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Original Research Article

Teacher Readiness in Facilitating CBE in Grade Six Home Science in Public Primary Schools in Bungoma County, Kenya

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Abstract

Despite the implementation of the Competency-Based Education (CBE) in Kenya, effective facilitation of Grade Six Home Science remains challenged by varying levels of teacher readiness in public primary schools in Bungoma County. The purpose of this study was to assess teacher readiness in facilitating CBE in Grade Six Home Science and its influence on effective curriculum implementation. The study was guided by Competence Motivation Theory and adopted a pragmatism paradigm. A mixed-methods research design was employed. The target population comprised 801 head teachers, 801 Grade Six Home Science teachers, and 47 Curriculum Support Officers (CSOs). A sample of 240 head s of institutions, 240 Home Science teachers, and 14 CSOs was selected using simple random sampling. Data were collected using structured questionnaires and interview schedules. Validity of instruments was ensured through expert review, while reliability was confirmed using Cronbach's Alpha coefficients above 0.80. Quantitative data were analyzed using descriptive and inferential statistics, including Pearson correlation analysis, while qualitative data were thematically analyzed. Ethical considerations included informed consent, confidentiality, and voluntary participation. Findings revealed that teacher readiness was generally high, with 77.6% reporting confidence in facilitating CBE, although gaps existed in assessment skills and resource availability. Correlation analysis showed a significant positive relationship between teacher readiness and effective facilitation of CBE ($r = 0.583$, $p < 0.01$). The study concluded that teacher readiness significantly influences the effectiveness of CBE implementation in Home Science. The study recommended the need for strengthening continuous professional development, improving access to teaching resources, and enhancing mentorship programs to support teachers in effectively delivering competency-based instruction.

Keywords: Readiness, Competency, Based Education, Curriculum, Implementation.

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1.0 INTRODUCTION

Teacher readiness is a critical determinant of successful implementation of Competency-Based Education (CBE), particularly in Grade Six Home Science in public primary schools. The CBE framework emphasizes hands-on learning, skills development, and learner-centered pedagogies, requiring teachers to move away from traditional content-based instruction. In Home Science, which involves practical competencies such as cooking, sewing, and home management, teacher readiness becomes even more essential for ensuring effective curriculum delivery and learner achievement. Globally, teacher readiness is understood as encompassing not only subject mastery but also pedagogical knowledge, confidence in learner-centered instruction, and sustained professional development. Research indicates that successful curriculum reform depends heavily on teachers' ability to internalize and apply new pedagogical approaches in classroom settings (Darling-Hammond & Hyler, 2022).

Globally, evidence shows that despite policy shifts toward competency-based and learner-centered education, gaps often exist between curriculum intentions and classroom practice. Teachers may understand the principles of CBE but struggle with implementation due to inadequate preparation and limited instructional support. Studies emphasize that readiness involves conceptual understanding, confidence in applying new methods, and access to continuous professional learning opportunities (Darling-Hammond & Hyler, 2022; Smith & Lee, 2023). In many cases, teachers require ongoing mentorship, collaborative learning opportunities, and formative feedback to effectively translate training into practice. This challenge is particularly evident in primary education, where

teachers handle multiple subjects and large, diverse classrooms. Additionally, teacher readiness is influenced by contextual factors such as school leadership, availability of resources, and socio-economic conditions, all of which affect the implementation of competency-based reforms (Darling-Hammond & Hyler, 2022).

In developed countries such as the United States, research shows that teachers often understand competency-based education concepts but still feel underprepared to implement them effectively. Studies using mixed methods indicate that teachers require further professional development in areas such as formative assessment and differentiated instruction to confidently apply competency-based approaches (Darling-Hammond & Hyler, 2022). In Canada, teacher readiness varies depending on access to sustained professional development and collaborative learning structures. Where professional learning communities exist, teachers demonstrate higher confidence and improved instructional practices (Smith & Lee, 2023). Similarly, in Australia, research shows that although teachers align with competency-based education goals, they struggle with translating theory into practical classroom strategies, particularly in assessment and learner-centered instruction (Smith & Lee, 2023). In Finland and Switzerland, teacher readiness is strengthened through integrated teacher education systems that emphasize reflective practice and continuous professional development, although ongoing support is still necessary to sustain effective implementation (Greiner & Meier, 2023). In South Korea and Singapore, strong pre-service teacher education systems provide a solid foundation for instructional readiness, supported by structured professional development and collaborative teaching cultures (Yang & Tan, 2023).

