized assessment, access to assessment materials and enough time for assessment. The study recommended that the ministry of education needs to train and motivate teachers to enable them grasp CBC content and pass the same to learners to enhance holistic development. This study would enhance more positive influence on performance and economic development of the country. Further studies can be carried out in other levels of education like the primary schools, senior secondary schools and universities. This study can also be replicated in other sub-counties and counties to find out how CBC is performing in different places of the country.

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ACRONYMS AND ABBREVIATIONS

The following are important education-related acronyms used:

CAT: Continuous Assessment Test

CBAM: Concern Based Model

CBC: Competency-Based Curriculum

CBT: Competency Based Training

CSO: Curriculum Support Officers

DOE: Department of Education

ICM: Innovation and Configuration Maps

ICT: Information Communication Technology

JSST: Junior Secondary School Teachers

KICD: Kenya Institute of Curriculum Development

LOU: Levels of Use

MOESP: Ministry of Education Strategic Plan

NACOSTI: National Commission for Science and Technology

NCVER: National Centre for Vocational Education Research

SOC: Stages of Concern

TVET: Tertiary and Vocational Education Training

TERMS AND DEFINITIONS

COMPETENCY: A combination of knowledge, skills, abilities, and behaviors that enable an individual to effectively perform specific tasks, duties, or functions in a given context.

CURRICULUM: A structured and planned set of educational experiences, activities, and materials designed to facilitate learning and development within a specific educational program or institution. It outlines the subjects, topics, learning objectives, assessments, and teaching methods that guide the instructional process.

DATA ANALYSIS: The process of inspecting, transforming, and interpreting data to extract meaningful insights, patterns, trends, and relationships

DATA: A collection of facts, statistics, observations, measurements, or information that is gathered, recorded, or represented in a structured or unstructured form.

EDUCATION: The process of acquiring knowledge, skills, values, and attitudes through formal or informal means. It involves the deliberate and systematic imparting of information and instruction to individuals, usually to foster intellectual, social, and personal development

FIGURE: A visual representation or illustration used to convey information, data, concepts, or ideas in a clear and concise manner

INTERVIEW: A structured or semi-structured conversation between two or more individuals, where one person (the interviewer) asks questions and another person or group of people (the interviewee or interviewees) responds with answers

POPULATION: The entire group of individuals, objects, or events that share a common characteristic and are of interest to a researcher or analyst

QUESTIONNAIRE: A structured instrument or survey tool used to gather information, opinions, attitudes, or data from individuals or groups of people.

RESEARCH: The systematic and organized process of investigating a particular topic, issue, question, or problem to acquire new knowledge, understanding, or insights.

SAMPLE: A subset of a larger population that is selected to conduct research, collect data, or draw conclusions about the entire population

CHAPTER 1

INTRODUCTION TO THE STUDY

1.1 Introduction

This chapter presents the background of the study, the statement of the problem, the purpose of the study and the objective of the study. It further outlines research questions, assumptions of the study, and significance of the study. Finally, the chapter describes the scope and delimitation of the study.

1.2 Background of the Study

The global adoption of the Competency-Based Curriculum (CBC) is becoming more prominent in many educational institutions across the globe. This trend is primarily fueled by the intention to establish a strong connection between educational initiatives, the labor market's demands, and dynamic societal needs (Mulder et al., 2018). The increasing need for individuals to acquire 21st-century skills, the integration of technology into daily life, and the globalized job market have influenced how learning and teaching are perceived. This has emphasized the necessity of ensuring that all individuals attain essential new competencies for personal and societal growth (Pamier, 2017).

According to Mosha (2012), a curriculum based on competencies is characterized by precise outcome statements that delineate the competencies to be cultivated or achieved. Competency is described as the demonstrated capacity to effectively utilize skills, expertise, and individual attributes across various academic or professional scenarios (Nikolov, Sholkova & Kovatcheva, 2014).

Transitioning from a content-based curriculum to a Competency-Based Curriculum (CBC) necessitates a fundamental shift in instructional approach. This change moves away from the traditional method of memorizing content to a focus on acquiring relevant skills and competencies (Jengere, 2017). This shift requires the adoption of learner-centered, activity-based pedagogy. Consequently, teachers need to undergo training to understand this paradigm shift and to effectively implement pedagogical approaches aligned with the CBC.

To effectively cater to the requirements of the CBC, teachers are expected to deliver lessons that are tailored to the individual needs and abilities of learners (KICD, 2017). This requires a concerted effort by teachers to integrate the various components of the CBC. Teachers are also responsible for designing impactful learning activities that foster the development of specific competencies (Jengere 2017).

Involving teachers in curriculum development also plays a vital role (Darling-Hammond et al., 2009). The successful implementation of curriculum reform is closely tied to how prepared and informed teachers are, as well as how the reforms are communicated (Porter et al., 2015; Kaniuka, 2012). Previous research also indicates that the primary pedagogical approach in the teacher training curriculum in Kenya used to be predominantly teacher-centered (Kiilu et al., 2018; Ogeta, 2018; Wambiri & Ndani, 2016).

Specifically, there was an observed deficiency in practical examples and limited interaction between teacher educators and student teachers (Akyeampong et al., 2013). This could pose a challenge as teachers who graduated before the implementation of the CBC were trained using teacher-centered methods, whereas they are now expected to employ learner-centered pedagogical approaches.

Teachers are expected to create an environment that incorporates technology to facilitate and enhance the teaching and learning processes (Lim, Chai & Churchill, 2011). In Kenya, a government policy mandates the integration of ICT across all levels of learning to align with the objectives of Vision 2030 (Ministry of Education Strategic Plan (MOESP), 2006).

Additionally, Teachers' attitude plays a crucial role in the successful implementation of a curriculum. The process of curriculum performance requires not only focusing on the content but also addressing the attitudes of various stakeholders, particularly teachers. The significance of changing teachers' attitudes has been emphasized as a pivotal factor for effectively executing a curriculum (Hawes, 1979).

Furthermore, the curriculum places a strong emphasis on formative assessment, which allows teachers to evaluate the capabilities and comprehension of concepts in learners as they continue to learn (KICD, 2017). The use of rubrics for assessments is encouraged, aiding educators in appraising learners' capacity to comprehend and execute tasks. Employing rubrics for assessment also permits teachers to gather evidence of a learner's acquisition of specific proficiencies across different learning activities (Jengere, 2017).

Consequently, teachers are expected to shift from evaluating learners' abilities and competencies based on a comparison with their peers (norm-referenced) to an evaluation based on predetermined criteria (criterion-referenced) as a measure of their advancement within the educational system (Waweru, 2018). The modifications in the curriculum necessitate the preparation of teachers to adapt to this change in approach. Therefore, a consistent and comprehensive training program is essential to equip teachers with the skills to effectively assess learners' abilities across various learning domains.

The concept of competency-based education (CBE) was initially introduced in the United States of America during the 1960s (Sullivan & Bruce, 2014). Sanchez and Romero (2015) noted that the reform in curriculum commenced within teacher education, with the US Department of Education (DOE) aligning instructional methods in training institutions with competency-based teaching and learning approaches. The curriculum emphasized identifiable proficiencies that students were expected to acquire and apply in practical situations. Fein's study (2015) revealed that during the 1970s, the competency-based approach was extended to other professional education programs across the USA.

The Oklahoma Public Schools' Resource Centre in the USA initiated a groundbreaking program called Momentum Schools, tasked with researching competency-based education in foreign countries. The program specifically examined nations that outperform the USA in Pisa assessments. Pisa, managed by the Organization for Economic Cooperation and Development (OECD), is a global initiative designed to assess educational systems by evaluating the academic performance of 15-year-old students in science, mathematics, and reading (OECD, 2016).

The report highlights insights gathered from Canada, Finland, and Scotland. It notes that British Columbia has embraced a Competency-Based Curriculum (CBC) as part of its K-12 innovation strategy. The aim is to introduce greater flexibility to empower teachers in fostering innovation and customizing learning experiences.

In the 1990s, significant endeavors were invested in Australia to introduce competency-based curricula in schools, vocational education and training (TVET) programs, and higher education institutions (Obwoye, 2016). Furthermore, Obwoye's research uncovered that at the heart of

this curriculum overhaul was the aspiration to shift from a content-centered educational approach to one centered on achieving competencies.

The Australian National Centre for Vocational Education Research (NCVER) (2014) elucidated that competency-based training is designed to foster the acquisition and demonstration of skills by industry-established benchmarks, to enhance Australia's competitiveness within the job market. According to Obwoye (2016), the adoption of competency-based training (CBT) in Australia has contributed to the cultivation of a skilled, adaptable, and inventive workforce, thereby playing a role in augmenting Australia's productivity and global competitiveness.

In the United Kingdom, the Competency-Based Curriculum has established a firm foundation, placing significant emphasis on the question of what practical applications can be derived from acquired knowledge. The overarching objective of education is to ensure that learners can effectively utilize their school-acquired knowledge in real-world contexts to address challenges. In the UK, the value of the transfer of knowledge to the learner is tied to its contribution to addressing societal needs and its eventual impact on the country's Gross

Domestic Product over the long term (Katrina, 2018).

In 1998, South Africa became the pioneer African nation to adopt a Competency-Based Curriculum (CBC). The primary goal was to prepare students for the contemporary world through a shift in their perspective and the provision of pertinent skills (Mulenga & Kabombwe, 2019).

Rwanda stands out as a regional example for successfully adopting the Competency-Based Curriculum (CBC), progress noted by Mbarushimana and Kuboja (2016). The curriculum was introduced into primary schools and teachers' training colleges in 2016, replacing teacher-centric methodologies and passive learning with learner-centered approaches as emphasized by the Rwanda Education Board (2017).

The introduction of CBC in Rwanda, as detailed by Ndiokubwayo, Habiyaremye, and Rukundo (2019), was driven by the objective of nurturing skilled and capable Rwandan citizens. Simultaneously, Mugabo, Ozawa, and Nkundabakura (2021) elucidated that this paradigm shift aimed to furnish learners with knowledge, skills, and values that would render them pertinent and competitive in their society. To ensure the effective implementation of the curriculum across Rwandan schools, Ndayambaje (2018) reported that primary school teachers underwent regular and rigorous in-service training on how to effectively implement the curriculum.

In 2005, Tanzania took the initiative to introduce a competency-based curriculum as a strategic response to the prevalent challenges in preparing learners within educational institutions, challenges that had been negatively affecting the quality of education (Ogondieck, 2005). The core intention behind implementing the competency-based curriculum in Tanzania was to elevate the standard of education in the country. This shift aimed to develop learners who not only possessed the acquired skills, attitudes, and knowledge but also could apply these competencies in real-world problem-solving scenarios, aligning with the evolving societal needs and aspirations.

However, five years following the introduction of the competency-based curriculum in Tanzania, a study conducted by Tilya and Maphumulo (2010) explored the compatibility between the curriculum and the teaching methods employed. This study highlighted a notable lack of clarity among curriculum developers, textbook authors, and educators regarding the effective implementation of the competency-based curriculum.

In January 2011, the Kenyan government initiated a comprehensive review of the national curriculum to develop an educational framework that effectively addresses the needs and aspirations of the population. The objective was to equip children with not only knowledge but also the appropriate attitudes and skills required for global competitiveness. The review was prompted by a research report on curriculum reform needs conducted by KICD, which highlighted the importance of integrating competencies and skills relevant to real-life situations, both locally and internationally, within the primary school curriculum.

The research report also emphasized the significance of prioritizing vocational education and practical subjects in the curriculum. As a result, the report recommended the essentiality of enhancing teacher capacity through training and professional development, ensuring the availability of learning resources, and offering both pre-service and in-service teacher training across all subject areas. The overarching aim of the new curriculum was to establish pathways that foster the nurturing of individual talents, as outlined in the Pathways to Education initiative of 2016.

In January 2018, Kenya introduced the Competency-Based Curriculum (CBC) as a replacement for the existing 8-4-4 curriculum. The primary objective of this change was to move away from an examination-focused education system and instead implement an approach that prioritizes the acquisition of skills and competencies. This shift was motivated by the need to align with the goals outlined in Kenya's Vision 2030 development plan, which aims to meet the country's human resource requirements for future progress (as stated by KICD in 2016).

The start of the 2023 school year in Kenya marked an important occasion: the first cohort of pupils to adopt a new curriculum in 2017 entered junior secondary school. Despite the ongoing transition to junior secondary schools, several studies examining the implementation of the Competency-Based Curriculum (CBC), (Sossion, 2017; Ondimu, 2018; Sifuna & Obonyo,

2019; Koskei & Chepchumba, 2020) have indicated significant challenges in its rollout. One major area of concern revolves around the readiness of schools to effectively implement the CBC.

The initial warning signs of challenges in implementing the Competency-Based Curriculum (CBC) in Kenya were evident in the IBE-UNESCO report of 2017. This report highlighted several areas that needed improvement, such as updating and clarifying teachers' curriculum books to align better with learners' materials. It also emphasized the need for clearer guidance on assessment, including providing pre-made templates and checklists, as well as training on creating custom assessment lists. Additionally, the report noted that teachers were spending excessive time on lesson planning, often directly copying from the curriculum design books. The report recommended addressing these issues before rolling out the curriculum, but subsequent research suggests that this advice may not have been followed.

In a study conducted by Koskei and Chepchumba (2020), it was discovered that the majority of primary schools they examined lacked properly trained teachers in the Competency-Based Curriculum (CBC). This left many schools ill-equipped to effectively implement the curriculum, particularly in classes with high teacher-to-student ratios. Those teachers who did receive training typically underwent short, intensive courses lasting only two or three days, which often overloaded them with information. The educators responsible for CBC training were frequently either inexperienced or insufficient in number compared to the teachers they were tasked with training. Matata 2016 revealed that inadequate textbooks were a major challenge leading to poor performance in public primary schools of Makindu Sub County. Furthermore Ndambuki 2016 revealed that teacher shortage was a challenge in implementing free secondary education in Makindu Sub County

Additionally, a shortage of training materials and confusion in the content further hindered the quality of instruction provided to teachers. The study concluded that inadequately prepared teachers would likely have a detrimental effect on the successful implementation of the CBC, a situation exacerbated by the rushed nature of the implementation and the negative attitudes some teachers held toward the new curriculum.

Drawing from this diverse range of global studies, there lacks clear evidence that JSS learners in Makindu Sub County have acquired 21st-century skills, are up to date with modern technology, and have the opportunity to compete in the global job market. It is also not clear from the previous studies whether JSS teachers in Makindu Sub County have been adequately prepared to implement CBC. This proposed research, therefore, aims to contribute localized insights to the broader discourse on Competency-Based Curriculum in junior secondary schools.

By examining the unique challenges, opportunities, and outcomes in this specific context, the study intends to provide actionable recommendations for enhancing teacher preparedness, curriculum delivery, and student learning outcomes within the sub-county. Additionally, the study seeks to establish connections between global trends and local realities, ensuring that educational reforms align with both international best practices and the unique needs of the community.

1.2 Statement of the problem

The success of a competency-based curriculum (CBC) in public junior secondary schools depends on several factors, with teacher preparedness being a crucial one. Moving from a traditional content-based curriculum to a competency-based one requires educators to possess specific skills, pedagogical strategies and a comprehensive understanding of the new

curriculum's principles and objectives. Additionally, Teachers Service Commission projected teachers' shortage between the year 2018 - 2023 as shown in the table below:

Year	Primary	Secondary	Total
2019	37, 410	61, 671	99, 081
2020	36, 777	61, 671	98, 448
2021	36, 155	61, 671	97, 826
2022	35, 543	61, 671	97,214
2023	34, 941	61, 671	96, 612

Source: TSC Data 2018

Makindu being part of the entire Kenya is deemed to suffer the same challenge. Matata 2016 revealed that inadequate textbooks were a major challenge leading to poor performance in public primary schools of Makindu Sub County. Furthermore Ndambuki 2016 revealed that teacher shortage was a challenge in implementing free secondary education in Makindu Sub County. In addition, no research has been done on the effect of teacher preparedness on the performance of CBC in Makindu Sub County, this made it necessary for this research to be conducted.

1.3 Purpose of the Study

This study was aimed at assessing the level of teacher preparedness for effective implementation of the Competency-Based Curriculum (CBC) in public junior secondary schools in Makindu Sub-County, Makueni County, Kenya.

1.4 Objectives of the Study

The study was to be guided by the following objectives:

- (i) To determine teachers' attitude toward CBC performance in public junior secondary schools of Makindu Sub- County.
- (ii) To establish the assessment of learners on CBC performance in public junior secondary schools of Makindu Sub- County.
- (iii) To establish the impact of ICT on CBC performance in public junior secondary schools of Makindu Sub- County.
- (iv) To determine the effect of instructional resources on CBC performance in public junior secondary schools of Makindu Sub County.

1.5 Research Questions

The following research questions guided the study:

- (i) How does teachers' attitude toward CBC affect the competency-based curriculum performance in public junior secondary schools in Makindu Sub- County?
- (ii) How does assessment of learners affect CBC performance in junior secondary schools in the Makindu sub-county?
- (iii) How do teachers' Information Communication Technology skills impact CBC performance in junior secondary schools in the Makindu sub-county?
- (iv) How does instructional resources affect CBC performance in public junior secondary schools of Makindu Sub County.

1.6 Assumptions of the Study

It is assumed that all junior secondary school teachers in Makindu Sub-County are CBC compliant. In addition, it is assumed that all respondents will give honest responses to all questions asked. All teachers in Makindu Sub-County are also assumed to be working under similar environmental conditions.

1.7 Significance of the Study

It was important to assess the readiness of teachers to implement the "competency-based curriculum" in public junior secondary schools in Makindu Sub-County. This research aimed at understanding the influence of teachers on their students' learning experiences using innovative teaching approach. There are several reasons why this research was significant. To begin with, teachers who are prepared to adopt this teaching methodology can enhance their students' learning outcomes by effectively imparting essential skills, knowledge, and attitudes. Assessing teacher readiness also holds relevance in the realm of teacher development. This research was able to identify the areas where teachers might require additional training, shaping more effective teacher training programs and highlighting the need for ongoing support to facilitate continuous growth. Moreover, this research aimed to determine whether teacher preparedness contributes to the adoption of innovative and engaging teaching approaches tailored to individual student needs. Its findings were important in informing curriculum design, teacher training strategies, resource allocation, and support mechanisms, shaping an environment conducive to effective teaching.

Secondly, learners are likely to experience improved learning outcomes if teachers are well-prepared and more proficient in implementing the CBC. This can lead to a more enriching educational experience and better academic achievements. The findings of this research will guide curriculum developers in refining the CBC, making it more effective and aligned with the needs of both teachers and students and society.

Educational administrators can use the insights of this study to allocate resources effectively, design targeted training programs, and create support mechanisms that cater to the specific needs of teachers in the implementation of the competency-based curriculum. The study will

also teacher trainers on how to design the content of training initiatives to ensure that teachers are adequately prepared to implement the competency-based curriculum.

The findings of this research will help to inform policy decisions related to curriculum design, teacher training, and resource allocation, leading to a more effective and impactful educational system. Parents and guardians will understand how teacher readiness influences their children learning outcomes and this will empower them to advocate for high-quality education and support initiatives that enhance teacher preparedness.

Finally, the findings of this study will contribute to the body of knowledge in education research. It adds to the understanding of how teacher preparedness influences educational outcomes, particularly in the context of a competency-based curriculum. This research can also serve as a foundation for future studies related to teacher readiness and curriculum implementation. It can inspire further research and initiatives aimed at enhancing teaching practices and educational experiences.

In conclusion therefore, this study's exploration into the preparedness of teachers for implementing a competency-based curriculum within public junior secondary schools in Makindu Sub-County is profoundly meaningful. Its outcomes hold the promise of positively transforming both the teaching environment and students' educational journeys, fostering a brighter educational landscape in the region. The findings of this study will also guide policymakers, educational administrators, and curriculum developers in improving teacher training and support to realize the key objectives of CBC.

1.7. Scope and Limitations of the Study

This particular study is focused on public junior secondary schools in the Makindu Sub-County area, and as such, the results may not apply to other regions with different demographics, resources, or educational policies. It is also important to note that the study only examined the experiences and challenges faced by teachers and students at the junior secondary level, and did not take into account primary or senior secondary school levels. Additionally, private schools were not included in the study, which could have provided valuable insight into variations in resources, teaching approaches, and challenges. The study also did not explore potential differences in curriculum implementation and teacher preparedness across different subjects.

The reliability of the study's findings may be affected by factors such as the size and composition of the sample, and the possibility of biases in responses. The study's time constraints for data collection and analysis may also limit the depth of understanding achieved, particularly about long-term effects. There may also be difficulty in securing enough participation from teachers, head teachers and curriculum support officers due to scheduling constraints or other commitments. There was a possibility that participants may provide responses that they perceive as socially desirable rather than entirely candid.

LITERATURE REVIEW

2.1 Introduction

In this section, the researcher comprehensively explored prior research endeavors that have specifically targeted the application of a Competency-Based Curriculum as a means to advance sustainable development goals. These studies were systematically arranged based on their respective research objectives, providing a structured overview of the diverse approaches employed in this area of study.

2.2 Empirical Review

In this section, a critical and systematic analysis of existing research and scholarly works on teacher preparedness to implement curriculum were reviewed.

2.2.1 Teachers Attitude Toward the Competency-based Curriculum

Attitude encompasses the psychological processes shaped by the accumulation of experiences garnered through our five senses. Individuals can filter and categorize these responses into either positive or negative perceptions. This acquisition of responses unfolds through the stages of selection, interpretation, and subsequent reaction (Erin & Maharani, 2018).