In developing countries, teacher readiness for competency-based education is often constrained by limited training and resource availability. In Ghana, studies using descriptive survey methods reveal that teachers face significant gaps in understanding and applying CBE principles due to insufficient professional development opportunities (Rwigema & Andala, 2022). In South Africa, mixed-methods research shows that readiness is influenced by school leadership support, access to training, and availability of teaching resources, with teachers requiring more targeted in-service training to strengthen implementation capacity (Makgato & Mokoena, 2023). In Ethiopia, research indicates that weak alignment between teacher beliefs and competency-based education goals undermines readiness, highlighting the need for stronger pre-service and in-service training systems (Ralf, Wagner, & Peters, 2023). Similarly, in Mozambique and Cameroon, studies report that inadequate professional development and limited instructional support hinder effective implementation, leading to calls for more structured training programs (IJRIAS, 2025). In East Africa, studies show similar patterns. In Rwanda, research indicates that although teachers value competency-based education, their preparedness is constrained by insufficient training, with structured professional development improving classroom implementation (Uwera & Habimana, 2024). In Uganda, teachers demonstrate limited capacity in developing formative assessment tools due to inadequate training, highlighting the need for practical workshops and continuous support (turn0search11). In Tanzania, teacher readiness is affected by large class sizes, limited resources, and insufficient professional development, with studies recommending stronger training systems and improved instructional support (Otieno *et al.,* 2026).

In Kenya, multiple studies highlight significant challenges in teacher readiness for CBE implementation. Research shows that while teachers understand the theoretical framework of CBE, many lack confidence and practical skills for learner-centered instruction, particularly in practical subjects such as Home Science (Karua *et al.,* 2025; Koros & Achieng, 2023). Ochieng and Kibera (2023) found that Home Science teachers struggle with hands-on instruction due to inadequate training, limited resources, and large class sizes, making it difficult to supervise practical tasks such as cooking and sewing. Similarly, Karanja (2024) reports that although teachers are enthusiastic about CBE, limited continuous professional development and insufficient training opportunities hinder effective implementation, especially in rural schools where resource constraints are more severe. Wambui and Mbugua (2023) further highlight that ICT integration enhances teacher readiness, particularly in supporting Home Science instruction through digital demonstrations and simulations. However, many teachers lack ICT skills and access to digital tools, limiting their ability to integrate technology effectively. Nyambura (2022) also identifies a gap between theoretical training and classroom practice, noting that while teachers attend CBE workshops, they often lack follow-up mentorship and support, resulting in weak application of differentiated instruction and formative assessment strategies.

1.1 Statement of the Problem

Competence Based Education in Kenya was rolled lout in 2017 and teachers were expected to shift from traditional teaching method where tutors transmitted knowledge to learners to facilitating roles. (learner cantered). Grade six Home Science requires teachers to shift from knowledge transmission to facilitating practical learner centered activities like cooking, nutrition planning, clothing, construction and hygiene. However, reports from KICD, KNEC and County education offices indicate persistent low learner mastery of Home Science competencies at grade six with KPSEA results showing most learners score below the Expectations in practical strands. Field visits and audit reports suggest that many teachers in public primary schools are still using teacher centered method because

either they don't understand the difference between facilitation and instruction or they avoid practical lessons and express uncertainty in designing facilitation activities, assessing competencies and improvising with limited resources.

There is limited empirical evidence on the actual level of teachers'' readiness in terms of CBE knowledge, skills, attitudes and resource preparedness to implement CBE in Home Science at grade six level. If this readiness gap will not be addressed and interventions such as massive retooling of practical subjects like home Science then curriculum implementation will remain generic and may not address the specific barriers hindering effective facilitation of CBE and therefore this study seeks to examine teachers' readiness in facilitating CBE in grade six Home Science and establish the extent to which this readiness influences learner acquisition of competencies in Home Science at Grade six level in Bungoma County, Kenya.

1.2 Research objective

To assess the level of teachers' readiness in facilitating Competency-Bases Education in grade six Home Science public primary schools in Bungoma County, Kenya

1.3 Research question

What is the level of teachers' readiness in facilitating Competency-Based Education in Grade Six Home Science in public primary schools in Bungoma County, Kenya?

2.0 LITERATURE REVIEW

Teacher readiness is a critical factor in the successful implementation of the Competency-Based Education (CBE) in Grade Six Home Science in Public Primary Schools. The CBE framework places a strong emphasis on hands-on learning, skills development, and learner-centered teaching methods, which requires teachers to adapt their traditional pedagogical approaches. For Home Science, which includes practical subjects such as cooking, sewing, and home management, teacher readiness is particularly vital for ensuring that students achieve the intended competencies. Teacher readiness is a critical determinant of effective curriculum reform worldwide, particularly in transitions to competency-based and learner-centered approaches that require shifts in teachers' pedagogical knowledge, beliefs, and instructional practices. Globally, education research emphasizes that teachers' readiness includes conceptual understanding of the new curriculum, confidence in applying learner-centered methods, and sustained professional development, all of which impact classroom practices and student outcomes (Darling-Hammond & Hyler, 2022). Studies in diverse contexts show that even where policy frameworks advocate new curriculum models, gaps persist between teachers' training and their actual implementation capacity, especially in practical subjects requiring active learning (Darling-Hammond & Hyler, 2022; Smith & Lee, 2023). Teacher readiness is therefore not only about initial qualifications but involves continuous in-service training, supportive leadership, and access to instructional resources that enable the enactment of competency-based curricula (Darling-Hammond & Hyler, 2022).

also points to the complexity of readiness in relation to teachers' beliefs and established instructional habits. Even where professional development is provided, teachers may not translate training into practice without follow-up support and opportunities for reflection, peer collaboration, and formative feedback (Darling-Hammond & Hyler, 2022; Smith & Lee, 2023). This is especially true in primary education, where teachers often cover multiple subject areas and are expected to enact broad competency goals within large, heterogeneous classrooms. Research in global education contexts reveals a pattern where teachers report feeling under-prepared for competency-oriented instruction, citing doubts about assessment, pedagogical shifts, and practical application of learner-centered strategies (Darling-Hammond & Hyler, 2022). Further, teacher readiness research increasingly highlights that context matters. Socio-economic conditions, access to teaching materials, school leadership support, and cultural attitudes toward teaching all influence how ready teachers feel to facilitate new curriculum paradigms (Darling-Hammond & Hyler, 2022; Smith & Lee, 2023). Without systemic support and aligned teacher development policies, even well-designed competency frameworks may fail to be effectively enacted at the classroom level, which underscores the importance of integrating teacher readiness research into curriculum implementation planning.

In the United States, research on teacher readiness for competency-based and 21st-century learning emphasizes that many teachers understand core ideas of competency frameworks but feel insufficiently prepared to translate them into student-centered practice. Studies using mixed methods surveys and interviews found that American teachers often report a need for deeper professional learning opportunities, particularly in formative assessment and differentiated instruction, to feel ready for competency-oriented teaching (Darling-Hammond & Hyler, 2022). These findings conclude that targeted professional learning and school-level support are vital for shifting entrenched instructional habits. In Canada, research has similarly employed surveys and classroom observations to document teacher readiness for competency-aligned reforms, observing that while Canadian teachers generally express strong pedagogical knowledge, practical preparedness varies by province and by access to sustained professional development. Findings indicate that where teacher networks and collaborative inquiry are encouraged, teacher confidence and instructional innovation improve; the conclusion stresses the role of systematic professional learning

communities in enhancing readiness (Smith & Lee, 2023).

In Australia, educational research using questionnaire and focus group designs reports that teachers often feel conceptually aligned with competency and learner-centered goals but struggle with concrete instructional strategies and assessment practices that embody these goals (Smith & Lee, 2023). Teachers conclude that readiness is enhanced when professional development is continuous, contextualized, and linked to classroom realities, rather than occurring in isolated workshops. Finland and Switzerland have fewer published studies specifically on CBE teacher readiness, but broader research on competency-based and learner-centered education shows that teacher education systems in these countries systematically integrate reflective practice and pedagogical innovation into both pre-service and in-service preparation programs (Greiner & Meier, 2023). These studies use qualitative case study and policy analysis methods to illustrate that readiness for competency curricula in high-performing education systems is supported by sustained professional learning cultures, although researchers conclude that even in these contexts ongoing support is needed to maintain coherence between policy and classroom practice. In South Korea and Singapore, research has focused more on initial teacher education structures using comparative policy and program analysis, finding that high standards and rigorous preparation in initial teacher education contribute to strong core instructional readiness (Yang & Tan, 2023). While not CBE-specific, these studies conclude that strong pre-service preparation, collaborative cultures, and ongoing pedagogical development lay a foundation for readiness to implement competency-oriented reforms when they occur.