Otter (as cited in Ghadirian, Ayub, & Salehi, 2017) characterizes attitude as an active process of gathering information, often influenced by the environments to which students are exposed. Nugroho (as cited in Saifuddin, 2020) defines attitude as commencing with the utilization of the five senses in receiving a stimulus, which is then organized and interpreted to gain an understanding of the sensed phenomenon. According to Rahmat (as cited in Arifin, Fuady, &

Kuswarno, 2017), attitude pertains to the comprehension of objects, events, or relationships derived from the process of interpreting received messages.

Similarly, Sugihartono (as cited in Arifin, Fuady, & Kuswarno, 2017) defines attitude as the ability of our senses to translate stimuli or convert stimuli into human sensory experiences. In human attitude, there lies a discernible distinction between perceiving something positively or negatively, which in turn influences subsequent human actions. In summary, the definitions provided collectively imply that attitude emerges from individual experiences and emotions, shaped by the process of sensory reception.

A survey of 370 educators in the North Eastern region of the United States found that many teachers lacked confidence in utilizing the Common Core State Standards during their instruction. The survey also revealed that teachers experienced increased stress while trying to implement the standards and improve their teaching methods, which affected their perception of the effectiveness of their classrooms. Cochrane and Cuevas (2015) conducted a research study on how teachers perceived the implementation of the Common Core State Standards. The study revealed that while around 66% of educators felt adequately prepared to teach the new standards, 53% indicated a desire for additional information to effectively deliver the standards.

The findings of their research indicated that participants did not perceive significant differences in education brought about by the new standards compared to the previously employed No Child Left Behind approach. The study indicated that teachers held a mixed perspective on the Common Core State Standards; while some positives were noted in terms of content, there was a negative perception associated with the emphasis on test scores. Moreover, there were adverse perceptions related to the increased workload and the repercussions of the testing standards (Cochrane & Cuevas, 2015).

According to a study conducted in Canada by Hardy (2003), both pre-service and in-service teachers expressed a sense of inadequacy and insufficient preparation in essential ICT skills required for utilizing technological tools effectively in their classrooms. Despite having received formal training in instructional technology, most teachers had limited knowledge regarding the integration of computer technology into their teaching methods. The study revealed that a significant portion of teachers struggled to incorporate technology into their lessons due to a lack of adequate training and proficiency in technological skills needed for its successful application in their professional practices.

A study conducted by Govender in 2018 aimed to understand the attitude of teachers regarding the introduction of curriculum reforms in schools in the U-Thungulu District of Kwa Zulu Natal, South Africa. The research involved 20 teachers from grades one to six and used an interpretive qualitative research design. The study revealed that teachers faced challenges in implementing the new curriculum due to insufficient training provided by the Department of Basic Education. The training sessions were limited to a single day, and there were no ongoing professional development programs available. As a result, teachers felt ineffective in the implementation process.

In Maimela's 2015 study, which focused on the impact of curriculum changes on primary school teachers in Seshego Circuit, Limpopo Province, South Africa, it was found that the attitudes of teachers were not the sole determining factor in the success or failure of curriculum. The research revealed that various other factors played crucial roles in this process. While teacher attitudes were significant in providing encouragement and motivation, they were just one piece of the larger puzzle, especially given the frequent changes affecting curriculum

implementation. Motivation and evaluation of both students and teachers were deemed crucial within an educational institution.

In the study conducted by Ndifor and Ngeche in 2017, which centered on teacher and student attitudes as correlates of mathematics performance in secondary schools in Cameroon, the results indicated a clear connection between attitudes and performance in mathematics. This suggests that fostering positive attitudes among both teachers and learners is essential for achieving high performance in the subject. In Libya, Salem (2013) conducted a study to investigate teachers' views on the revised English language curriculum in public schools. The study showed that the lack of opportunities for in-service training resulted in negative perceptions among teachers, which affected the successful implementation of the curriculum. However, the study suggests that by offering training opportunities tailored to curriculum implementation, a shift towards positive perceptions can be fostered, leading to greater success in implementing the curriculum.

Tamara (2013) conducted a qualitative case study in Nigeria to explore teachers' perspectives and encounters with factors impeding curriculum implementation. The research utilized semi-structured interviews, classroom observation checklists, and document analysis for data collection. Findings indicated that teachers generally held favorable views toward the curriculum; nonetheless, a significant majority (62.3%) struggled to incorporate certain aspects of the curriculum into their teaching due to insufficient understanding. Teachers emphasized that comprehensive training and professional development were crucial strategies to enhance successful curriculum implementation.

In the Namibian context, a notable observation made by scholars is that teachers have not been adequately involved in the various stages of curriculum development, with their participation often limited to the classroom implementation phase (Negumbo and Carl, 2017; Nghihalwa,

2018; Mushelenga, 2020). This has led these scholars to the consensus that teachers' perspectives have been conspicuously absent throughout the critical phases of curriculum development. As posited by Carl (2017), the inclusion of teachers in the curriculum development process allows them to share their insights regarding the possibilities, challenges, and constraints within the educational environment. Carl further contends that teachers' input is crucial as they possess intimate knowledge of their students, the subject matter, and the resources necessary for the curriculum's success.

In Makunja's 2016 research, which focused on the challenges faced by teachers in implementing a competency-based curriculum in Morogoro Municipality, Tanzania, it was found that educators encountered obstacles that hindered the successful execution of the program. These difficulties stemmed from a lack of expertise in both teaching and learning. The study emphasized the importance of allowing teachers to actively participate in the curriculum formulation process and its subsequent revisions.

In a study conducted by Alabu, Kembo, and Otara (2020), the focus was on examining how principals' conflict management techniques influence teacher job satisfaction in selected secondary schools in Uriri and Nyatike Sub Counties, Kenya. The results of the study have contributed valuable insights to the existing body of knowledge and offer practical guidance for effective school management, benefiting principals and other stakeholders. The study recommended that the Ministry of Education should develop training materials for school managers to equip them with the skills needed to handle conflicts adeptly. This, in turn, would enable teachers and educators in schools to effectively address and manage conflicts.

In a separate study by Mwoma (2018) in Narok County, Kenya, the relationship between preschool attendance and children's reading abilities was investigated. The findings revealed

that learners who attended preschool performed better in English sub-tasks compared to those who did not attend. Conversely, in Kiswahili, those who did not attend preschool showed better performance compared to their counterparts. The study indicated that teachers allocate additional time and resources to support children who did not attend preschool, potentially explaining their improved performance in Kiswahili. These findings underscore the importance of teachers' willingness and positive attitude in enhancing academic performance, particularly in the context of the Competency-Based Curriculum (CBC).

Similarly, Talla (2012) argues that optimal educational practices dictate the involvement of all stakeholders from the earliest stages of curriculum development. Talla suggests that the voices of all stakeholders should be taken into account when selecting areas of knowledge and determining the contexts in which this knowledge will be imparted. According to Priestley et al. (2021), prioritizing the engagement of teachers in curriculum development is essential because they are the primary executors and beneficiaries of that knowledge. They go on to assert that teachers are more likely to take ownership of curriculum reforms when they recognize and comprehend the underlying knowledge, theories, and concepts.

Implicit in the arguments of both Talla (2012) and Priestley et al. (2021) is the notion that effective curriculum reforms should involve grassroots participants from the outset, employing a bottom-up approach. In support of this perspective, Etim and Okey (2015) also note that teachers should be integral to all stages of these processes because of their unparalleled familiarity with the needs of students compared to any other party involved in curriculum development. This stance holds, given that teachers are the individuals who engage with students daily and are thus uniquely positioned to identify issues related to their learning experiences. Consequently, the inclusion of teachers in all phases of curriculum development

must be considered non-negotiable, given their wealth of experience and the pivotal roles they assume in implementation and evaluation.

In a study conducted by Puteh and Ali (2014) in Kenya, the focus was on understanding preschool teachers' attitudes towards incorporating a play-based approach in the implementation of literacy and language curriculum. The findings revealed that teachers generally held positive views regarding the use of the play-based approach in instruction. However, despite these positive perceptions, there was limited adoption of these approaches in classrooms due to teachers lacking the necessary knowledge and skills for effective implementation. This underscores the notion that having favorable perceptions of a curriculum does not necessarily translate to effective implementation if educators are not adequately equipped with the requisite skills and knowledge.

The study specifically examined preschool teachers' perceptions of the play-based approach in the context of literacy and language curriculum. It highlighted that positive attitudes alone might not ensure successful implementation if educators face challenges in applying the teaching methods due to insufficient skills and knowledge. Given this background, it is important to note that teachers' perceptions of a play-based approach might differ from their attitudes towards the implementation of the Competency-Based Curriculum (CBC). Therefore, the proposed research aims to evaluate junior secondary school teachers' perspectives on the CBC and their proficiency in utilizing assessment rubrics.

Nihuka and Peter conducted a study in 2014 that highlighted the obstacles encountered in implementing the ICT curriculum in primary schools. The research revealed that a significant number of educators enjoyed using ICT for teaching and recognized its significance in

equipping learners with practical technological knowledge. Nonetheless, the findings also pointed out that over half of the teachers, specifically 53.6 percent, held unfavorable views regarding the ICT curriculum. More than half of the teachers surveyed admitted to teaching and using ICT only because they are obligated to, lacking genuine enthusiasm for it.

When curriculum change occurs, teachers can perceive the change as a way to stifle their creativity and autonomy in the classroom. Nadelson et al. (2012) found that there was a need for enhanced professional development for teachers concerning the Common Core State Standards. The study emphasizes the importance of gauging educators' understanding and viewpoints as vital factors for effectively executing educational reforms.

Porter, Fusarelli, and Fusarelli (2015) highlight the critical importance of efficient communication and well-supported learning for teachers in successfully implementing and improving the classroom learning environment through new educational reforms. In Kenya, Puteh and Ali (2014) found that teachers held favorable opinions regarding the use of a play-based approach in their instruction, but the approach was minimally employed in classrooms due to teachers' inadequate proficiency and expertise in effectively implementing it.

In a study conducted by Ondimu (2018) in Kenya, the focus was on determining the preparedness of teachers in private preschools in Dagoretti North Sub-County, Nairobi County, to implement the Competency-Based Curriculum (CBC). One of the key objectives was to gauge the perceptions of preschool teachers regarding the CBC. The research utilized a descriptive survey design, encompassing 38 private schools and 320 preschool teachers.

According to the findings, a significant portion of the preschool teachers (37.6%) viewed the CBC positively as a commendable initiative. On the contrary, 11.1% expressed the opinion that the CBC should not be implemented, and a minimal 1.1% believed that the 8.4.4 curriculum was superior to the CBC. These results suggest that the majority of preschool teachers in private

schools exhibit favorable attitudes toward the implementation of the CBC, as indicated by the reviewed study.

The research focused on exploring the views of preschool teachers regarding the adoption of the Competency-Based Curriculum (CBC) in private pre-primary schools. Consequently, the results may not be universally applicable to public junior secondary schools in Makindu sub-county hence the need to undertake a separate study in public junior secondary schools to ascertain educators' perspectives on the implementation of CBC. Lastly, the reviewed studies used questionnaires and interview schedules to collect data while the current study will make use of observational checklist, document analysis guide, questionnaires and interview schedules, use of all these instruments will lead to reliable findings.

2.2.2 Assessment of Learners in Competency-Based Curriculum.

Evaluation involves a systematic procedure of gathering information with the explicit intention of making informed judgments regarding the quality of students' achievements in a specific subject. These judgments then guide the assignment of appropriate grades based on the scores obtained (Githua, Macharia, & Mboroki, 2009). This evaluative process hinges on the use of reliable evidence obtained through assessment to make informed comparisons and judgments about relative value (National Academy for Academic Leadership, 2012). Ololube (2015) sees curriculum evaluation as a broad and continuous effort to inquire into the effects of utilizing educational content and processes according to clearly defined goals.

Assessment, on the other hand, is the comprehensive process by which educators, administrators, and other stakeholders of interest gather evidence, whether in numerical or other forms, to derive insightful and pertinent information about students, educational institutions, and academic programs (National Academy for Academic Leadership, 2012). This

practice enables the informed development of meaningful insights for decision-making and improvement.

As outlined by Schwalen (2018), the evaluation of a curriculum is an essential and crucial component within any national education system. It forms the foundation for making decisions about curriculum policies, offering insights for ongoing adjustments to the curriculum, and guiding the processes of curriculum implementation.

The evaluation methodology utilized in educational institutions is varied, encompassing both quantitative and qualitative approaches (National Academy for Academic Leadership, 2012). Qualitative techniques involve methods such as surveys, focus groups, portfolios, and direct observations. Conversely, quantitative methods aim to provide numerical data and often employ tools like Continuous Assessment Tests (CATs) and examinations (National Academy for Academic Leadership, 2012). The assessment and evaluation of students are equally influenced by the strategy adopted for curriculum implementation.

Frequently, student evaluation highlights the disparities within the curriculum implementation process, as students may encounter challenges in meeting the individual preferences of educators (Mautusi, 2013). Within the Kenyan school context, the evaluation of a student's academic progress consists of two main components as outlined below: the formative evaluation which revolves around continuous assessment tests (CATs), while the summative evaluation which comprises end-of-term/semester examinations (ISSN: 2411-5681 www.ijern.com).

C.A.Ts allow students to gather information about their overall comprehension of subject matters, thereby providing insights into challenging areas that require dedicated attention for enhancement (Susuwele-Banda, 2005). Formative assessment pertains to methods that identify

misunderstandings, challenges, and gaps in learning as they occur, aiming to address these gaps and enhance learning. This approach involves effective tools that contribute to shaping the learning process, potentially empowering students to take charge of their learning journey when they realize the focus is on enhancing learning rather than final grades (Trumbull and Lash, 2013). It encompasses various techniques such as self-assessment by students, assessment by peers, and even evaluation by the instructor, employing mediums like written assignments, quizzes, discussions, and more. In essence, formative assessment is an ongoing process woven throughout a class or course, to advance student accomplishment of learning objectives through strategies that cater to individual student requirements (Theal and Franklin, 2010, p. 151).

On the other hand, summative assessments appraise students' learning, understanding, skills, or achievements at the culmination of an instructional phase, such as a unit, course, or program. These assessments are typically assigned formal grades and frequently carry substantial weight (although this isn't mandatory). When used in coordination with formative assessment, summative assessment can yield significant benefits. Instructors have the flexibility to explore different methods of integrating these two approaches. Sudha (2018) highlights the significance of enhancing teachers' capability to create accurate assessment rubrics. This entails thoroughly understanding the learning objectives, recognizing the skill levels of students, and showcasing proficiency to construct a diverse range of assessment criteria.

The educational approach of the Competency-Based Curriculum mandates ongoing assessment of each learning level using Rubrics, as emphasized by Martinez (2018). According to KICD (2017), the achievement of learning outcomes is accomplished by employing assessment rubrics. Rubrics denote evaluation tools that stem from specific content areas, aimed at measuring learners' aptitude to comprehend and execute a task. In this process, educators are required to determine their assessment ratings, such as excellent, good, meeting expectations,

and below expectations. These ratings are based on the efficacy with which a learner can display a particular competence.

Brookhart (2014) emphasizes that teachers, having undergone adequate training, should possess the expertise to create assessment rubrics that extend beyond mere grading or scoring. These rubrics offer insight into individual students' progress levels and pinpoint areas requiring targeted improvement, on an individual basis rather than collectively. The art of constructing rubrics is intricate, demanding comprehensive training, guidance, and ongoing formative feedback for educators. These rubrics or tasks are carefully formulated with specific questions and cues that extract students' thinking that is pertinent and relevant to what they have recently learned and the direction they are heading (Barman, 2011). In alignment with the assessment process using rubrics, Kelly (2011) proposes a shift in perspective towards an evaluation approach that centers on various stages of instruction. This approach not only informs the subsequent steps of instruction but also actively involves learners in cultivating critical thinking and problem-solving skills.

Eka (2018) conducted a study in Indonesia to establish the correlation between teachers' pedagogical skills and the performance of pupils in the national science exam at elementary schools in the Gerokgak district. The study's target group comprised 29 sixth-grade teachers. Data was collected during the academic year 2016/2017 through the use of a questionnaire. The study revealed a moderate correlation between teachers' pedagogical competencies and the outcomes of the national science exam, accounting for a predicted 22.09% of the variance. The pedagogical competencies contributing to these variances were centered on assessing student learning and implementing diagnostic approaches in the learning process.

When utilizing assessment rubrics, Kabita & Ji (2017) pointed out that the instructor can collect tangible proof regarding the extent to which an individual learner has grasped and put into practice a particular competency. This assessment can be carried out in both formal and informal learning settings, encompassing activities such as observation, questioning, extensive assignments, community service, group discussions, projects, and demonstrations.

A competency-based curriculum and its associated learning framework should prioritize students' needs and preferences, providing them with sufficient time to acquire and consistently demonstrate the anticipated skills, knowledge, expertise, and professional behavior. Additionally, it should create a supportive learning environment. This objective is achieved through various instructional strategies. It's essential to emphasize that any curriculum program should be grounded in evidence, take into account outcomes, and ensure that teaching strategies are aligned with the corresponding learning domain, encompassing psychomotor, cognitive, and affective aspects.

Zheng and Borg (2014) contend that teaching personnel must align themselves with a framework devised by curriculum developers that aligns with competency-based practices. To ensure the effectiveness of competency-based approaches, educators need to be skilled and encourage student engagement in the learning process. While students actively participate in learning, the teaching staff remains integral to curriculum implementation (Botha & Reddy, 2011; Wangeleja, 2010).

Scheopner, Brett, Cox, and Greller (2018) conducted a qualitative case study in the United States, specifically in three New Hampshire districts, to investigate the adoption of competency-based education reform in middle schools. This approach mandates that students must exhibit proficiency in skills and competencies before progressing and receiving credit,

typically through assessments that showcase mastery of knowledge and skill acquisition. The research revealed persistent obstacles, categorized as inertial, technical, normative, and political, which have impeded the comprehensive implementation of these reforms for over six years.

Villamero (2014) conducted a qualitative study focusing on three primary school teachers in Negros Oriental, Philippines. The research employed a constructivist approach, which facilitated an in-depth exploration of the teachers' experiences. Two constructivist tools, namely semi-structured interviews and classroom observations, were utilized to elucidate their experiences. The teachers employed diagnostic, formative, and summative assessment strategies, incorporating methods such as tests, observations, portfolios, and grouping for these purposes.

The study's findings emphasize the importance for teachers to employ a diverse range of assessment strategies when evaluating students. Furthermore, in the implementation of these strategies, teachers adapt both the content and delivery methods to suit the individual needs of the children. It is therefore necessary to carry out separate research to find out how the above discussed strategies may be applied in JSSs in the Kenyan perspective.

Galevska and Pesic (2018) noted in their study conducted in Macedonia that evaluating the educational progress of students with special needs poses a significant challenge for teachers. These educators frequently express a desire for clear and specific guidance when implementing assessment methods in inclusive classroom settings.

According to a study by Mangope, Kuyini, and Major (2012) in Botswana, children are typically enrolled in grade one without undergoing any assessments to determine if they have

special needs. Consequently, a significant number of children with special needs enter the education system without being evaluated and without receiving the necessary classroom accommodations and learning support. In South Korea and the United States of America, Hyunjeong et al. (2014) noted that many teachers have not received proper training on how to instruct students with special needs, let alone integrate them into regular classrooms. This underscores the importance of equipping teachers with effective evaluation methods for assessing learners with special needs in inclusive classroom settings, which is the focus of this study. The study centered on learners with special needs but not in the Kenyan junior secondary schools' context, hence the need for this study.

Kuendeli (2014) conducted a study focused on assessing the effectiveness of the life skills curriculum in primary schools within Lurambi Division, Kakamega County, Kenya. The study aimed to identify the resources used for teaching and evaluating life skills, evaluate their sufficiency, examine challenges faced by teachers during implementation, and gauge the attitudes of both teachers and students towards the subject. Additionally, it sought to understand the influence of the community on the curriculum's implementation and determine the extent to which it was being taught.

A comprehensive literature review was undertaken, drawing from various sources including books, journals, magazines, and online materials. The research employed a descriptive survey methodology, involving the administration of questionnaires to school principals and interviews with male and female students. The study selected 10 schools out of a population of 47 state primary schools, employing a simple convenience site sampling technique. All principals, 30 life skills teachers, and a total of 90 students participated in the research. The collected data underwent analysis using both descriptive and inferential statistics.

The findings revealed that life skills education was being provided in all the schools under examination. However, it was observed that teachers lacked adequate training in this area, with 42% expressing negative attitudes towards the curriculum. Moreover, there was a shortage of teaching resources for life skills education, along with insufficient learning support. The study suggested that the Kenyan Institute of Curriculum Development (KICD) should consider implementing a preschool program and providing comprehensive training for educators to enhance their proficiency in delivering the life skills curriculum (Kuendeli 2014). Because the study focused only on primary schools and one learning area (life skills), it may not be prudent to make conclusions using such data. It is therefore necessary to carry out separate research to find out how teachers in JSSs assess learners in various subjects.

2.2.3 Integration of Information Communication Technology in Competency-Based Curriculum

In contemporary society, global competition across industries has intensified due to the emergence of a knowledge-driven economy. Governments worldwide are committed to ensuring equitable access to high-quality education for their populations (UNESCO, 2013). Consequently, the integration of Information and Communication Technology (ICT) in education is recognized as a strategy to enhance educational accessibility, particularly in rural areas, and to enhance the engaging nature of teaching and learning processes.