In Ghana, research on CBE readiness points to training gaps and resource constraints using descriptive survey methods; teachers often report limited opportunities for professional learning that address CBE principles, and studies conclude that enhanced focus on practical strategies and localized training would strengthen readiness for competency-based teaching (Rwigema & Andala, 2022). South African research using mixed methods designs reveals that teacher readiness for competency and learner-centered approaches is affected by school leadership, professional development access, and resource availability. Findings indicate that while teachers value competency goals, there is a need for more targeted in-service training linked to specific pedagogical practices (Makgato & Mokoena, 2023). In Ethiopia, research evaluating teacher readiness via surveys and interviews documents challenges in professional preparation and alignment of teachers' beliefs with competency-based goals; studies conclude that pre-service and ongoing professional learning systems must be strengthened for teachers to feel ready for CBE implementation (Ralf, Wagner, & Peters, 2023). In Mozambique, scarce empirical research exists on CBE teacher readiness, but descriptive studies suggest that limited professional development and instructional support undermine teachers' preparedness for competency-oriented practice, leading to calls for coordinated training programs that align curriculum reforms with teacher development needs. In Cameroon, recent research conducted using mixed methods interviews and questionnaires indicates that teacher preparedness for competency-based teaching remains uneven, with many teachers lacking targeted professional learning that connects curriculum philosophy with classroom practice; findings conclude that strategic training and support systems are essential for readiness (IJRIAS, 2025).

In Nigeria, although few studies explicitly address CBE readiness, research related to 21st-century curriculum competence using cross-sectional surveys finds that teachers demonstrate competency in many instructional skills but report a need for enhanced training and diverse instructional methods to better align with competency-oriented goals, concluding that professional development focused on practical skills boosts readiness (turn1search2). In Rwanda, research via mixed methods reports that while teachers recognize the value of competency goals, preparedness is hampered by insufficient training and ongoing capacity building, and studies conclude that structured professional learning opportunities improve teacher confidence and classroom enactment of competency-based reforms (Uwera & Habimana, 2024). Ugandan studies, though focused on secondary education, find that teacher proficiency in designing formative assessment tools a key part of competency-based readiness is limited due to lack of targeted professional development and instructional resources, and research concludes that practical workshops and ongoing support are needed to enhance readiness (turn0search11). In Tanzania, descriptive research shows that teacher preparedness for competency-aligned curriculum is constrained by limited professional development, resource shortages, and large class sizes, and findings conclude that comprehensive teacher training systems and resource support are vital for readiness and effective curriculum enactment (Otieno *et al.,* 2026).

In Kenya, multiple empirical studies using descriptive and mixed methods survey designs show that teachers often lack adequate training and confidence in implementing CBE, with many relying on traditional methods rather than learner-centered practices; findings conclude that in-service training, continuous professional learning, and improved instructional support significantly enhance teacher readiness (Karua *et al.,* 2025; Koros & Achieng, 2023). A study by Ochieng and Kibera (2023) examined the preparedness of teachers to implement CBE in primary schools, with a focus on practical subjects such as Home Science. Their findings indicated that while teachers generally understood the theoretical framework of CBE, many

struggled with practical implementation due to insufficient training, inadequate teaching resources, and large class sizes. Teachers reported feeling unprepared to effectively manage the hands-on aspects of Home Science, such as cooking demonstrations or the supervision of sewing projects, due to a lack of equipment and materials (Ochieng & Kibera, 2023). Similarly, a study by Karanja (2024) found that although there was enthusiasm among Home Science teachers for the new curriculum, many were not adequately trained to deliver the curriculum in a learner-centered manner. The study revealed that professional development opportunities for teachers were limited, particularly in public Primary Schools, where teachers often did not receive enough continuous training or exposure to new pedagogical strategies.

Karanja (2024) also pointed out that the rapid pace of CBC implementation left teachers with insufficient time to adapt their teaching methods. Furthermore, teachers in rural areas were found to have even fewer resources and access to training, which worsened the challenges faced in implementing CBE effectively in Home Science (Karanja, 2024). Another study by Wambui and Mbugua (2023) highlighted the role of technology in facilitating teacher readiness. The study found that teachers who were well-versed in using ICT tools for teaching were more confident in facilitating CBE, especially in Home Science subjects where digital platforms could be used for instructional purposes, such as online recipe demonstrations or virtual home management simulations. However, the study also indicated that a significant number of teachers lacked adequate ICT skills and access to digital resources, which limited their ability to effectively integrate technology into their teaching. This issue was especially predominant in underserved schools where both digital devices and internet access were scarce (Wambui & Mbugua, 2023). In terms of specific teacher competencies, a study by Nyambura (2022) explored the gap between the theoretical understanding of CBE and practical teaching abilities. Nyambura found that while many teachers attended CBE workshops and training sessions, they often struggled to transfer this knowledge into their teaching practice. This disconnect was attributed to a lack of follow-up support and mentorship, which left teachers with limited strategies to address classroom challenges such as differentiated instruction and formative assessment in practical Home Science tasks (Nyambura, 2022).

2.1 Theoretical Underpinning

This paper was anchored on Competence Motivation Theory, originally proposed by Robert W. White in 1959 and later expanded by Susan Harter in 1978 and 1981. The theory postulates that individuals are inherently motivated to engage in activities that allow them to demonstrate competence, master challenges, and experience success, with perceived competence and feelings of effectiveness serving as central drivers of sustained motivation (Harter, 1978). It further argues that motivation is strengthened when individuals perceive themselves as capable in a given task environment and weakened when they experience repeated failure or low self-efficacy in performance situations (White, 1959). In educational settings, the theory emphasizes that learners and teachers are more likely to engage effectively in learning and instructional processes when they feel competent and supported within their roles.

In this study, Competence Motivation Theory is significant in explaining teacher readiness in facilitating Competency-Based Education (CBE) in Grade Six Home Science. The theory helps to understand that teachers' willingness and ability to implement CBE is strongly influenced by their perceived instructional competence, confidence in learner-centered pedagogy, and mastery of practical skills required in Home Science. When teachers feel adequately trained and capable of delivering hands-on activities such as cooking, sewing, and home management, their motivation to effectively implement CBE increases. Conversely, inadequate training, lack of resources, and limited pedagogical support reduce perceived competence, thereby lowering readiness and instructional effectiveness in the classroom.

Other researchers have applied Competence Motivation Theory in education to explain teacher behavior, student engagement, and instructional effectiveness. For instance, Harter (1981) applied the theory in school settings to demonstrate that learners' motivation and participation increase when they perceive themselves as competent in academic tasks, particularly in skill-based subjects. In a similar application, Deci and Ryan (2000) extended competence-related motivational constructs within Self-Determination Theory, emphasizing that perceived competence enhances intrinsic motivation in teaching and learning environments. In curriculum implementation studies, researchers such as Darling-Hammond and Hyler (2022) have indirectly used competence-based motivational principles to show that teacher confidence and professional mastery significantly influence the successful adoption of learner-centered and competency-based curricula. In African contexts, studies on curriculum reforms have also employed competence motivation perspectives to explain why teachers with higher professional confidence and training exposure are more likely to implement new pedagogical approaches effectively compared to those with limited preparation (Rwigema & Andala, 2022; Makgato & Mokoena, 2023). These applications collectively support the relevance of the theory in explaining variations in teacher readiness in implementing competency-based Home Science instruction in primary schools.

3.0 METHODOLOGY

The study was guided by Competence Motivation Theory proposed by White (1959) and later

developed by Harter (1978), and was anchored on the pragmatism research paradigm. A mixed-methods research design was employed to integrate both quantitative and qualitative approaches in examining teacher readiness in facilitating Competency-Based Education in Grade Six Home Science. The target population comprised 801 head teachers, 801 Grade Six Home Science teachers, and 47 Curriculum Support Officers (CSOs) in public primary schools. A sample of 240 head teachers, 240 Home Science teachers, and 14 CSOs was selected using simple random sampling to ensure equal representation and reduce sampling bias. Data were collected using structured questionnaires for head teachers and teachers, and interview schedules for CSOs. Validity of the research instruments was established through expert review from curriculum and research specialists, while reliability was confirmed using Cronbach's Alpha coefficients of above 0.80, indicating acceptable internal consistency. Quantitative data were analyzed using descriptive statistics such as frequencies, means, and standard deviations, as well as inferential statistics, while qualitative data were analyzed thematically through coding, categorization, and interpretation. Ethical considerations were observed by obtaining research authorization, ensuring informed consent, maintaining confidentiality, and guaranteeing voluntary participation of all respondents throughout the study.