Information and Communication Technology (ICT) resources encompass an array of physical tools such as computers, scanners, printers, mobile phones, projectors, and communication mediums like radio and television. These resources are complemented by essential software applications that enhance the quality of teaching and learning experiences. To ensure their efficacy, these resources need to be interconnected through computer networks and internet connections, enabling the seamless exchange of data and information between educators and

learners. However, it's important to recognize that a networked educational environment is more than just a physical infrastructure; it also involves leveraging external resources when beneficial, as highlighted by the insights of Rodríguez et al. (2019).

Technologically advanced nations such as Japan, the United Kingdom, France, and Germany have collectively affirmed the prospective impact of ICT resources in driving a constructive evolution of teaching, learning, and assessment methodologies over an extended period (Enrique, 2018). This sustained transformation holds the promise of enhancing student education and equipping the younger generation with the competencies required to thrive in contemporary globalized societies (Akkari & Maleq, 2019).

In India, Al-Awidi and Aldhafeeri (2017) conducted a study aimed at assessing the preparedness of teachers to implement a digital curriculum within Kuwaiti schools. This research utilized a mixed-method approach, encompassing both online surveys and semi-structured interviews. A randomized sample of 532 teachers took part in the online survey to gauge their level of readiness, and 21 participants from this group were chosen for semi-structured interviews, which aimed to delve into the factors influencing their preparedness. The researchers devised a technology readiness survey that spanned two domains: technical and pedagogical. The findings of the study indicated that teachers exhibited a moderate level of readiness for the implementation of the digital curriculum in both the technical and pedagogical aspects. The study argued that a deficiency in digital skills among teachers posed a significant obstacle to their successful implementation of the curriculum.

In light of these findings, the study put forth a recommendation for providing in-service training to teachers, specifically focusing on equipping them with the necessary technological competencies for instructional purposes. Insights from Indian educational institutions

corroborate these results, revealing that when teachers lack essential technological skills, their ability to effectively execute various components of the curriculum is compromised.

Consequently, the study underscores the importance of equipping teachers with computer knowledge and skills to ensure the seamless integration of technology in education.

Furthermore, a comprehensive examination of previous research highlights persistent obstacles that have hindered the successful integration of technology within the educational landscape of the country.

The adoption of the ICT strategy is geared towards elevating the ongoing utilization and enhancement of education. Likewise, in recent times, numerous educational reforms have prompted recognition of the significant role that ICTs can assume in reshaping educational frameworks. This shift aims to equip learners with the necessary knowledge and proficiencies to effectively address the demands arising from the swift evolution of the global landscape (Barakabitze et al., 2019).

According to the 2019 Global Innovation Index (GII) report from the World Intellectual Property Organization, South Africa, Kenya, and Mauritius are identified as the primary centers for innovation in Sub-Saharan Africa. This underscores the importance of examining the potential opportunities and obstacles related to technology and its integration into education within these nations.

In Africa, the utilization of ICT resources for specialized training is still in its early stages. Many countries in the region are at risk of falling behind in technological advancement due to the slow pace of integrating ICT into their education systems (Lloyd, 2020). Unfortunately, this holds particularly true for most developing nations in Sub-Saharan Africa, including

Uganda, Ghana, Liberia, Kenya, Zambia, and Sudan. Despite having complex ICT regulations in the field of education, these countries have limited implementation and usage of ICT in their educational systems.

Additionally, these regulations often do not align with the specific needs of the education sector, focusing more on using ICT for economic benefits outside of schools (Achimugu, Oluwagbemi, & Oluwaranti, 2010). Being a prominent hub for ICT innovation in sub-Saharan Africa and ranking second to Madagascar in terms of internet coverage across the country, Kenya is well-positioned to modernize its education sector (World Bank, 2019).

The National ICT Policy from 2006, which underwent revisions in 2019, outlined goals focused on expanding the use of ICT in education. These encompassed initiatives like fostering the creation of e-learning materials, facilitating partnerships between the public and private sectors to gather resources for supporting e-learning, promoting the establishment of an integrated e-learning curriculum to bolster ICT in education, and enabling the sharing of e-learning resources among various institutions (Farrell, 2007). Despite these efforts, effective and sustainable access to education through e-learning, attracting public investments in ICT education-related initiatives, and cultivating a qualified teaching workforce capable of harnessing digital technologies are outcomes that have yet to be definitively achieved.

In line with the Rwanda Education Board's guidelines from 2017, the incorporation of Information and Communication Technology (ICT) within the Competence-Based Curriculum (CBC) is expected to bring about several benefits. This includes the ability for both teachers and students to engage in dynamic teaching and learning experiences. This utilization of technology aims to facilitate a deeper and faster comprehension of concepts for students. Notably, in early childhood education settings, the integration of technology has played a

notable role in improving the overall education system and generating a heightened sense of curiosity and eagerness among young learners.

Policymakers in Kenya, consider ICT's role in education as a facilitator for acquiring knowledge, fostering innovation, and developing skills to tackle the challenges inherent in the country's educational system (Republic of Kenya, 2019). Aligned with Kenya's long-term development plan, Vision 2030, the educational curriculum has transitioned from the 8-4-4 system to a competency-based curriculum (CBC). The fundamental goal of these curriculum reforms is to equip students with high-quality standards and 21st-century skills essential for success, including digital literacy (KICD, 2017). This involves a significant emphasis on incorporating ICT across all subjects in the curriculum, a departure from the previous approach that only introduced ICT as an elective subject in secondary schools, excluding primary schools.

A report crafted by the World Economic Forum (2017) highlights a noticeable trend where a larger share of jobs in sub-Saharan Africa is becoming reliant on ICT expertise. The progression towards digitalization within the economy has led to a heightened need for proficiencies in digital literacy.

Consequently, digital literacy is now an essential element of the existing primary and secondary school education frameworks in Kenya. With the enhancement of ICT infrastructure and its growing integration into educational processes, it becomes crucial for educators to acquire essential ICT competencies. Furthermore, it's imperative for teachers to continuously enhance their skills to keep up with the evolving demands of technology.

The formulation of the National ICT Strategy for Education and Training in 2006 by the Kenyan government, along with the introduction of the e-learning policy statement, served as evident signals that the role of educators would transform, accompanied by heightened

demands for mastering digital literacy abilities. In 2016, the Ministry of Information, Communication, and Technology in Kenya established the Digital Literacy Program, which prioritized the training of teachers in effectively delivering digital educational content. In total, around 81,000 teachers received training through this initiative.

In the year 2020, the global education systems encountered a significant challenge in the form of the COVID-19 pandemic. This situation led to the closure of schools and the restriction of gatherings worldwide to curb the transmission of severe respiratory disease. In Kenya, approximately 20 million students were unable to attend school due to COVID-19, as estimated by UNICEF (Brown & Otieno, 2020). Consequently, this research aimed to investigate the viability of alternative learning methods, specifically e-learning, by examining the readiness of teachers and schools for the integration of technology before the crisis emerged.

The study concentrated on evaluating the presence of Information and Communication Technology (ICT) resources in public primary schools, the proficiency of teachers in utilizing technology for teaching and learning purposes, and teachers' viewpoints regarding the effectiveness and user-friendliness of ICT tools. Given the significance of digital literacy in adapting to 21st-century advancements, educators play a vital role in the successful adoption of ICT and should be adequately prepared through appropriate training (Hwang et al., 2010).

Moreover, Kapur (2019) underscores that the incorporation of technology by educators into the execution of instructional techniques assists them in performing their responsibilities with ease and efficiency. Additionally, teachers have the opportunity to employ digital resources for various classroom tasks, including creating lesson plans, evaluating students, and using online images to reinforce concepts for preschool learners. Moreover, teachers can captivate children's

attention through the utilization of animated content and films, fostering an enjoyable atmosphere within the school setting.

Hennessey Harrison & Wamakote (2010) pinpointed the primary barrier hindering the adoption of ICT as insufficient or lacking proficiency and training among teaching staff. Consequently, it becomes imperative to provide comprehensive ICT training to all educators, enhancing their confidence and ability to effectively utilize technology. According to a report from KICD (2018) regarding competency-based activities, it was revealed that 61 percent of teachers have not received training in ICT integration. Nevertheless, it remains essential for teachers to acquire adeptness in technological skills, as digital literacy stands as one of the fundamental proficiencies within the framework of the competency-based curriculum.

Higgins and Moseley's research in 2011 highlighted a significant finding: the lack of understanding among teaching staff about the rationale behind incorporating ICT into teaching practices, as well as the methods to effectively implement it, acts as a hindrance to its successful integration. Rather than placing sufficient emphasis on the practical adoption and utilization of ICT, a majority of educational institutions tend to focus more on defining the concept of ICT itself. Consequently, it becomes imperative for in-service training programs to not only equip teachers with basic ICT skills but also to guide them in applying these skills during the learning process.

Another relevant study conducted by Hennessy, Harrison & Wamakote in 2010 supported these findings by identifying a key obstacle to the adoption of ICT: the inadequacy of teachers' ICT knowledge and skills. This deficiency in expertise among teachers was a pivotal factor contributing to the challenges faced in implementing ICT effectively. Therefore, these studies collectively emphasize the importance of providing teachers with comprehensive training and

support in both understanding the purpose of ICT integration and developing the practical skills required for its successful application in the classroom.

A study conducted by Karsenti et al. (2012) across more than ten schools in Kenya identified a range of factors that posed challenges to the effective pedagogical integration of ICT. These factors encompassed issues such as the scarcity of ICT devices, teachers' perception of ICT as a time-consuming and additional workload, the technophobia exhibited by older teachers towards technology, and the inadequate ICT proficiency among educators, among other complexities.

In response to these challenges, the Jubilee government devised a plan in 2013 to infuse ICT into education by distributing laptops to all first-grade pupils (Muinde & Mbataru, 2019). As per Wanzala and Nyamai (2018), by July 2018, technology devices had been provided to 19,000 out of a total of 23,951 public primary schools. Nevertheless, despite these endeavors, only 70,000 out of the more than 300,000 teachers had received training, a number that fell short in preparation for the impending implementation of the Competence-Based Curriculum (CBC), which was just It will be a few months before the implementation of ICT in public schools is rolled out.

A study conducted by the Teachers Service Commission revealed that 84.2% of surveyed teachers faced challenges in integrating technology into their teaching practices. The seamless integration of technology was identified as a significant skills gap that affected their ability to provide effective educational services. This observation was supported by previous research conducted by Oduor and Wanzala & Nyamai.

Furthermore, Wambiri and Ndani (2014) found that teachers' attitudes strongly influence their use of ICT, revealing that older teachers generally harbor negative beliefs and attitudes toward

technology. The study emphasized the importance of addressing primary school teachers' beliefs, especially those held by older teachers, regarding computer use. It recommended a focus on providing ICT training, particularly for veteran teachers who received their training before the integration of ICT into the education curriculum.

The study argued that even if teachers consider themselves knowledgeable about operating computers, they may struggle to integrate them into teaching without specific training on instructional methods involving computers. Consequently, the Ministry of Education was advised to offer professional development courses on ICT integration in teaching, especially for long-serving teachers. The training could be structured as in-service programs, conveniently scheduled during holiday sessions to accommodate practicing teachers.

Lastly, the study proposed a revision of the current primary teacher education curriculum to incorporate content on ICT pedagogy. This revision would ensure that teacher trainers focus on developing both knowledge and skills related to teaching with computers, going beyond mere computer literacy. The study acknowledged that while the previous research concentrated solely on computers, there are various other ICT tools applicable to teaching and learning, particularly in the context of the Competency-Based Curriculum (CBC). Therefore, the present study aims to investigate the preparedness of teachers to integrate ICT into teaching and learning, considering the implementation of CBC in Junior Secondary Schools (JSSs).

2.2.4 Instructional Resources and the Performance of Competency-Based Curriculum

Education catalyzes both economic and societal transformation. Therefore, it is crucial to regularly update curricula to align with the evolving global job market and the increasing demand for twenty-first-century skills. Many nations have transitioned from curricula centered on content to those that prioritize competency-based teaching and learning methodologies.

Fein (2015) highlights that the United States introduced competency-based approaches in teacher education during the 1970s, and subsequently, these approaches have been adopted and integrated into diverse professional domains and educational institutions worldwide (Sanchez & Romero, 2015). The implementation of a Competency-Based Curriculum (CBC) in Kenya encountered significant hurdles posed by various education stakeholders. Among these stakeholders, the teachers' union expressed the belief that the nation was unprepared for the adoption of the new curriculum.

In Ghana, researchers Acquah, Frimpong, and Kwame (2017) conducted a study aimed at identifying the obstacles encountered during the implementation of Competency-Based Training Programs (CBT) within educational institutions. The study's findings indicated that the adoption of competency-based approaches significantly contributed to the training of highly skilled graduates required for the industry. Despite the positive outcomes observed, the study also revealed that certain training institutions faced difficulties in effectively implementing the curriculum. The challenges were attributed to factors such as inadequate financial support for the institutions, insufficient infrastructure development, and the absence of well-defined policy guidelines within the institutions. These research findings emphasize that the implementation of a Competency-Based Curriculum (CBC) can encounter various hindrances within educational settings. It's important to note, however, that these findings might not be directly applicable to the Kenyan context.

In Rwanda, a case study by Mugabo, Ozawa, and Nkundabakura (2021) investigated the correlation between a school's characteristics and its ability to implement the Competency-Based Curriculum (CBC). The study's findings indicated that disparities in the adoption of CBC among teachers were influenced by variations in their professional development, insufficient

training related to CBC, inadequate teaching and learning resources, as well as a lack of adequate school infrastructure. The study's recommendations highlighted the necessity of providing ample instructional resources and establishing robust and regular in-service training programs to empower teachers in translating new concepts into classroom practice. The study underscores the significance of adequate resources and proper teacher training in overcoming challenges during curriculum implementation.

Furthermore, another report authored by Ndayambaje (2018) shed light on the obstacles faced during the execution of the Competency-Based Curriculum in Rwandan schools. The report pointed out that even though all primary school teachers received training on implementing the curriculum, some remained resistant to change and continued using old teaching methods and materials. Moreover, Ndayambaje (2018) emphasized that a shortage of adequate teaching and learning resources also posed a hindrance to the effective implementation of CBC in Rwanda. This highlights the importance of furnishing sufficient instructional materials and consistently training teachers to shift their perspectives on CBC to ensure successful implementation.

In a study conducted by Makunja (2016), titled "Obstacles Encountered by Educators in Enforcing the Competence-Based Curriculum in Tanzania: A Study of Community Secondary Schools in Morogoro Municipality," various factors were identified as significant impediments to the successful execution of the Competence-Based Curriculum (CBC). These factors encompassed issues such as insufficiently trained teachers, financial limitations, and a lack of ethical conduct among educators. These factors were identified as the primary contributors affecting the effective rollout of the CBC.

Furthermore, in the work by Hipolite (2019), an exploration was undertaken regarding the difficulties encountered in introducing a Competence-Based Curriculum (CBC) within public secondary schools in Morogoro Municipality, Tanzania. The research adopted a case study

methodology and employed a qualitative approach to gather information, involving 36 participants through means such as observations, interviews, and focus group discussions. The investigation unveiled several challenges faced by educators, impeding the successful integration of the curriculum. These challenges encompassed factors such as overcrowded classrooms, insufficient teaching and learning resources, and teachers' limited grasp of the CBC framework. It was recommended in the study that the Tanzanian Ministry of Education address these issues by furnishing schools with adequate instructional materials and providing comprehensive in-service training for all teaching staff.

Muneja (2015) conducted a research project within Tanzania, shedding light on the obstacles encountered by secondary school educators when attempting to implement the Competence-Based Curriculum (CBC). The study revealed a multitude of challenges faced by teachers, which hurt the successful execution of the curriculum. The issues highlighted in the Tanzanian context encompassed teachers' inadequate familiarity with effective teaching and assessment methods, a shortage of suitable textbooks, and subpar quality instructional resources.

Moreover, the study underscored the insufficiency of Information and Communication Technology (ICT) tools for instruction and noted teachers' lack of enthusiasm for curriculum implementation. The study recommended that the Tanzanian Ministry of Education and Culture should organize in-service training programs to shift teachers' attitudes towards embracing curriculum implementation and ensure the provision of ample materials and infrastructure across all educational institutions (Muneja 2015).

Momanyi and Rop (2019) conducted a study that investigated the implementation of Competency-Based Assessment (CBA) by the Kenya National Examinations Council (KNEC). The research revealed that the execution of CBA posed considerable challenges for KNEC, primarily due to various obstacles that hindered its implementation efforts. One major

challenge revolved around the absence of well-defined policies and documented procedures that would facilitate the effective deployment of CBA.

In the research conducted by Momanyi and Rop (2019) within the boundaries of Bomet East Sub-County, an in-depth survey was undertaken to delve into the complexities faced by educators during the implementation of the Competence-Based Curriculum (CBC) in lower primary schools. The results of this meticulous survey uncovered a prominent obstacle that loomed over the effective execution of the CBC – the inadequacy of teachers' knowledge and skills essential for successful curriculum integration.

This deficiency emerged as a pivotal factor that hindered the seamless alignment of the curriculum with educational practices. Consequently, the study's recommendations aimed at addressing this core issue. To overcome the challenge, it was proposed that both the Ministry of Education and the Kenya Institute of Curriculum Development (KICD) should proactively embark on an intensified effort to facilitate an increased number of in-service training sessions for teachers. This targeted approach sought to bridge the existing gaps in teachers' pedagogical competencies, enhance their ability to deploy robust assessment methodologies and elevate their aptitude in crafting relevant and effective teaching materials.

By empowering educators with a comprehensive understanding of the intricacies inherent in the Competence-Based Curriculum (CBC), these recommended actions aimed to equip teachers with the proficiency necessary to confidently address the challenges that might arise throughout the process of curriculum implementation. In essence, the study underscored the critical importance of adequately preparing teachers to navigate the complexities of the CBC to optimize the learning experiences of students. These findings are informative however, the

study focused on lower primary school teachers therefore; there is a need to establish the challenges faced by junior secondary school teachers in implementing the CBC.

A separate research endeavor conducted by Mwarari, Githui, and Mwenje (2020) delved into the perceived difficulties associated with enlisting parental participation in the implementation of the Competence-Based Curriculum (CBC) within early years' education. The study findings underscored that parent recognized the significance of being engaged in school-related activities and their children's learning processes. Nevertheless, the study brought to light several factors that influenced parents' collaboration with schools in this context. These factors encompassed constraints such as time limitations, a lack of parental training to comprehend the essence of CBC, insufficient knowledge about how to effectively support their children's learning, and inadequate resources.

Furthermore, in a study conducted by Sifuna and Obonyo (2019), an investigation was carried out to explore the obstacles impeding the successful implementation of the Competence-Based Curriculum (CBC) in Kenya. The study's findings revealed that the curriculum lacked a systematic plan and implementation approach. Moreover, it was identified that there was limited teacher training in terms of both curriculum content and effective teaching methods. Additionally, the study underscored the shortage of instructional materials and noted a lack of involvement from parents and other pertinent stakeholders in the curriculum reform process.

The study recommended that the Ministry of Education should establish a comprehensive framework for training teachers, raise awareness among parents, and ensure the provision of sufficient instructional materials and classrooms across all schools. This highlights the fundamental importance of adequately training teachers, engaging parents, and supplying ample teaching and learning resources to ensure the successful execution of the curriculum. It's worth noting that these highlighted issues were observed primarily within lower primary

grades. However, this may not necessarily apply to the junior secondary school section hence the need to conduct a distinct study to ascertain whether teachers in public JSSs encounter similar challenges.

A study conducted by Amunga, Were, and Ashioya (2020) aimed to identify the parental involvement required in Competency-Based Curriculum (CBC) activities and the challenges faced during its implementation. Using an exploratory research design, the study randomly selected 56 lower primary teachers for interviews and open-ended questionnaires. Findings revealed a lack of parental collaboration in curriculum implementation, with many parents hesitant to provide materials for practical lessons. Teachers cited challenges such as insufficient materials, inadequate parental support, limited time for lesson preparation, and large class sizes. The study recommended parent sensitization, increased government funding for more classrooms, and the hiring of additional teachers. While this research focused on challenges faced by lower primary teachers, it raises the broader question of the challenges encountered by teachers in public junior secondary schools during CBC implementation.

Muasya and Waweru (2019) conducted a study to explore the potential obstacles that could impede the effective rollout of the Competency-Based Curriculum (CBC) in Machakos County, which shares a border with Makueni County. The research employed a descriptive survey approach and targeted all 8,320 teachers across the 828 public primary schools in Machakos County, Kenya. The sample of 342 teachers responsible for grades one to three, where CBC was being introduced, was selected using a stratified random sampling method.

Data was collected through a combination of a questionnaire and an observation checklist.

The findings of the study indicated that teachers were not adequately prepared for the implementation of the new curriculum. Additionally, the existing infrastructure in schools was

insufficient to support the successful execution of CBC. Furthermore, the government hastily implemented CBC without first addressing challenges such as understaffing, a shortage of teaching and learning materials, and an unfavorable teaching and learning environment.

As a recommendation, the study proposed that the Ministry of Education, in collaboration with the Kenya Institute of Curriculum Development (KICD), should allocate more resources to teacher training and actively involve teachers in the curriculum change process to foster a positive attitude among educators, ultimately leading to the successful implementation of CBC. The study highlights a number of challenges hindering the effective implementation of CBC but it only focused on lower primary schools, it is therefore important to establish the challenges facing JSS teachers in implementing the Curriculum.

Marion (2020) conducted a study aiming to assess the difficulties encountered by teachers in the implementation of the Competency-Based Curriculum (CBC) in lower primary schools within Laikipia East Sub-County, Kenya. The research utilized a descriptive survey design, employing observation schedules and questionnaires for data collection. The results revealed numerous challenges faced by teachers during the implementation of the new curriculum.