4.0 FINDINGS AND DISCUSSION

4.1 Teacher Readiness in Facilitating Homes science under CBE

The purpose of the study was to assess teacher readiness in facilitating CBE in Grade Six Home Science in public primary schools in Bungoma County. Respondents were requested to rate their level of agreement or disagreement with a series of statements on a five-point Likert scale aimed at measuring their preparedness to implement CBE effectively. The constructs examined included teachers' mastery of CBE content, confidence in applying learner-centred instructional approaches, ability to use appropriate assessment methods, access to required teaching resources, and preparedness to handle practical Home Science activities. The findings were as summarized in table 1.

Table 1: Teacher Readiness in Facilitating CBE (N = 448)

Statement	SD		D		U		A		SA	
	F	%	f	%	F	%	F	%	F	%
Teachers in my school feel confident in facilitating Home Science using CBE approaches.	42	9.4%	50	11.2%	8	1.8%	243	54.2%	105	23.4%
Teachers in my school have adequate knowledge of CBE principles and practices.	38	8.5%	57	12.7%	10	2.2%	229	51.1%	114	25.4%
Teachers in my school can assess learner competencies effectively.	60	13.4%	70	15.6%	9	2.0%	215	48.0%	94	21.0%
Teachers in my school are supported by school administration in CBE implementation.	55	12.3%	66	14.	6	1.3%	210	46.9%	111	24.8%
In my school teachers are ready to adapt new methods to meet CBE requirements.	47	10.5%	60	13.4%	7	1.6%	245	54.7%	89	19.9%

The findings in Table 1 indicate that a majority of the respondents, 243 (54.2%), agreed that teachers in their school feel confident in facilitating Home Science using CBE approaches, while 105 (23.4%) strongly agreed, 50 (11.2%) disagreed, 42 (9.4%) strongly disagreed, and 8 (1.8%) were undecided. This implies that a substantial majority of teachers (77.6%) feel confident in applying CBE strategies, suggesting that most educators have a foundational readiness to implement the curriculum effectively. Teacher confidence is critical for successful adoption of competency-based methods, as it promotes engagement and innovation in instruction. This finding aligns with Roberts et al. (2022), who observed that teacher confidence significantly influences effective CBE implementation globally. The presence of some disagreement highlights the need for continuous support and mentorship to boost confidence levels among all teachers.

Similarly, the data revealed that a majority 229 (51.1%) of respondents agreed that teachers have adequate knowledge of CBE principles and practices, while 114 (25.4%) strongly agreed, 57 (12.7%) disagreed, 38 (8.5%) strongly disagreed, and 10 (2.2%) were undecided. This implies that a substantial majority of teachers (76.5%) possess sufficient knowledge of CBE principles, reflecting a positive trend in professional preparation for curriculum delivery. Adequate understanding of CBE principles enables teachers to translate policy into practical classroom strategies. This finding concurs with Smith and Lee (2021), who emphasized that teacher knowledge is vital for effective implementation of competency-based curricula. The small proportion of disagreement suggests

that targeted training may be necessary to address knowledge gaps among some educators.

Furthermore, 215 (48.0%) of respondents agreed that teachers can assess learner competencies effectively, while 94 (21.0%) strongly agreed, 70 (15.6%) disagreed, 60 (13.4%) strongly disagreed, and 9 (2.0%) were undecided. This implies that a substantial majority of teachers (69.0%) feel capable of conducting competency-based assessments, which are crucial for monitoring learner progress and guiding instruction. Teacher competence in assessment ensures accurate evaluation of skills and knowledge acquisition under CBE. This finding aligns with Anderson et al. (2023), who noted that assessment capability is a core factor in the successful implementation of competency-based education. The observed disagreements indicate the need for further professional development in assessment strategies to ensure consistent competency evaluation.