Teachers highlighted the significant obstacle of large class sizes hindering the effective execution of CBC in public primary schools. Furthermore, a lack of teaching materials for practical learning areas like Music and inadequate resources for digital literacy posed serious impediments. The study also found that integrating digital literacy, problem-solving, and critical thinking competencies proved challenging for a majority of teachers, who expressed ongoing development of these skills. Insufficient materials for digital learning were a common concern among teachers.

While the majority of lesson plans aligned with CBC requirements, teachers reported that the training provided for CBC implementation was brief and insufficient for acquiring the necessary skills.

The study recommended that the government address these challenges by constructing more classrooms, ensuring the availability of teaching-learning materials, and conducting regular teacher training. The findings indicate that the effective implementation of CBC in lower primary grades has been hindered by various challenges faced by teachers. It is important to note that the challenges identified in lower primary grades may not necessarily be applicable to junior secondary schools, highlighting the need for a separate investigation into the challenges faced by teachers in implementing CBC in junior secondary schools.

In summary, therefore, the reviewed literature focused on exploring the views of preschool teachers regarding the adoption of (CBC) in primary school section, the studies also focused on use of computers only as a way of integrating ICT while ignoring other ICT tools applicable to teaching and learning, particularly in the context of CBC. It is also important to note that the challenges identified in lower primary grades may not necessarily be applicable to junior secondary schools. In addition, there is also limited research done on teacher preparedness on CBC in public junior secondary schools hence the need for a separate investigation into teacher preparedness to implement CBC in JSSs in Makindu Sub County.

2.3 Theoretical Review

The study utilized the Concern-Based Adoption Model (CBAM) developed by Hall, Hord, and Rutherford (2006), which helps to understand and predict teacher concerns and behaviors

during the implementation of an educational innovation. CBAM, evolving from Frances Fuller's earlier work on teacher concerns, employs three diagnostic components: the Stages of Concern (SoC) survey, Levels of Use (LoU) interviews, and Innovation Configuration Maps (ICM).

For over 40 years, CBAM has been employed in educational settings to explore educators' concerns, behaviors, and variations in the adoption of educational innovations. It emphasizes the human element in successful program implementation, contending that beyond providing materials and resources, the key factor is the readiness and commitment of teachers who act as implementers.

The SoC survey, consisting of 35 items, gauges change agents' attitudes and beliefs regarding innovation. The LoU interview identifies behavioral changes in innovation implementation, categorizing them into variations of use and non-use. ICMs provide a clear definition of the innovation, delineating stages of implementation and associated components. These components offer crucial data for evidence-based decision-making in the implementation process.

CBAM asserts that successful implementation requires understanding stakeholders' perceptions and feelings, particularly those of the teachers who are the implementers. It contends that change involves not only acquiring new skills but also altering individuals' perceptions. The model suggests that changing teachers' perceptions enhances their comfort and competence, shifting their focus from personal concerns to the desired outcomes of the program. Therefore, the study focuses on examining the preparedness of Junior Secondary School (JSS) teachers to implement the curriculum.

The model underscores that effective implementation goes beyond providing materials and resources; it necessitates addressing the human element—the teachers. CBAM posits that individuals respond uniquely to new programs based on their beliefs and attitudes. Change, according to CBAM, is not just about gaining new skills but also about changing individuals' perceptions. Thus, the study aims to investigate how JSS teachers perceive the curriculum.

CBAM emphasizes the importance of looking at the degree of fidelity in using a new program and the expertise of staff members before judging its effectiveness. Therefore, the success of implementing the new curriculum depends largely on the competency of the implementers, emphasizing the need for equipping teachers with the necessary knowledge and skills.

The model posits five assumptions about implementing new programs: change is a process, not an event; the focus should be on the implementers; change is a personal experience; individuals' progress through different stages; and systematic and adaptive monitoring is essential. These assumptions guide the study to consider the time it takes for effective CBC implementation, the centrality of teachers in the change process, the variability in teachers' perceptions affecting implementation, the progression of teachers through different stages in relation to the curriculum, and the necessity for systematic monitoring by the government to ensure successful CBC implementation in junior secondary schools.

2.4 Conceptual Framework

A conceptual framework is a foundational structure that outlines the key concepts, variables, relationships, and assumptions underlying a research study or theory. It serves as a guide for understanding the scope and direction of a study, helping researchers organize their thoughts, identify important factors, and establish a coherent framework for analysis and interpretation.

Independent variable

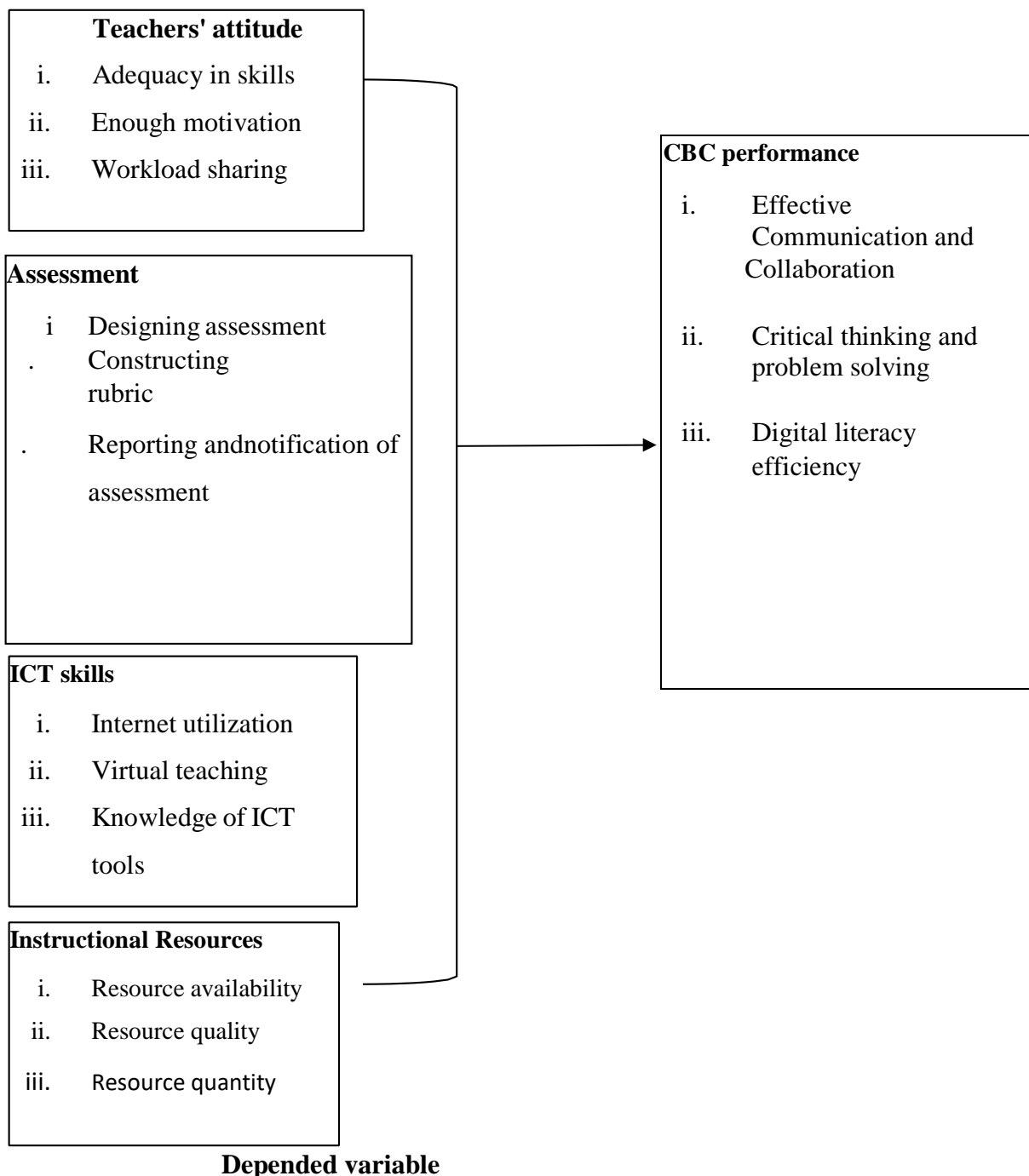


Figure 2.1

Through investigating teacher attitudes, the study aimed at revealing the attitudes and beliefs that shape educators' approach to CBC. Understanding how teachers view the value, relevance, and feasibility of CBC can provide insights into the level of commitment they bring to its implementation, impacting the overall quality of instruction and student engagement. The examination of assessment methods within the framework sought to uncover the strategies teachers use to gauge student competencies. This exploration contributed to a deeper

understanding of the balance between formative and summative assessment techniques, as well as the integration of authentic assessments that mirror real-world scenarios. The insights gained from this dimension offered guidance on optimizing assessment practices to align with the core principles of CBC.

Technological skills represent a pivotal aspect of modern education, and their role in CBC implementation cannot be underestimated. By delving into teachers' proficiency with digital tools, online resources, and blended learning techniques, the framework aimed to highlight the impact of technology on instructional delivery and the potential enhancement of student learning experiences.

The dimension addressing resources on CBC performance acknowledged the realities that educators and institutions face. Investigating resource constraints, assessment burdens, resistance to change, and policy alignment provided a comprehensive understanding of the obstacles that needed to be navigated for successful CBC adoption. By identifying and addressing these challenges, the study contributed to the development of strategies and support systems that can pave the way for smoother implementation.

In sum, this conceptual framework set the stage for an in-depth exploration of the intricate relationships among teacher attitude, assessment, technological skills, and resources in the context of CBC performance. By unraveling these dimensions, the research sought to provide valuable insights and recommendations that can guide educators, policymakers, and educational institutions toward more effective and impactful CBC integration, ultimately fostering a learning environment that equips students with the competencies they need to thrive in an evolving world.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covered research design, location of the study, target population, sampling techniques and sample size, data collection instruments, reliability and instrumentation, data collection, data analysis, and logistical and ethical considerations.

3.2 Research Design

A research design outlines a systematic approach to addressing a specific set of inquiries McCombes, (2019). This blueprint encompasses the techniques and steps for gathering, examining, and making sense of data. In essence, the research design delineates how the researcher intends to explore the primary issue of the study. The researcher adopted a descriptive survey design, which uses both qualitative and quantitative methods Namusinge, (2016).

Descriptive statistics provide a concise summary of the main characteristics of a dataset. They help in understanding the distribution, central tendency, and variability of the data. They make complex data more understandable. Instead of dealing with a large set of raw numbers, you get a few key metrics that represent the data's overall behavior. According to Orodho (2004), descriptive survey research entails acquiring information through either conducting interviews with participants or distributing questionnaires to the intended group of individuals. The research involved collection of data through questionnaires, interviews and observation checklist which were summarized, organized and presented for further studies.

3.3 Study Location

The study was specifically conducted within Makindu Sub County in Makindu Ward, Nguumo Ward, and Kikumbulyu South Ward. This is because numerous junior secondary schools in these Wards grapple with a spectrum of challenges spanning from an insufficient number of teachers to the issue of accommodating a high number of JSS pupils within each classroom.

Matata (2016) revealed that inadequate textbooks were a major leading to poor performance in public primary schools of Makindu Sub County. Furthermore Ndambuki (2016) revealed that teacher shortage was a challenge in implementing free secondary education. In addition, no research has been done on the effect of teacher preparedness on the performance of CBC in Makindu Sub County, this made it necessary for this research to be conducted.

3.4 Study Population

This refers to all the members who meet the criteria specified for a research investigation" (Alvi, 2016). The author further attest that the target population corresponds to a portion of the population about which one intends to conclude, thus part of the population whose characteristics are an interest to the investigator.

This research targeted a population of 400 respondents from Makindu Sub-County, which include: 260 junior secondary school teachers, at least two teachers from each of the 40 junior secondary schools in Makindu sub-County, 136 head teachers of primary schools (who also head JSSs), and 4 curriculum support officers.

A total sample of 120 respondents, consisting of 78 junior secondary school teachers, 41 primary school head teachers, and 1 curriculum support officer were taken for the study. Makindu sub-county has been selected for this study due to the following reasons: there is less research that has been carried out on teacher preparation in implementing CBC in JSSs in Makindu sub-county, there is a large number of JSSs in Makindu sub-county that may be facing

various challenges in implementing CBC hence providing enough data on teacher preparedness to implement CBC in JSSs and lastly Makindu sub-county has a large number of rural schools with diverse challenges that may help to provide a deeper understanding of how CBC is best implemented in JSSs.

3.5 Sampling Procedure

Sampling is the process of selecting a subset (sample) from a larger population to make inferences or draw conclusions about that population. Proper sampling is crucial in research to ensure that your findings are representative and generalizable. A sampling procedure is a systematic method or set of steps used to select a subset of individuals, items, or units from a larger population for research or data collection.

3.5.1 Sample Size

This refers to the number of individuals, items, or units included in a study or experiment. The research involved 30% of the intended participants, which aligns with Mugenda and Mugenda's (2013) recommendation of a sample size ranging from 10% to 30% of the target population. Consequently, the study encompassed 120 individuals, consisting of 78 junior secondary school teachers, 41 primary school head teachers, and 1 curriculum support officer.

TABLE 3.1

Sample size

Category	Target population	Sample size (30%)
Number of JSS teachers in the Nguumo Ward (1 urban and 27 rural schools)	56 (2 teachers × 28 schools)	17
Makindu Ward (1 urban and 60 rural schools)	124 (2 teachers × 62 schools)	37

Kikumbulyu South Ward (1 urban and 39 rural schools)	80 (2 teachers×40 schools)	24
Head Teachers	136	41
Curriculum Support Officers	4	1
Total	400	120

3.5.2 Sampling Techniques

The following sampling techniques were used: Simple Random Sampling was used to select schools, JSS teachers and Headteachers. In this method, each school was given an equal chance of being selected for study. Simple random sampling was used because it is unbiased and straightforward to implement for very large populations.

Purposive Sampling was used to select curriculum support officers. This technique enabled the researcher to deliberately choose specific individuals who were likely to provide relevant information.

3.6 Data collection procedure

The data collection process began with the researcher obtaining a letter from KCA University allowing him to carry out the research. The researcher then sought to obtain a research permit from the National Council for Science and Technology (NACOSTI). This permit was presented to both the Deputy County Commissioner and the Sub County Director of Education in Makindu.

Before starting the actual data collection, the researcher conducted a preliminary visit to the selected schools. During this visit, the researcher introduced himself to the respondents and explained to the school head teachers regarding the study's procedures and objectives.

Following this, the distribution of questionnaires took place.

3.6.1 Data collection techniques

The collection of primary data involved conducting interviews, carrying out observations, and facilitating focus groups. On the other hand, secondary data was gathered through a comprehensive literature review, accessing online databases, analyzing historical documents, reviewing media sources, and extracting insights from surveys and studies.

3.6.2 Data collection tools

The following tools were used to collect data: questionnaires and interviews for school administrators and curriculum support officers.

3.6.3 Ethical considerations

The researcher initiated the approval process by submitting requests to the Graduate School Board, under the guidance of the Dean of the School of Education at KCA University.

Additionally, formal requests for approval were sent to the National Commission for Science, Technology, and Innovation (NACOSTI), as well as the Makindu Deputy County Commissioner and Makindu Sub-County Director of Education.

The requests above sought authorization to conduct data collection focused on assessing the impact of teacher preparedness on the implementation of the Competency-Based Curriculum (CBC) within public junior secondary schools located in the Makindu Sub-County. All participants had the autonomy to engage voluntarily and withdraw without consequences. Their identities were safeguarded with anonymous identifiers and secure data storage for authorized access. Respect for participants' perspectives and autonomy was central to minimizing harm through measures to reduce distress.

3.7 Validity and Reliability of the Research Instruments

Validity is the degree to which a research instrument is measuring the concept it claims to measure. This was ensured by use of language that is clear, concise, and easily understandable to the target audience. On the other hand, reliability refers to the ability of a research instrument to produce consistent results over time.

3.7.1 Pilot Study

Mugenda and Mugenda (2013) pointed out that piloting is a significant step in research. It enables the researcher to determine validity and reliability of the instruments and unravel problems that participants were likely to encounter when giving information. The researcher conducted a pilot study in two junior secondary schools in Kibwezi East Sub-County junior secondary schools to test research instruments. Feedback from this study was used to make necessary adjustments before the main research.

3.7.2 Validity of the Research Instruments

According to Mugenda and Mugenda (2013) validity refers to the accuracy and meaningfulness of inferences that are based on research results. The validity of questionnaires was determined through pre-testing during piloting and thereafter analysis of piloted data was conducted to know the extent to which the research instrument has measured the intended data.

3.7.3 Reliability of the Research Instrument

Reliability was tested through test-retest reliability that is the same questionnaire administered during piloting was administered again during data collection time. The two results were compared to determine the reliability of the research instrument. According to Mugenda and Mugenda (2013) a coefficient of 0.70 or more will simply show that there is high reliability of data. The reliability results were

Teachers Attitude of CBC	0.763
CBC Assessment of learners	0.756
ICT skills	0.749

All the data collection instruments were therefore deemed reliable for data collection. A reliability coefficient (alpha) of 0.767 was considered acceptable.

3.8 Data Analysis Techniques

Data analysis techniques encompass a wide range of methods and approaches for examining, interpreting, and making sense of data. Thematic analysis was used for qualitative data while quantitative data will be analyzed using descriptive statistics.

CHAPTER FOUR

RESEARCH FINDINGS

4.1 Introduction

This chapter outlines the research analysis findings, discussion and interpretation of the results based on the research objectives.

4.2 Response Rate

The target participants for the study were 78 junior secondary school teachers, 40 head teachers and 1 curriculum support officers within Makindu Sub- County. The response rate results were presented in table 4.1 and figure 4.1.

4.2.1 Response Rate for questionnaire

The participants that were involved in the research study accounted for 78 junior secondary school teachers, whom the questionnaires were administered. The response rate as documented by the study was set in Table 4.1.

TABLE 4.1:

Response Rate

Response rate	F	%
Returned Questionnaire	72	92.3
Unreturned Questionnaires	6	7.7
Total	78	100

Source: Research Data, (2024)

The research findings in Table 4.1 exposed that questionnaires which were properly filled accounted for 92.3% response rate. The questionnaires that were not received back accounted to 7.7 %. Mugenda (2009) opined that where the response rate is 50% implied adequate, when it reaches 60% then its good and when it goes beyond 70% then it's excellent. The response rate attained in the study was 91.7%, equates to excellent thus attributing to greater reliability of the study.

4.2.2 Response rate of interview schedule

The interview scheduled distributed to head teachers and curriculum support officers were 41. The returned interview schedule was 29 out of 41, which translated to 70.73%. Figure 4.1 summarizes the response rate results.

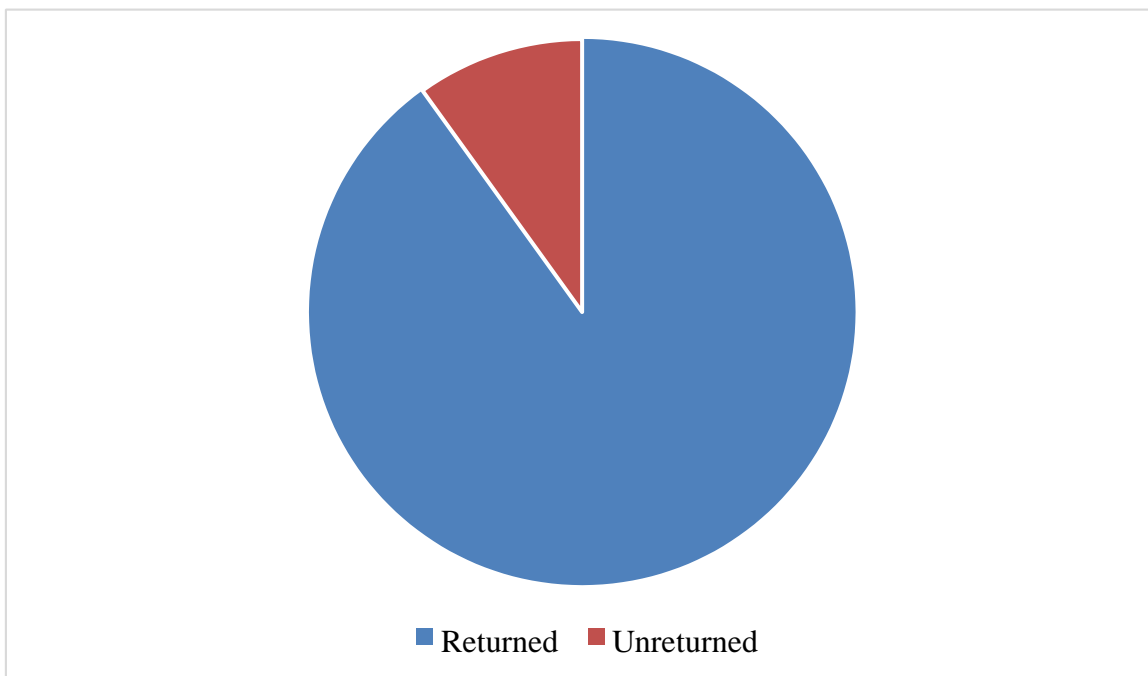


Fig 4.1:

Response Rate for Interviews

Source; Survey Data 2024

The response rate results of 70.73% was acceptable and excellent based on Mugenda (2009) criterion that the rate of response above 70%, to ensure adequacy of data for reporting and analysis.

4.3 Reliability Tests

The reliability test was conducted to find out the research instruments reliability. A pilot test was carried out using a sample of 12 respondents in Kibwezi Sub-County. The results for reliability test are shown in table 4.2

Table 4.2

Variables	Reliability Statistics		Conclusion
	Cronbach's Alpha	N of Items	
Teachers Attitude of CBC	0.763	6	Scale Reliable

CBC Assessment of Learners	0.756	5	Scale Reliable
ICT skills	0.749	5	Scale Reliable
Instructional Resources	0.801	8	Scale Reliable
Overall Reliability	0.767	24	Instrument was Reliable

The findings in Table 4.2 shown that variables had an alpha of above 0.7. The findings indicated that questionnaire was reliable. The entire questionnaire provided the overall reliability of 0.756 which inferred reliability in research instrument. The Cronbach's Alpha with α greater than 0.7 were considered to be reliable.

4.4 Demographic Information

The study obtained data relating to features of participants involved in the study. The information obtained consisted gender, age bracket, highest level of academic qualification, grade teaching, years of teaching and length of teaching in junior secondary school. The findings were revealed in Table 4.3.

Table 4.3:

The Respondents Demographic information

		Frequency	Percent
Gender	Female	31	43
	Male	41	57
	Total	72	100
Age bracket	20- 30 years	24	33
	31-40 years	29	40

	41-50 years	14	19
	Above 50 years	5	7
	Total	72	100
Highest level of academic qualification	Certificate	6	8
	Diploma	26	36

		Frequency	Percent
	Degree	44	46
	Masters	7	10
	Total	72	100
Grade currently teaching	Grade 7	35	49
	Grade 8	37	51
	Total	72	100
Teaching experience in years	Below 5 years	24	33
	5-20 years	40	56

	Above 20 years	8	11
	Total	72	100
Length of teaching in Junior Secondary	Below 1 year	45	62.5
	Above 1 year	27	37.5
		Frequency	Percent
	Total	72	100

Source: Research Data, (2024)

The result in Table 4.3 showed female accounted for 43% whereas males accounted for 57%.

The information from the result indicated that there was diversity of gender in Kenya's teaching fraternity. The findings for age bracket shown that 33% aged, 20-30 years, between 31-40 years composed of 40% while 19% were between 41-50 years and finally above 50years posted 7%.

The findings also confirmed that participants had varying academic qualification level with certificate holders accounting 8%, those that possessed diploma were 36%, degree owners contributed 46% and master holders comprising 10%. The result implied that majority of the respondents had high literacy level hence capable of properly interpreting the research questions posed to them easily.

Furthermore, the findings showed that 49% of the teachers handled grade seven while 51% taught grade eight. In regard to years of teaching, the result showed that 33% had taught for less than 5 years, those that had taught between 5-20 years were 56% and teachers that had taught for above 20 years recorded 11%. The findings inferred that majority of the teachers were experienced teachers who can deliver the learning contend in the best way.

The results on the length of teaching in junior secondary school revealed that 62.5% had engaged learners for less than one year whereas 37.5% had engaged learners for more than 1 year. The findings signaled that the teachers handling junior secondary school required more training to be more conversant with the content in this level.

4.5 Analysis of Results

The descriptive statistics on the research variable are presented, focusing on the teachers' readiness, teachers' attitude, and methods of assessing, Information Communication Technology skills and Instructional resources in the performance of competency-based curriculum.

4.5.1 : Teacher's Attitude towards CBC

To establish teachers' attitude toward CBC in public junior secondary schools of Makindu Sub-County was the first objective of the study. Attitude pertains to the comprehension of objects, events, or relationships derived from the process of interpreting received messages. This acquisition of responses unfolds through the stages of selection, interpretation, and subsequent reaction (Erin & Maharani, 2018). Individuals can filter and categorize the responses into either positive or negative perceptions. Attitude encompasses the psychological processes shaped by the accumulation of experiences garnered through our five senses.

The descriptive results focused on teacher's attitude towards CBC. The respondents were asked how familiar they were with competency-based curriculum. The findings are presented in

Figure 4.2

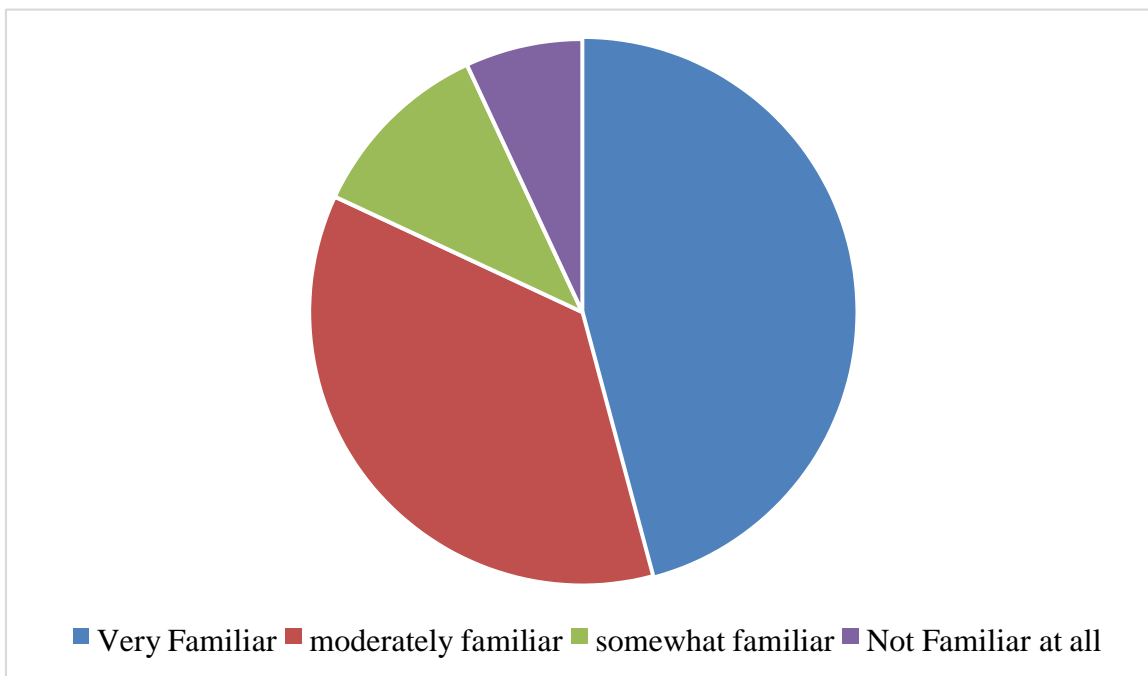


Figure 4.2: Familiarity with CBC

Source: Research Data, (2024)

The results in Figure 4.2 showed that 45.83% were very familiar with the concept of CBC, 36.11% were moderately familiar with the system whereas 11.11% were somewhat familiar but 6.94 were not familiar at all with CBC. The findings implied that most of junior secondary school teachers are not well conversant with the CBC system of education. The findings concur with Tamara (2013) that teachers generally held favorable views toward the curriculum; nonetheless, a significant majority struggled to incorporate certain aspects of the curriculum into their teaching due to insufficient understanding of the curriculum. Teachers emphasized that comprehensive training and professional development were crucial strategies to enhance successful curriculum implementation.

The study also sought to find out if junior secondary teachers had a good understanding on the differences between CBC and traditional curriculum approach. The results are shown in

Figure 4.3

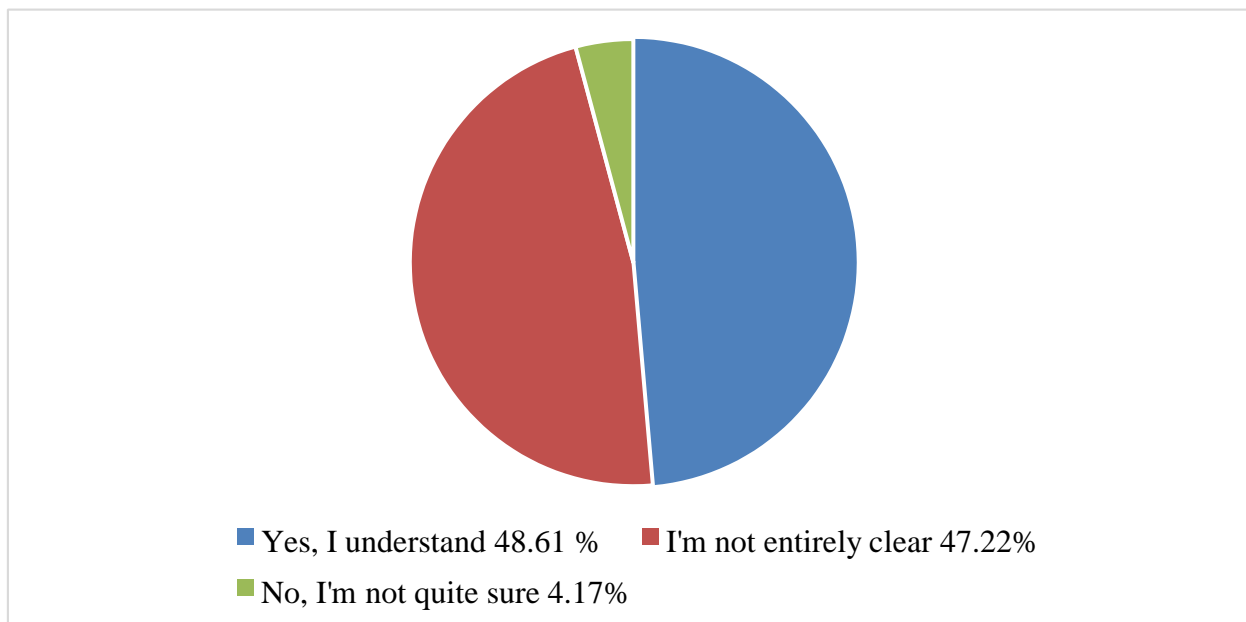


Figure 4.3:

Whether the Respondents Could Differentiate CBC and Traditional Curriculum

Source: Research Data, (2024)

The findings from Figure 4.3 revealed that 48.61% had a good understanding between CBC and traditional curriculum approach. 47.22% were not entirely clear with the distinction of the two approaches while 4.17% were not sure of the differences. The implication of the finding was that majority of the respondents could not differentiate the CBC and traditional education approach. These results supported Mushelenga (2020) and Nghihalwa (2018) that teachers have not been adequately involved in the various stages of curriculum development, with their participation often limited to the classroom implementation phase. This has led these scholars to the consensus that teachers' perspectives have been conspicuously absent throughout the critical phases of curriculum development. As posited by Carl (2017), the inclusion of teachers in the curriculum development process allows them to share their insights regarding the possibilities, challenges, and constraints within the educational environment.

The study further sought to determine whether respondents had prior experience in teaching using CBC. The study findings are documented in Figure 4.4.

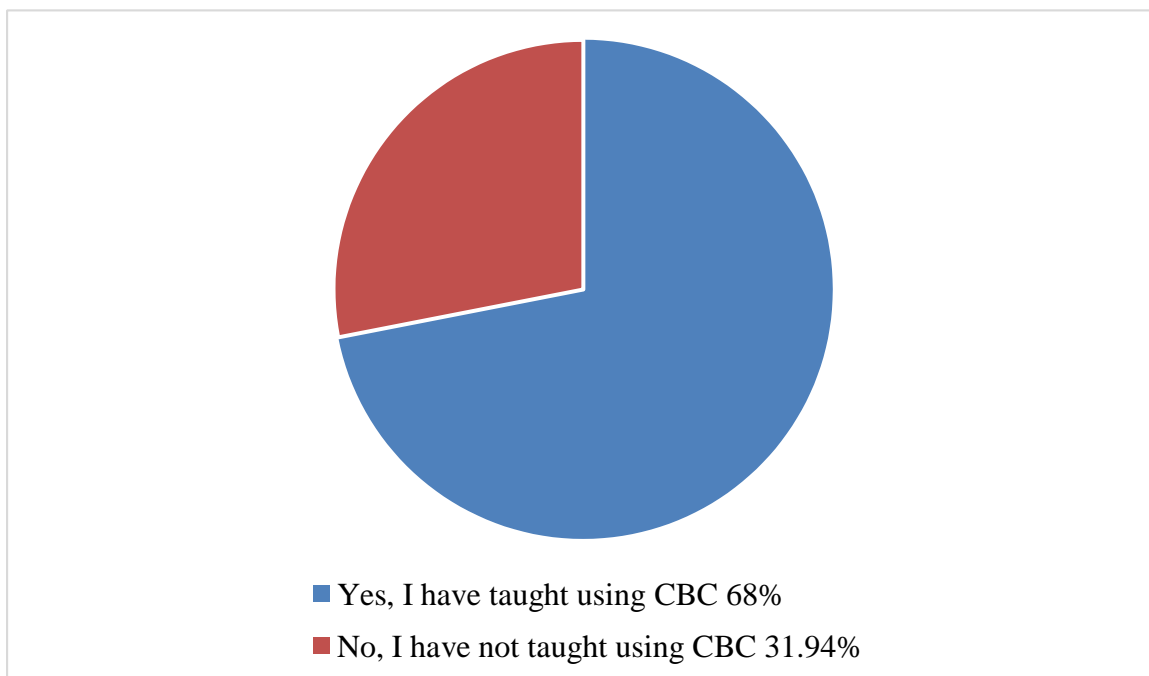


Figure 4.4:
Prior Experience in Teaching Using CBC

Source: Research Data, (2024)

The results of Figure 4.4 indicated that most of the teachers had prior experience in teaching CBC at 68.01% where as 31.94% lacked experience in handling CBC at junior secondary school. The result reveal that most of the teachers had experience in teaching junior secondary using CBC. The results concurred with Priestley et al. (2021), prioritizing the engagement of teachers in curriculum development is essential because they are the primary executors and beneficiaries of that knowledge. Teachers are more likely to take ownership of curriculum reforms when they recognize and comprehend the underlying knowledge, theories, and concepts. Talla (2012) suggests that the voices of all stakeholders should be taken into account when selecting areas of knowledge and determining the contexts in which this knowledge will be imparted.

The study furthermore sought whether respondents had received training on CBC implementation. The results of the study are shown in Figure 4.5.

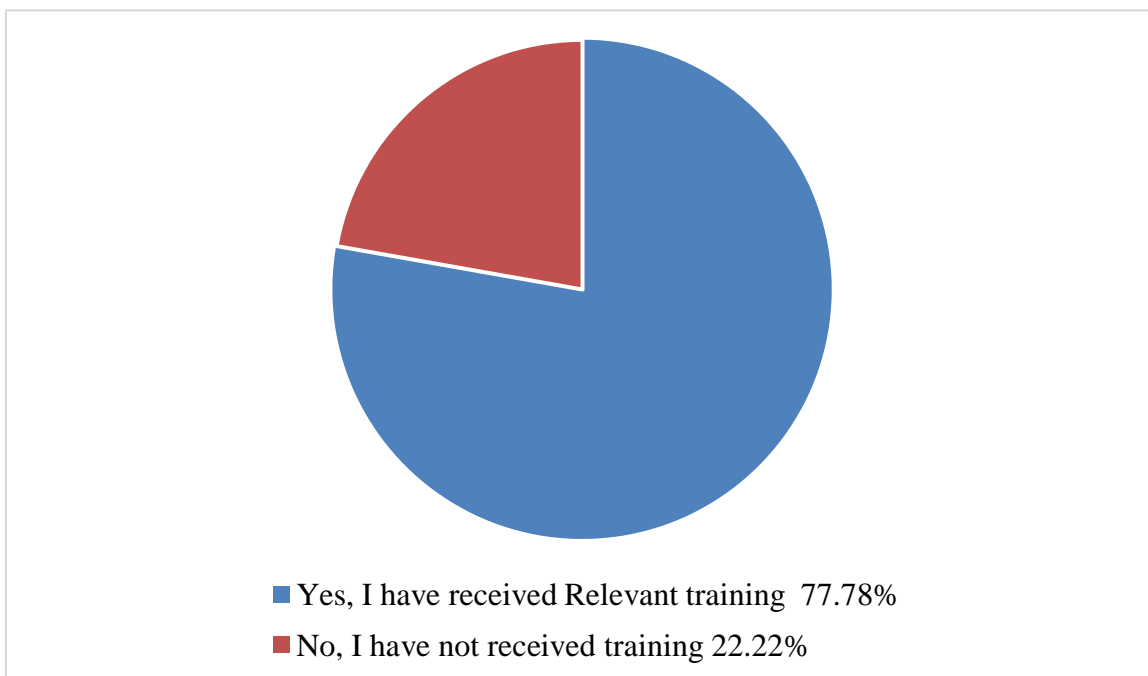


Figure 4.5:

Whether Respondents Had Received Training on CBC

Source: Research Data, (2024)

The Figure 4.5 results disclosed that 77.78% of the respondents had undergone relevant training while 22.22% had not received training concerning CBC approach. The findings implied that most of Junior secondary school teachers had undergone relevant training hence they possessed appropriate knowledge and skills to impart in learners. The study concurred with Ndayambaje (2018) that to ensure the effective implementation of the curriculum across Rwandan schools, reported that primary school teachers underwent regular and rigorous in-service training on how to effectively implement the curriculum.

Finally concerning the teacher attitude towards CBC, the study sought to establish how prepared the respondents were to implement CBC. The results are shown in Figure 4.6.

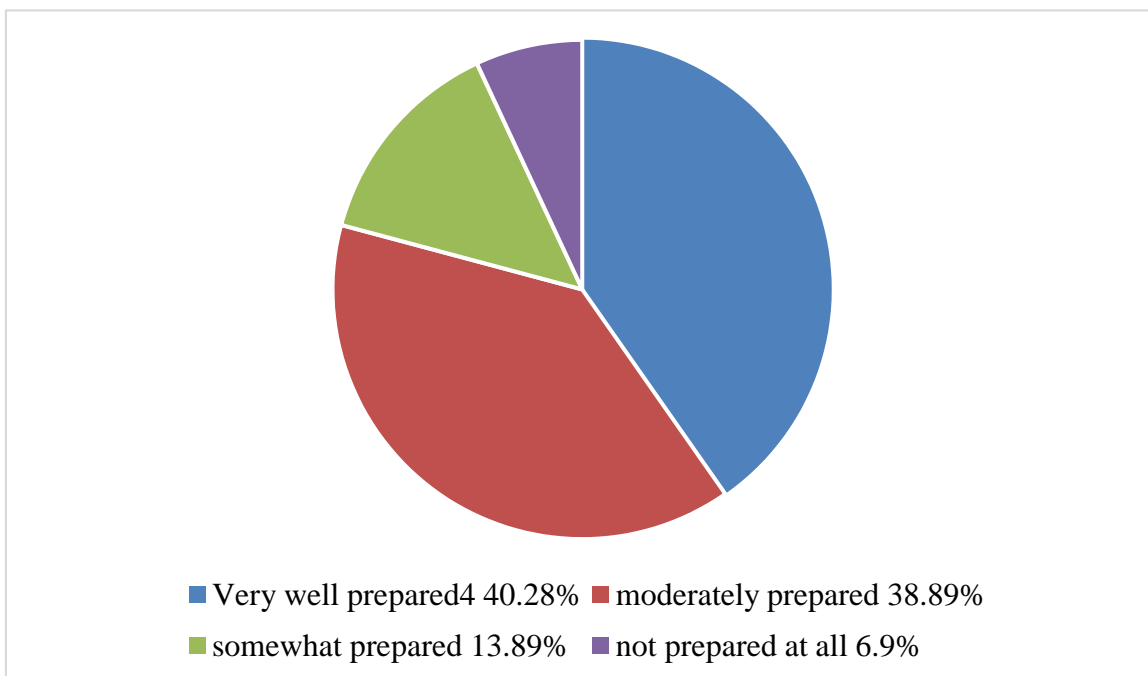


Figure 4.6:

Preparedness of Respondents and the performance of CBC

Source: Research Data, (2024)

The result from Figure 4.6 revealed that 40.28% were well prepared to implement CBC in teaching. 38.89% were moderately prepared whereas somewhat prepared accounted for 13.89%. 6.9% were not prepared to implement CBC. The results implied that most of the respondents were not well prepared to implement CBC. This is in line with Tilya and Maphumulo (2010) explored the compatibility between the curriculum and the teaching methods employed. This study highlighted a notable lack of clarity among curriculum developers, textbook authors, and educators regarding the effective implementation of the competency-based curriculum. This contradicts Firdousi (2013) affirmation that the basic purpose of training needs assessment is to ascertain knowledge and skill that people must have to perform efficiently on the specific tasks.

4.5.2 Assessment of Learners in Competency-Based Curriculum.

Evaluation involves a systematic procedure of gathering information with the explicit intention of making informed judgments regarding the quality of students' achievements in a specific subject. These judgments then guide the assignment of appropriate grades based on the scores obtained (Githua, Macharia, & Mboroki, 2009). This evaluative process hinges on the use of reliable evidence obtained through assessment to make informed comparisons and judgments about relative value (National Academy for Academic Leadership, 2012). Ololube (2015) sees curriculum evaluation as a broad and continuous effort to inquire into the effects of utilizing educational content and processes according to clearly defined goals. The study sought the views of respondents concerning the assessment of competency-based curriculum in junior secondary school in Makindu sub-county. The result to teachers' perception to CBC was presented in Table 4.4.

Table 4.4:

Teachers Attitude toward CBC

	Strongly disagree	Disagree	Neutral	agree	Strongly agree	Mean	Std Dev
Implementation of a Competency-Based Curriculum (CBC) brings benefits to Education.	1.4%	1.4%	6.9%	31.9%	58.3%	4.45	0.74
CBC is tailored to meet individual student needs	6.9%	2.8%	2.8%	68.1%	19.4%	3.90	0.97

CBC promotes critical thinking and problem-Solving skills among the learners.	0.0%	22.2%	2.8%	25.0%	50.0%	4.03	1.19
CBC Promotes higher student engagement and motivation.	6.9%	4.2%	5.6%	48.6.5%	34.7%	4.00	1.09
CBC is well-aligned with real-world skills	4.2%	2.2%	4.2%	41.7%	45.8%	4.21	1.00
Benefits of a Competency-Based Curriculum (CBC) outweigh any potential challenges	0.0%	5.6%	6.9%	58.3%	29.17%	4.11	0.76
Overall mean						4.12	0.96

Source: Research Data, (2024)

The results in Table 4.4 showed the responses based on various parameters used measure perception of respondents to CBC. The study aimed to establish from respondents whether implementation of competence-based curriculum brings benefits to education. The findings showed that 58.3% and 31.9% strongly agreed and agreed respectively whereas 1.4% disagreed as well as those who strongly disagreed. Further the study sought to find out whether CBC is tailored to meet individual student’s needs. The result revealed that most of respondents acknowledged that it does with 68.1% agreeing and 19.4% strongly agreeing.

When it came to whether CBC promotes critical thinking and problem-solving skills among the learners, majority of the respondents concurred that it does with 50.0%strongly agreeing and 25.0% agreeing. Those that were not in agreement accounted for 16.0% while no one strongly disagreed. The responses on whether CBC promotes higher students’ engagement and

motivation displayed that 48.6% agreed and 34.7% strongly agreed. 4.2% and 6.9% were of the view that CBC does not engage and motivate learners. On whether CBC was well aligned with real world skills, the result exposed that 45.8% and 41.7% strongly agreed and agreed respectively only 4.7% were neutral, disagreed as well as those strongly disagreed.

Furthermore, respondents were required to provide views whether benefits of CBC outweigh potential challenges. The results indicated that 58.3% and 29.2% agreed and strongly agreed. None of the respondents strongly disagreed with only 5.6% being in disagreement. The result posited overall mean of 4.11 which implied that most of the respondents shown a positive perception towards CBC. The results were in line with Acquah, Frimpong, and Kwame (2017) that the adoption of competency-based approaches significantly contributed to the training of highly skilled graduates required for the industry.

Besides, the study sought from respondents whether they could recommend the adoption of a competency-based curriculum to other educators based on knowledge and experience. The findings were presented in Figure 4.7.

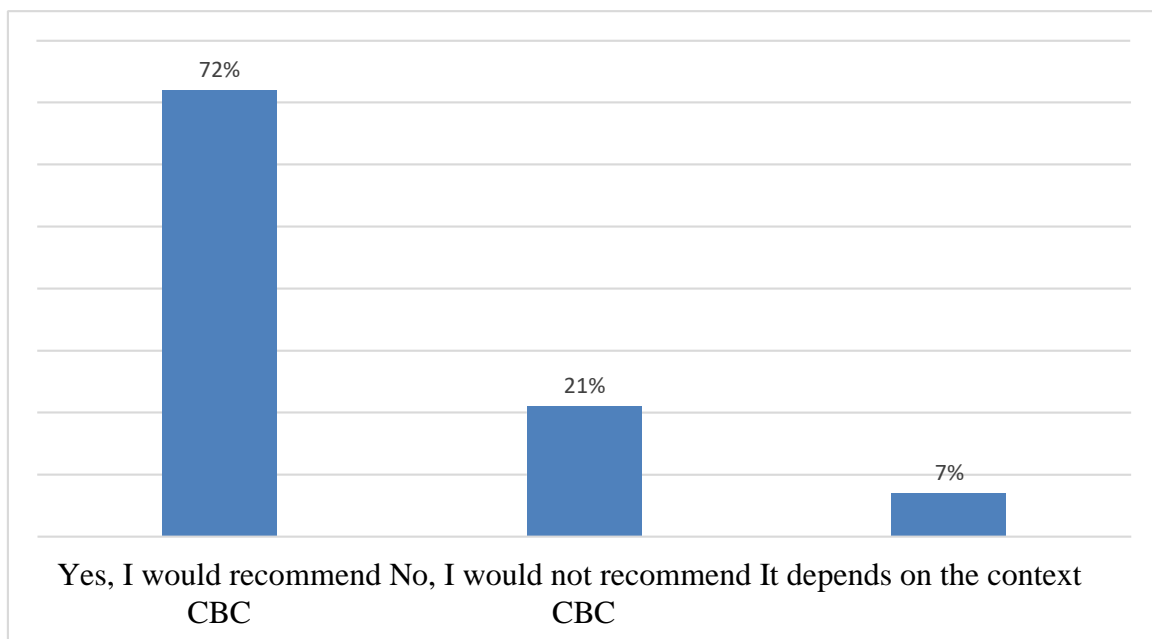


Figure 4.7:

Recommendation on the Adoption of CBC to Other Educators Based on Knowledge and Experience.

Source: Research Data, (2024)

Figure 4.7 results indicated that 72% of the respondents acknowledged that they would recommend CBC to other educators. 21% of the respondents would not recommend CBC whereas 7% noting that the context for recommendation was key.

The finding showed that most of the respondents could recommend CBC to other educators. This is in line with ILO (2014) that education approach should put emphasis on participatory and learner centered teaching approaches that involves role play on risk taking, negotiation, team work and occupational games intended to make learning fun, inspiring and interactive. Rwanda stands out as a regional example for successfully adopting the Competency-Based Curriculum (CBC) (Mbarushimana & Kuboja, 2016). The curriculum was introduced into primary schools and teachers' training colleges in 2016, replacing teacher-centric methodologies and passive learning with learner-centered approaches as emphasized by the Rwanda Education Board (2017). Mugabo, Ozawa, and Nkundabakura (2021) elucidated that CBC provides a paradigm shift aimed to furnish learners with knowledge, skills, and values that would render them pertinent and competitive in their society.

The study further sought to establish whether respondents were familiar with the CBC assessment concept. The study findings are shown in Figure 4.8.

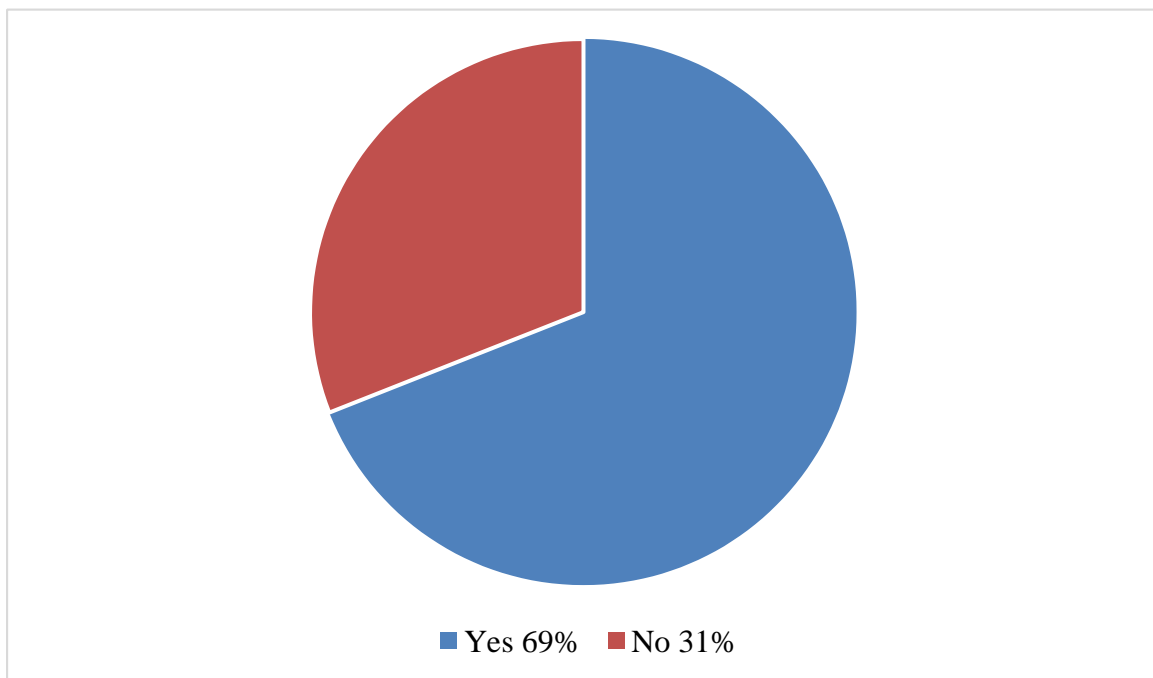


Figure 4.8:

Familiarity with the CBC Assessment

Concept. **Source: Research Data, (2024).**

The result in figure 4.8 revealed that majority of the respondents accepted that were familiar with concept of assessment in CBC, 69% whereas 31% were not. The finding implied that most of the respondents were familiar with the CBC assessment approach. The study agreed with Galevska and Pesic (2018) that educators frequently express a desire for clear and specific guidance when implementing assessment methods in inclusive classroom settings.

The study further required the respondents to rate their understanding on CBC assessment methods. The results of the findings are shown in Figure 4.9.

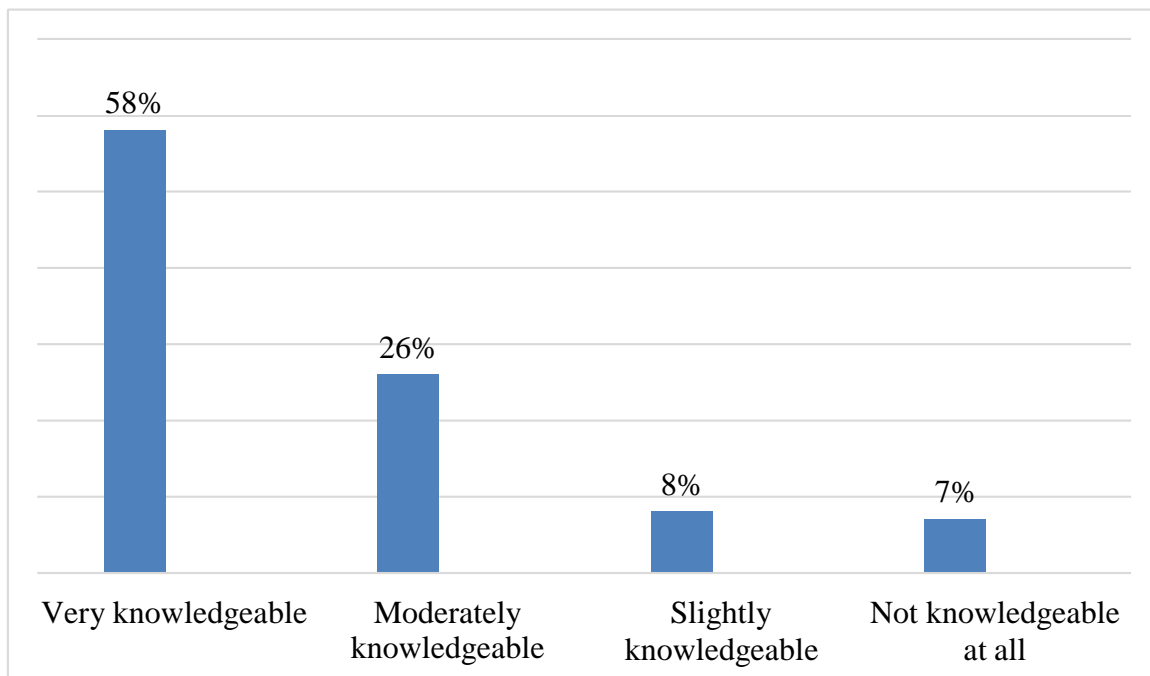


Figure 4.9:

*Understanding on CBC Assessment Methods. **Source:***

Research Data, (2024).

The results from Figure 4.9 indicated that 58% were very knowledgeable about CBC assessment methods. Those that were moderately knowledgeable accounted for 26%. The slightly knowledgeable and not knowledgeable at all posted 8% and 7% respectively. The result revealed that most of the respondents possessed knowledge on CBC assessment methods. The study was in agreement with Villamero (2014) that teachers employed diagnostic, formative, and summative assessment strategies, incorporating methods such as tests, observations, portfolios, and grouping for these purposes. The importance for teachers to employ a diverse range of assessment strategies when evaluating students enhances both the content and delivery methods that suit the individual needs of the learners.

Likewise, the study required the rating of respondents concerning whether CBC assessment approach effectively measured students' skills and competencies. The study findings were presented in Table 4.5 and Figure 4.10.

Table 4.5:

	Strongly disagree	Disagree	Neutral	agree	Strongly agree	Mean	Std Dev
The assessment methods used in CBC effectively measure students' skills and competencies.	0%	2.8%	13.9	43.1 %	40.3%	4.21	0.786

Source: Research Data, (2024)

The result of Table 4.5 indicated the mean as 4.21 and standard deviation as 0.786. This implied that the respondents strongly agree that the assessment methods used in a Competency-Based Curriculum (CBC) effectively measure students' skills and competencies.

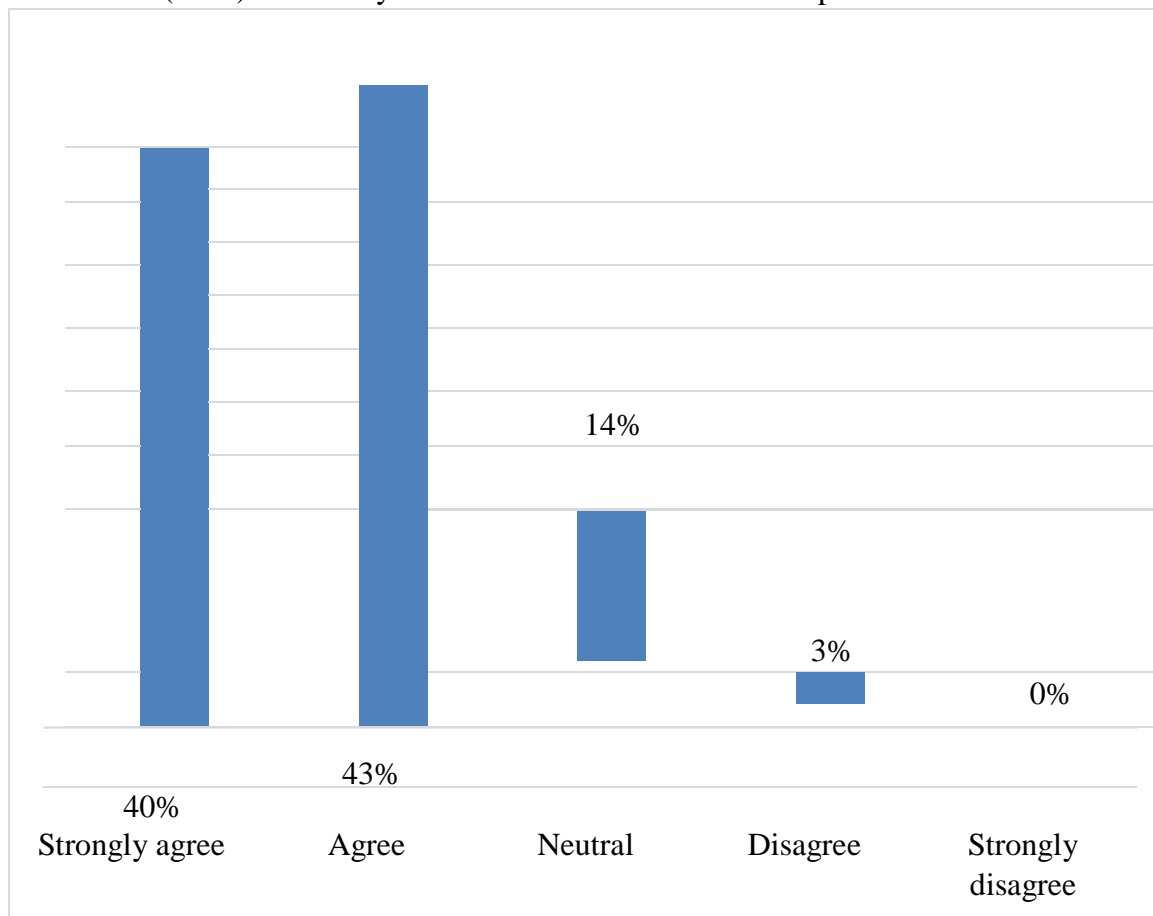


Figure 4.10:

Effectiveness of CBC Approach in Measurement of Students Skills and Competencies

The Figure 4.10 results showed that 43% and 40% agreed and strongly agreed that the CBC assessment approach effectively measured learners' skills and competencies. Only 3% disagreed with 14% being neutral. The findings implied that respondents agreed that CBC assessment approach effectively measures learners' skills and competencies. The findings are in line with (OECD, 2016) that Competency-Based Curriculum (CBC) introduced greater flexibility to empower teachers in fostering innovation and customizing learning experiences. The curriculum emphasized identifiable proficiencies that students were expected to acquire and apply in practical situations (Sanchez & Romero, 2015).

Equally the study asked respondents the effectiveness of CBC assessment methods in identifying students' strength and areas of improvement. The Figure 4.11 presented the findings.

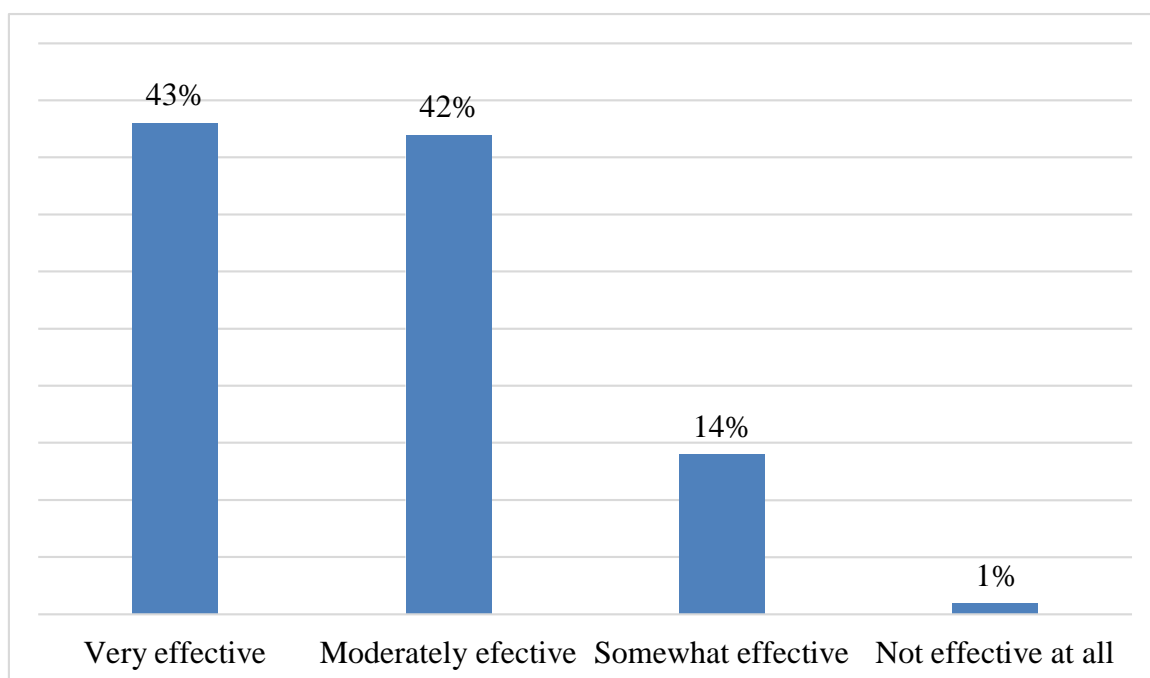


Figure 4.11:

Effectiveness of CBC Assessment Methods in Identifying Students' Strength and Areas of Improvement.

The findings presented in Figure 4.11 revealed that 43% and 42% that CBC assessment methods were very effective and moderately effective respectively in identifying students' strength and areas of improvement. Somewhat effective accounted for 14% while not effective at all accounted for 1%. The result implied that CBC assessment methods effectively identified students' strength and areas that required improvement. The findings supported KICD (2017) that CBC places a strong emphasis on formative assessment, which allows teachers to evaluate the capabilities and comprehension of concepts in learners as they continue to learn. Jeng'ere (2017) opined that use of rubrics for assessments is encouraged, aiding educators in appraising learners' capacity to comprehend and execute tasks. This permits teachers to gather evidence of a learner's acquisition of specific proficiencies across different learning activities.

Finally, the study sought to find out how often CBC assessment methods should be reviewed and updated to remain relevant and accurate. The results were presented in Figure 4.12.

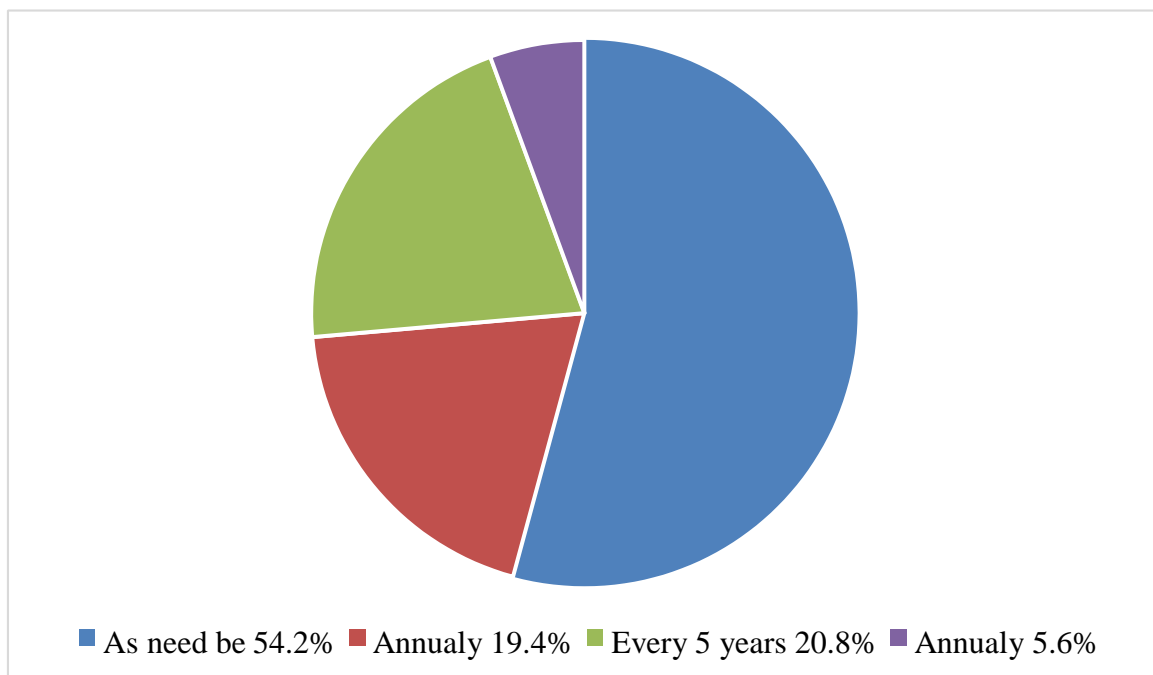


Figure 4.12:

How Often CBC Assessment Methods Should Be Reviewed and Updated to Remain Relevant and Accurate.

Source: Research Data, (2024)

The result in Figure 4.12 specified that 54.2% of the respondents observed that CBC assessment methods should be reviewed and updated as need be for it to remain relevant and accurate.

20.8% and 19.4% of the respondents recommended every five years and 10 years respectively while 5% of the respondents endorsed annually. The result implied that the CBC assessment methods should be reviewed and updated as need be for it to remain relevant and accurate. The results are in line with Njeng'ere (2017) that Curriculum should, be reviewed regularly to, meet the requirements of the individual citizens and the country.

4.5.3. Information Communication Technology skills

Integration of Information and Communication Technology (ICT) in education is recognized as a strategy to enhance educational accessibility, particularly in rural areas, and to enhance the engaging nature of teaching and learning processes. The adoption of the ICT strategy is geared towards elevating the ongoing utilization and enhancement of education. Numerous educational reforms have prompted recognition of the significant role that ICTs in reshaping educational frameworks. Barakabitze et al. (2019) confirmed that ICT equip learners with the necessary knowledge and proficiencies to effectively address the demands arising from the swift evolution of the global landscape. The Study sought to establish the effect of Integration of ICT in competency-based curriculum in junior secondary school in Makindu sub-county. The study required respondents to provide views about their familiarity of integration of technology in CBC. The results were presented in Figure 4.13.

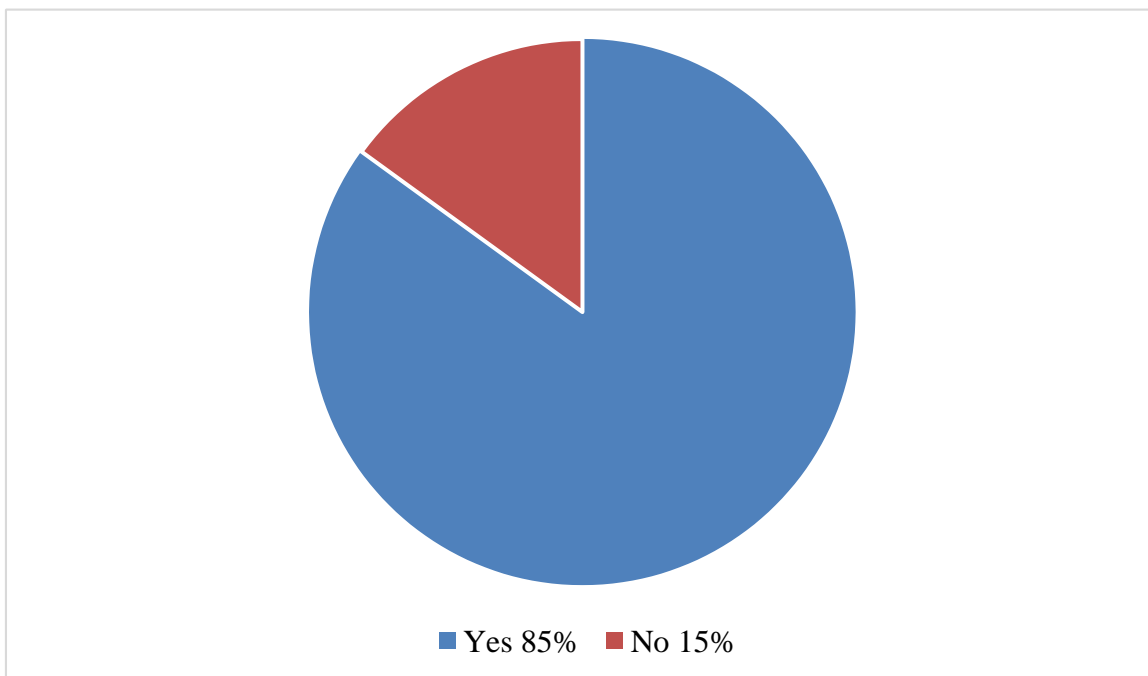


Figure 4.13:

Acquaintance of Integration of Technology in CBC

Source: Research Data, (2024)

The result in figure 4.13 presents the familiarity of respondents on integration of technology in CBC. 85% of the respondents acknowledged that they were familiar with the integration of technology in CBC whereas 15% were not familiar. The result implied that most of the respondents were aware of integration of technology in CBC.

Respondents were also asked to rate their comprehension about the role of technology in CBC.

The findings are shown in Figure 4.14.

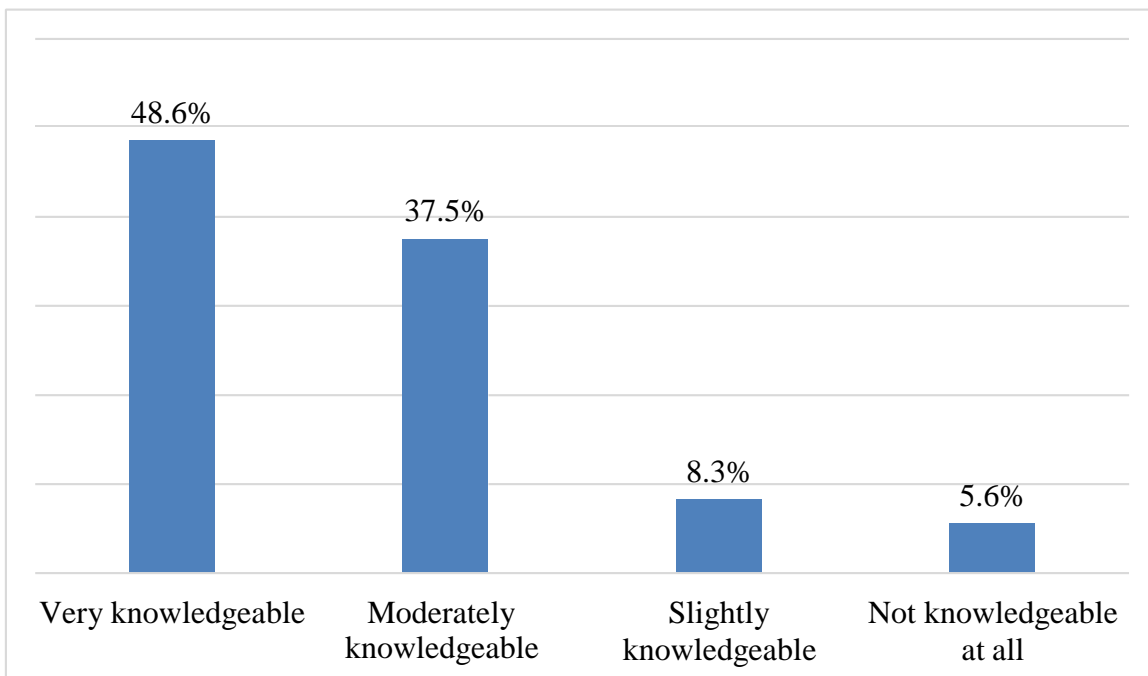


Figure 4.14:

Comprehension About the Role of Technology in CBC

Source: Research Data, (2024)

The result in figure 4.14 showed that 48.6% and 37.5% were very knowledgeable and moderately knowledgeable. Those that were slightly knowledgeable accounted for 8.3% but 5.6% were not knowledgeable at all. The result implied that majority of the respondents were possessed knowledge about the role of technology in CBC.

Similarly the respondents were asked to provide their opinion about the extent technology enhanced implementation of CBC. The results were provided in Figure 4.15.

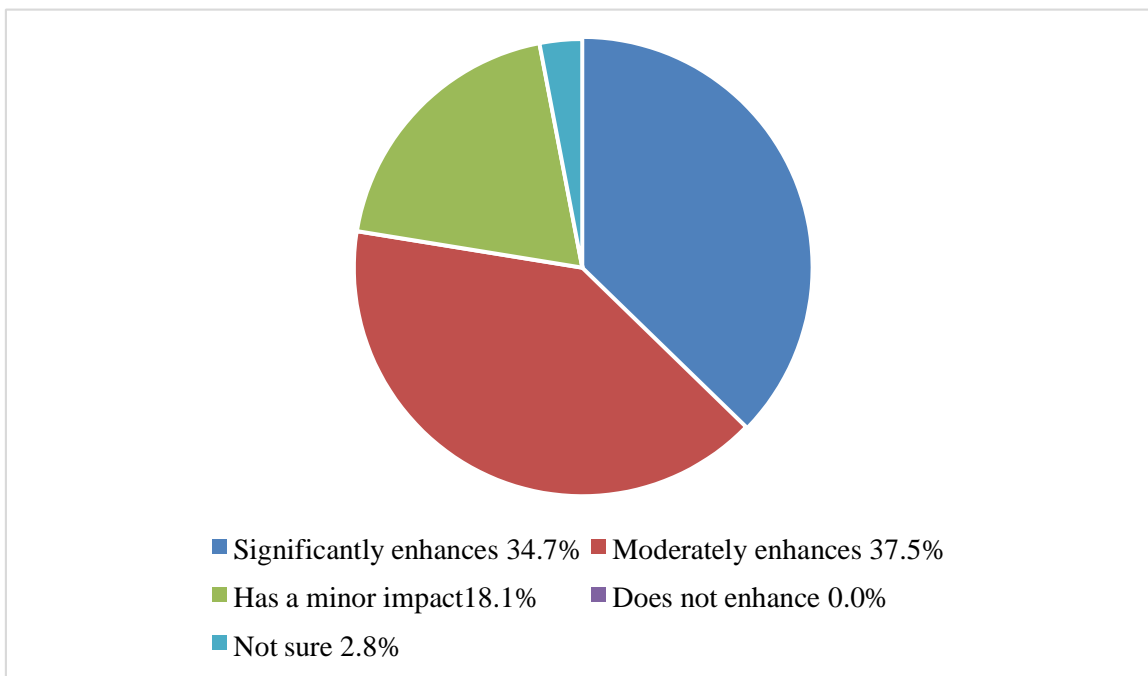


Figure 4.15:

The Extent to Which Technology Enhanced performance of CBC.

Source: Research Data, (2024)

The results shown in figure 4.15 revealed that 34.7% and 37.5% of the respondents accepted that technology significantly enhances and moderately enhances implementation of CBC respectively. 18% acknowledged that technology had a minor impact on CBC implementation while 2.8% were not quite sure of its impact.

Furthermore, the study asked the respondents to rate the impact of technological aspects on CBC implementation. The results are provided in table 4.6.

Table 4.6:

Impact of Technological Aspects on CBC performance.

Strongly disagree	Disagree	agree	Strongly agree	Mean	Std Dev

Technology enables the collection and analysis of data to track student progress and adapt instruction	1.4%	0.0%	38.9%	59.7%	3.57	0.57
Technology provides access to a wide range of digital resources and learning materials.	0.0%	6.9%	56.9%	36.1%	3.29	0.59
Technology facilitates remote and flexible learning opportunities.	0.0%	6.9%	45.8%	47.2%	3.40	0.6
Technology can adapt content and pacing based on individual student performance.	6.9%	5.6%	59.7%	27.8%	3.08	0.78
Technology allows for tailored learning experiences based on students' competencies and needs.					3.32	0.72
Overall mean	4.2%	2.8%	50.0%	43.1%	3.33	0.65

Source: Research Data, (2024)

The results in Table 4.6 shown that the overall variable mean was 3.3 and a standard deviation of 0.65. basing on a four-point Likert scale the study mean score was close to 3. This inferred those respondents agreed that technological aspects had impact CBC implementation.

However, the data showed that there was slight variation within respondents concerning impact of technological aspect on CBC implementation, with a standard deviation of 0.65.

Equally, views on technology enables the collection and analysis of data to track student progress and adapt to instruction had the highest overall mean score of 3.57, which is rounded off to 4 that denotes strongly agree and the lowest standard deviation of 0.57. The results pointed out that respondents strongly agreed that technology enabled the collection and analysis of data to track student progress and adapt to instruction. Likewise, the lowest mean score of 3.08 means that respondents had reservation that technology can adapt content and pacing based on individual student performance. Furthermore, a standard deviation of 0.78 signified significant differences amongst respondents regarding technology adapting content and pacing based of individual student performance.

Technology provides access to a wide range of digital resources and learning materials provided had a mean of 3.29 whereas technology facilitates remote and flexible learning opportunities accounted for a mean score of 3.40. The results symbolized that respondents agreed that technology provides access to a wide range of digital resources and learning materials as well as enhance remote and flexible learning opportunities. On technology allowing tailored learning experiences basing on students' competencies and needs had a mean of 3.32. These results meant that the respondents agreed on technology allowing tailored learning experiences basing on students' competencies and needs although the result varied extensively amongst respondents with a standard deviation of 0.72.

The respondents were further asked whether technology had an impact on students' engagement and motivation in CBC. The findings were provided in Figure 4.16

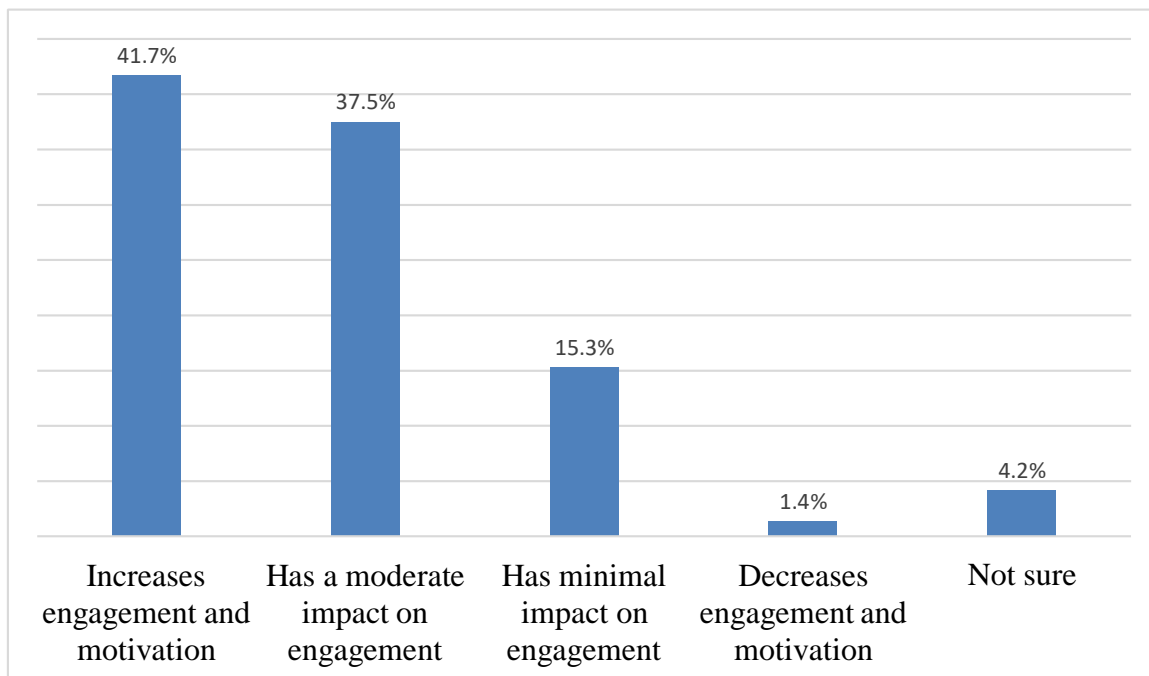


Figure 4.16:

Impact of Technology on Students' Engagement and Motivation in CBC.

Source: Research Data, (2024)

The results in Figure 4.16 indicated technology increases engagement and motivation in CBC accounted for 41.7% whereas technology had a moderate impact on engagement and motivation contributed 37.5%. 15.3% had minimal impact on engagement and motivation but 1.4% had a negative view of decreasing engagement and motivation. The result implied that technology had a positive influence on CBC engagement and motivation.

4.5.4. Instructional Resources and the performance of CBC

The performance of a Competency-Based Curriculum (CBC) has undergone significant hurdles posed by various education stakeholders. Among these stakeholders, the teachers' union expressed the belief that the nation was unprepared for the adoption of the new curriculum. Mugabo, Ozawa, and Nkundabakura (2021) revealed that disparities in the adoption of CBC among teachers were influenced by variations in their professional development, insufficient training related to CBC, inadequate teaching and learning resources, as well as a lack of adequate school infrastructure. This section focused on challenges of implementing the CBC.

The respondents were asked whether they were familiar with instructional resource challenges associated with the performance CBC. The results are indicated in Figure 4.17

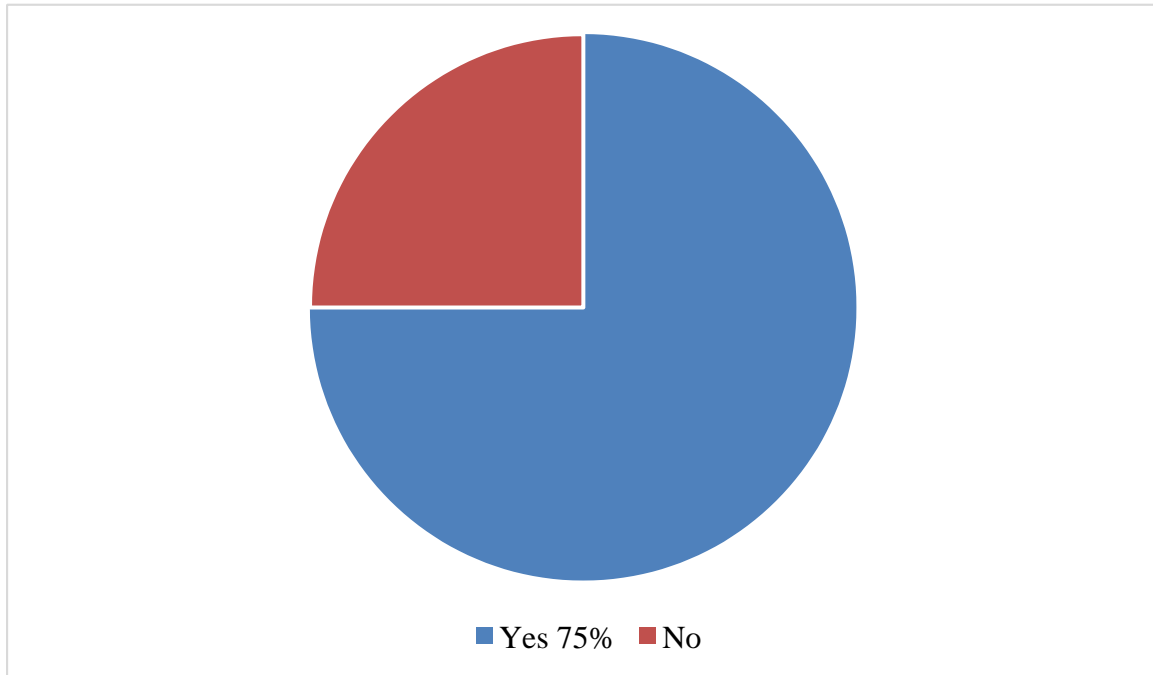


Figure 4.17:

Familiarity with Instructional Resources associated with the performance of CBC

Source: Research Data, (2024)

Figure 4.17 established that 75% of respondents had familiarity with the instructional resource challenges associated with the performance of CBC but 25% were not familiar. The findings implied that respondents were conversant with the challenges hence they were in a position to find solution with ease where they can.

Likewise, the respondents were required to rate whether the instructional resource challenges on the performance of a Competency-Based Curriculum (CBC) can significantly impact its effectiveness, the results are presented in Table 4.7 and Figure 4.18.

Table 4.7: Instructional Resources can Significantly Impact the performance of CBC

	Strongly disagree	Disagree	Neutral	agree	Strongly agree	Mean	Std Dev

The assessment methods used in a Competency-Based Curriculum (CBC) effectively measure students' skills and competencies.							
	1.4%	4.2%	26.4%	30.6%	37.5%	3.99	0.971

Source: Research Data, (2024)

The result in Table 4. 7 showed that the mean was 3.99. This signified agreement to the statement that Instructional resources can significantly impact the performance of CBC.

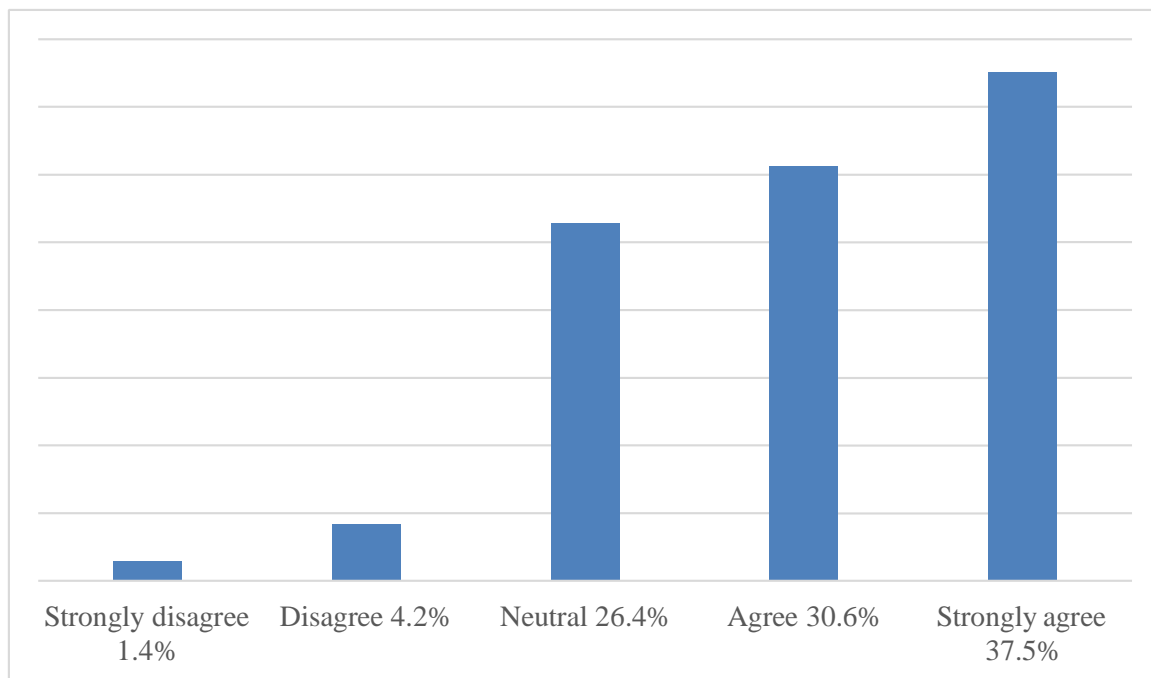


Figure 4.18:

Instructional Resources can Significantly Impact the performance of CBC

Source: Research Data, (2024)

The results presented in Figure 4.18 shown that 37.5% and 30.6% strongly agreed and agreed respectively. Those that disagreed accounted for 4.2 whereas 1.4 strongly disagreed. 26.4 % were neutral. These findings implied that most of the respondents agreed that instructional resource challenges can significantly impact the performance of CBC.

Furthermore, respondents were required to rate the ability in carrying out assessment. The results are indicated in Table 4.8

*Table 4.8:
Ability to Carry Out Assessment of Learners in CBC*

	Significant challenge	Moderate challenge	Not sure	Minor challenge	No challenge	Mean	Std Dev
Designing assessment	4.2%	6.9%	4.2%	20.8%	63.9%	4.36	1.06
Conducting assessment	4.2%	9.7%	2.8%	55.6%	27.8%	4.01	0.89
Fair grading	5.6%	25. %0	0.0%	43.1%	26.4%	3.90	0.85
Individualized assessment	9.7%	12.5%	1.4%	48.6%	27.8%	3.92	0.95

Access to assessment materials	5.6%	15.3%	9.7%	34.7%	34.7%	3.79	1.25
Assessment reflects true learners' position	12.5%	8.3%		43.1%	27.8%	3.69	1.23
	Significant challenge	Moderate challenge	Not sure	Minor challenge	No challenge	Mean	Std Dev
			8.3%				
There is enough time for assessment	8.3%	22.2%	2.8%	33.3%	33.3%	3.86	1.06
Learners are aware of the assessment methods	2.8%	8.3%	5.6%	54.2%	29.2%	3.99	0.99
Overall mean						3.94	1.035

Source: Research Data, (2024)

The results in Table 4.8 showed that overall mean score of 3.94 with a standard deviation of 1.035. This result depicted that respondents agreed that there were minor challenges with performance of CBC as shown by the mean score. The result signified significant variation among respondents' responses as indicated by the standard deviation.

Designing assessment constituted the highest mean score of 4.36 and a standard deviation of

1.06. This inferred that respondent designing assessment was not a key challenge that faced CBC implementation although there was significant variation among respondents on the issue. The lowest mean of 3.69 with a standard deviation of 1.23 required respondents to gauge whether CBC assessment reflects true learners' position. These findings implied that assessment reflecting true learners' position was a minor challenge although there was varied outcome amongst respondents as revealed by the standard deviation.

Conducting assessment, fair grading, individualized assessment, access to assessment materials, there is enough time for assessment and learners are aware of the assessment methods all these provided minor challenge as indicated by their mean within 3.41-4.20 (Pimentel, 2010). These results concurred with Hipolite (2019) that difficulties encountered in introducing a Competence-Based Curriculum within public secondary schools encompassed factors such as overcrowded classrooms, insufficient teaching and learning resources, and teachers' limited grasp of the CBC framework.

Teachers' inadequate familiarity with effective teaching and assessment methods, a shortage of suitable textbooks, and subpar quality instructional resources (Muneja, 2015) were obstacles encountered by secondary school educators when attempting to implement the Competence-Based Curriculum (CBC). Momanyi and Rop (2019) viewed inadequacy of teachers' knowledge and skills essential for successful curriculum integration as a prominent obstacle that obscure effective execution of the CBC.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter deals with study findings summary, conclusion, study contribution, recommendation and areas of further research.

5.2 Summary of the Study

The aim of the study was to assess teacher preparedness on the performance of the Competency-Based Curriculum in public junior secondary schools in Makindu Sub-County, Makueni County, Kenya. The study goal was to establish the level of teacher preparedness for effective implementation of CBC in public junior secondary schools in Makindu Sub-County.

The research purposed to answer the questions: teachers' attitude towards CBC, teachers' methods of assessing learners, ICT skills and the impact of instructional resources on the performance of the Competency-Based Curriculum (CBC) in public junior secondary schools in the Makindu sub-county? The study adopted the Concern-Based Adoption Model (CBAM) developed by Hall, Hord, and Rutherford (2006) which assumes that change is a process, not an event; the focus should be on the implementers; change is a personal experience; individuals progress through different stages; and systematic and adaptive monitoring is essential. The study was specifically conducted within Makindu Ward, Nguumo Ward and Kikumbulyu South Ward in Makindu Sub-County, Makueni County, Kenya.

This research targeted 400 respondents from Makindu Sub-County, which included: 260 junior secondary school teachers, at least two teachers from each of the 40 junior secondary schools in Makindu sub-County, 136 head teachers of primary schools (who also head JSSs), and 4 curriculum support officers. The research employed the following sampling techniques: simple random sampling, convenience sampling, purposive sampling and stratified sampling. In addition, the following tools were used to collect data: questionnaires, observation checklists,

and interviews schedules. The collected data was analyzed using descriptive analysis to describe and summarize data.

The first objective of the study was how teachers' attitude toward CBC affect the implementation of the competency-based curriculum in public junior secondary schools in Makindu Sub- County. The findings indicated that that most of junior secondary school teachers are not well conversant with the CBC system of education. The findings concur with Tamara (2013) that teachers generally held favorable views toward the curriculum; nonetheless, a significant majority struggled to incorporate certain aspects of the curriculum into their teaching due to insufficient understanding of the curriculum.

The study further revealed that majority of the respondents could not differentiate the CBC and traditional education approach. Mushelenga (2020) and Nghihalwa (2018) asserted that teachers have not been adequately involved in the various stages of curriculum development, with their participation often limited to the classroom implementation phase. Equally the findings showed that most of respondents had undergone relevant training hence they possessed appropriate knowledge and skills to impart in learners. Likewise, the results shown that most of the respondents were not well prepared to implement CBC. Tilya and Maphumulo (2010) stressed that impediment to CBC implementation were lack of clarity among curriculum developers, textbook authors, and educators regarding the effective implementation of the competency-based curriculum.

The study further focused on the second objective of assessment of learners in CBC in public junior secondary schools of Makindu Sub- County. This evaluative process hinges on the use of reliable evidence obtained through assessment to make informed comparisons and judgments about relative value of CBC. The study revealed that implementation of competence-based curriculum brings benefits to education as it's tailored to meet individual student's needs. The result further shown that CBC promotes critical thinking and problem-solving skills among the learners. The findings also indicated that CBC promotes higher

students' engagement and motivation since it was well aligned with real world skills. Equally it was confirmed that respondents had a positive perception towards CBC as its benefit outweigh the potential challenges. The findings also revealed that respondents would recommend the adoption of competency-based curriculum to other educators based on knowledge and experience. The adoption of competency-based approaches significantly contributed to the training of highly skilled graduates required for the industry (Acquah, Frimpong, & Kwame, 2017). CBC education approach puts emphasis on participatory and learner centered teaching approaches that involves role play on risk taking, negotiation, team work and occupational games intended to make learning fun, inspiring and interactive.

Furthermore, the third objective of the study sought to establish the integration of ICT in CBC in public junior secondary schools of Makindu Sub- County. The study findings approved that respondents were aware of integration of technology in CBC and possessed knowledge about the role of technology in CBC. The study found out that technological aspects significantly influenced CBC implementation. That's collection and analysis of data to track student progress and adapt instruction, provides access to a wide range of digital resources and learning materials, remote and flexible learning opportunities, adapting content and pacing based on individual student performance and allowing tailored learning experiences based on students' competencies and needs. Furthermore, it was determined that technology had a positive influence on CBC engagement and motivation.

The fourth study objective sought to understand the impact of instructional resources on the performance of CBC. The findings revealed difficulties for teachers in designing and conducting an assessment as well as fair grading. The findings are in line with (Sudha, 2018; Eka, 2018; Scheopner, Brett, Cox & Greller, 2018; Galevska & Pesic (2018) that assessing the educational progress of learners posed a significant obstacle for teachers.

The results further showed that shortage of assessment materials and inadequate time for assessment posed a limitation for successful CBC implementation. The study findings agree

with several studies (Mugabe, Ozawa & Nkundabakura, 2021; Marion 2020; Amunga, Were, & Ashioya 2020; Ndayambaje, 2018) that shortage of assessment material and inadequate time for assessment interferes with effective CBC implementation.

5.3 Conclusion

The study sought to assess the level of teacher preparedness on Competency Based Curriculum performance in public junior secondary schools in Makindu Sub-County. The following conclusions can be drawn from the study. Teachers' attitude toward CBC affects the performance of the competency-based curriculum in public junior secondary school.

The study concludes that that the performance of competence-based curriculum brings benefits to education as it's tailored to meet individual student's needs. CBC also promotes critical thinking and problem-solving skills among the learners. Furthermore, CBC promotes higher students' engagement and motivation since it was well aligned with real world skills. Equally there was a positive perception towards CBC as its benefit outweigh the potential challenges. The findings also revealed that respondents would recommend the adoption of competency-based curriculum to other educators based on knowledge and experience.

The study findings established that junior secondary teachers were aware of integration of technology in CBC and possessed knowledge about the role of technology in CBC. The study found out that technological aspects significantly influenced CBC implementation. This technological aspect comprises collection and analysis of data to track student progress and adapt instruction, provides access to a wide range of digital resources and learning materials, remote and flexible learning opportunities, adapting content and pacing based on individual student performance and allowing tailored learning experiences based on students' competencies and needs. Furthermore, it was determined that technology had a positive influence on CBC engagement and motivation.

The findings revealed that the instructional resources can significantly impact the effectiveness of CBC. This challenge can range from designing assessment, conducting assessment, fair grading, individualized assessment, access to assessment materials and enough time for assessment

5.4 Recommendations

The study underscored that teacher's level of preparedness affect the performance of the Competency Based Curriculum (CBC) in public junior secondary schools. Teachers' attitude toward CBC affects the implementation of the competency-based curriculum in public junior secondary school. Most of junior secondary school teachers are not well conversant with the CBC system of education. This implies that need assessment to be conducted for junior secondary school teachers, the more they will tend to understand more the needs of this teachers hence the needs will be well addressed during the training on CBC. This will enable them know specific needs of the teachers so as to adequately address the identified needs.

The study noted that the ongoing process of implementing competence-based curriculum brings benefits to education as it's tailored to meet individual student's needs. Hence, ministry of education needs to train and motivate teachers to enable them grasp the CBC content and in-calculate the same to learners. This will have more positive influence on performance and economic development of the country.

The study found out that technological aspects significantly influenced CBC implementation. The education stakeholders should provide ICT materials to schools to enable teachers and learners to have hands on experience. Teachers should horn their ICT skills through continues training to be able to utilize these technological facilities. This technological aspect comprises collection and analysis of data to track student progress and adapt instruction, provides access to a wide range of digital resources and learning materials, remote and flexible learning

opportunities, adapting content and pacing based on individual student performance and allowing tailored learning experiences based on students' competencies and needs.

Furthermore, instructional resources can significantly impact the effectiveness of the Competence Based Curriculum. The challenges can range from designing assessment, conducting assessment, fair grading, individualized assessment, access to assessment materials and enough time for assessment. All stakeholders should be sensitized through capacity building to understand CBC. The teachers, parents and other stakeholders should work as a team to facilitate CBC to succeed through provision of required support. These include financial resources, human resources to enhance proper monitoring and evaluation.

5.5 Contribution to Knowledge

The study provided the required empirical evidence in assessing the level of teacher preparedness for effective implementation of the Competency-Based Curriculum (CBC) in public junior secondary schools. The study revealed that there are gaps in implementing CBC in junior secondary school. The study can be an eye opener for those who would like to carry the same study in other areas.

The study has revealed that there are challenges with integration of technology in CBC. It was also found out that competence-based curriculum brings benefits to education as it's tailored to meet individual student's needs. It was established that teachers' attitude toward CBC affect the implementation of the competency-based curriculum in public junior secondary school.

5.6 Suggestion for Further Research

The study focused on assess the level of teacher preparedness for effective implementation of the Competency-Based Curriculum (CBC) in public junior secondary schools in Makindu Sub-County. Thus, studies in other levels can be conducted like the primary schools, senior secondary schools and universities.

This study can also be replicated in other sub-counties, counties in Kenya. Apart from teachers, other studies can be carried out on other stakeholders like students, parents to find out their level of preparedness.

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APPENDICES APPENDIX I: A Questionnaire for Teachers in Junior Secondary Schools

This questionnaire seeks information on teacher preparedness for the implementation of CBC. You are kindly requested to honestly fill out the questionnaire by selecting the appropriate answer for each question.

Please do not provide any personal details that could identify you. The information collected through this questionnaire will remain confidential and will only be used for this study.

Please indicate your response to each question by marking the correct choice using a tick (✓).

SECTION A: Demographic information

1. Kindly indicate your gender Male Female

2. What is your age bracket? 20-30 31- 40 41-50 above 50

3. What is your highest academic qualification? Certificate Diploma Degree Master any other (specify).....

4. Which grade are you currently teaching? 7 8 9

5. For how many years have you been a teacher? Below 5 5-20 above 20 years

6. How long have you taught at the junior secondary school? Below 1 year [] above 1 year []

SECTION B: Teacher's Attitude of Competency-Based Curriculum

Use a Tick to indicate your attitude of CBC

	Strongly agree	agree	disagree	Strongly disagree	neutral
	agree			disagree	
Competency-Based Curriculum (CBC) brings benefits to the society.					
CBC is tailored to meet individual student Needs					
CBC promotes critical thinking and problem-solving skills among the learners.					
CBC Promotes higher student engagement and motivation.					
CBC is well-aligned with real-world skills Benefits of a Competency-Based Curriculum (CBC) outweigh any potential challenges?					

Key: strongly agree = 5, agree = 4, neutral = 3 disagree = 2, strongly disagree = 1

Based on your knowledge and experience, would you recommend the adoption of a Competency- Based Curriculum (CBC) to other educators?

Yes I would recommend CBC No, I would not recommend CBC It depends on the context

SECTION C: Assessment of learners on Competency Based Curriculum

1. Are you familiar with the concept of assessment within a Competency-Based Curriculum (CBC)? Yes NO

2. How would you rate your understanding of the assessment methods used in a Competency-Based Curriculum (CBC)?

Very knowledgeable moderately knowledgeable slightly knowledgeable Not knowledgeable at all

3. The assessment methods used in a Competency-Based Curriculum (CBC) effectively measure students' skills and competencies

Strongly agree Agree Neutral Disagree strongly disagree

4. How effective do you think the assessment methods used in a Competency-Based Curriculum (CBC) are in identifying students' strengths and areas for improvement?

Very effective moderately effective somewhat effective Not effective at all

5. How often do you think assessment methods within a Competency-Based Curriculum (CBC) should be reviewed and updated to remain relevant and accurate?

Annually every five years every ten years as need be

SECTION D: Information Communication Technology skills

1. Are you familiar with the integration of technology in a Competency-Based Curriculum (CBC)? Yes No

2. How would you rate your understanding of the role of technology in a Competency-Based Curriculum (CBC)?

Very knowledgeable Moderately Knowledgeable slightly knowledgeable Not knowledgeable at all

3. In your opinion, to what extent does technology enhance the implementation of a Competency- Based Curriculum (CBC)?

Significantly enhances moderately enhances has a minor impact Does not enhance Not sure

4. Please indicate by use of a tick the extent to which each of the following aspects of technology affects curriculum implementation:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Technology enables the collection and analysis of data to track student progress and adapt instruction					
Technology provides access to a wide range of Digital resources and learning materials.					
Technology facilitates remote and flexible learning Opportunities.					
Technology can adapt content and pacing based on Individual student performance.					
Technology allows for tailored learning experiences Based on students' competencies and needs.					

Key: strongly agree = 5, agree = 4, neutral =3 disagree = 2, strongly disagree = 1

5. In your experience, how does technology impact student engagement and motivation in a Competency-Based Curriculum (CBC)?

Increases engagement and motivation has a moderate impact on engagement has minimal impact on engagement Decreases engagement and motivation Not sure

SECTION E: Instructional Resources

1. Are there enough instructional resources Yes No

2. Instructional resources can significantly impact the effectiveness of CBC.

Strongly agree Agree Neutral Disagree strongly disagree

3. Tick in the relevant columns

	Significant challenge	Moderate challenge	Minor challenge	Not challenge	Not sure
Designing assessment					
Conducting assessment					
Fair grading					

Individualized assessment					
Access to assessment materials					
Assessment reflects true learners' position					
There is enough time for assessment					
Learners are aware of the assessment methods					

Key: Significant challenge = 1, moderate challenge = 2, not sure = 3 minor challenge = 4, No challenge = 5

Thank you for your responses

APPENDIX II: INTERVIEW SCHEDULE FOR HEAD TEACHERS AND CURRICULUM SUPPORT OFFICERS

1. How do you provide support and professional development opportunities for teachers who are facing challenges in implementing the CBC?

.....

2. What mechanisms are in place to monitor and evaluate the effective implementation of the in-classrooms?

.....

3. How do you gather feedback from teachers, students, and parents to continuously improve the implementation?

.....

4. What strategies or training do you provide to help teachers adapt instruction to cater to diverse learning needs in a CBC setting?

.....

5. How do teachers integrate life skills and practical applications into their subject instruction under the CBC?

.....

6. To what extent do teachers collaborate and share best practices for successful CBC implementation?

.....

7. How do you involve parents in understanding and supporting the CBC learning process of their children?

.....

8. Are there sufficient learning resources available to support CBC instruction, and how do you ensure their relevance and quality?

.....

9. What efforts are made to provide continuous professional development opportunities for teachers to stay updated on CBC methodologies?

.....

10. How do you ensure the integrity and consistency of assessments across different teachers and classrooms?

.....

11. Could you share examples of how teachers encourage student participation and active engagement in CBC-aligned lessons?

.....

12. How do data collected from assessments and student performance inform instructional decisions and curriculum adjustments?

.....

13. How do you foster an environment where teachers can innovate and bring creative teaching approaches to CBC classrooms?

.....

BOARD OF POSTGRADUATE STUDIES

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Date: Wednesday, March 13, 2024

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: MAKOKHA ROBERT FELIX REG NO: 22/04368

It is my distinct pleasure to introduce to you Makokha Robert Felix who is a student in our institution pursuing a Master Of Education - (Administration, Curriculum and Policy) in the School of Education Arts and Social Sciences.

Robert is conducting a research on a topic titled : *«Assessment of the Teacher Preparedness on implementation of the Competency Based Curriculum in public junior secondary schools in Makindu Sub County, Makueni County, Kenya.»* which is part of the requirements of the program he is pursuing. The research as well as the data procured thereof shall be used for academic purposes only.

Any assistance accorded to him is highly appreciated. 9 -

In case of further inquiry, do not hesitate to contact the undersigned.

Yours faithfully,



DR. JACKSON NDOLO
DIRECTOR, BOARD OF POST GRADUATE STUDIES



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This is to Certify that Mr.. Robert Felix Makokha of KCA University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Makeni on the topic: ASSESMENT OF THE TEACHER PREPAREDNESS ON IMPLIMENTATION OF THE COMPETENCY BASED CURRICULUM IN PUBLIC JUNIOR SECONDARY SCHOOLS for the period ending : 20/March/2025.

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