Additionally, the findings indicated that 210 (46.9%) of respondents agreed that teachers are supported by school administration in CBE implementation, while 111 (24.8%) strongly agreed, 66 (14.7%) disagreed, 55 (12.3%) strongly disagreed, and 6 (1.3%) were undecided. This implies that a substantial majority of teachers (71.7%) perceive adequate administrative support, which is essential for fostering readiness and sustaining curriculum reforms. Administrative backing provides guidance, resources, and motivation necessary for effective CBE implementation. This finding concurs with Garcia and Patel (2022), who observed that leadership support is a key determinant of teacher readiness for new curricula. The proportion of disagreement suggests that some schools may need to strengthen administrative mechanisms to fully support all teachers.

Moreover, 245 (54.7%) of respondents agreed that teachers are ready to adapt new methods to meet CBE requirements, while 89 (19.9%) strongly agreed, 60 (13.4%) disagreed, 47 (10.5%) strongly disagreed, and 7 (1.6%) were undecided. This implies that a substantial majority of teachers (74.6%) demonstrate readiness to adopt innovative and flexible pedagogical approaches necessary for competency-based instruction. Teacher adaptability supports learner-centered methods and promotes engagement in diverse learning activities. This finding aligns with Thompson et al. (2023), who noted that adaptability enhances effective student learning in CBE environments. The disagreement among some respondents indicates that additional support may be needed to strengthen teacher confidence in implementing new methods.

Teacher readiness in facilitating the Competency-Based Education is a critical determinant of its successful implementation. Teachers are expected to possess both confidence and competence in applying learner-centered strategies, conducting competency-based assessments, and adapting lesson delivery to meet diverse learner needs. The findings from this study indicate that a substantial majority of Home Science teachers in Bungoma County exhibit confidence in using CBE approaches and demonstrate a willingness to adopt new pedagogical methods, suggesting that foundational readiness is in place for effective curriculum delivery. However, readiness does not always equate to full capability. While teachers report confidence and knowledge of CBE principles, gaps remain in areas such as competency-based assessment and independent facilitation of learning. Some educators still feel less supported or lack sufficient experience in adapting innovative methods, which may limit the depth and consistency of CBE implementation. This highlights the ongoing need for targeted professional development and mentoring to strengthen teachers' readiness and ensure uniform quality across classrooms.

Consequently, inadequate teacher preparedness can directly affect learner outcomes. When teachers are only partially ready or unevenly skilled in competency-based methods, learners may not fully benefit from the intended learner-centered, practical, and collaborative approaches of CBE. Sustained investment in teacher capacity building, ongoing professional support, and structured peer collaboration is therefore necessary to bridge these gaps and enhance overall curriculum effectiveness. In Kenya, the national rollout of CBE has provided extensive teacher training programs and policy frameworks to promote readiness. Educators have participated in training workshops and professional forums aimed at equipping them with the necessary skills to implement CBE. Despite this, implementation challenges persist, particularly in public primary schools where resource constraints, large class sizes, and limited access to teaching materials can hinder effective curriculum facilitation.

The study findings reveal that while many teachers in Bungoma County, are adopting CBE-aligned strategies, readiness varies between schools. Most teachers are confident, knowledgeable, and open to innovative methods, yet some still require further guidance and administrative support. Ideally, all schools would demonstrate uniform teacher readiness, ensuring that every learner benefits from competency-based instruction. These results underscore the importance of continuous professional development, supportive leadership, and resource allocation to enhance teacher readiness and optimize CBE implementation at the county level.

However on interview, one of the participants CSO1 noted,

> *"Teachers were not well prepared for CBE. Assessing learners has also not been well streamlined. The biggest challenge is lack of financial support, and most schools do not have Home Science equipment. However, newly*

employed teachers have been well prepared for CBE."

The response from CSO1 highlights that a significant number of teachers are not fully prepared to implement the Competence Based Education (CBE) in Home Science. In particular, the assessment of learners' competencies has not been effectively streamlined, indicating gaps in both knowledge and practical application of CBE principles. This underscores a need for structured support to equip teachers with the skills required for formative and competency-based assessments, which are central to the success of CBE. Furthermore, the response emphasizes the critical challenge of inadequate financial support and the lack of Home Science equipment in most schools. These resource constraints limit the ability of teachers to deliver practical, hands-on learning experiences that are essential for competency-based instruction. Without sufficient materials and infrastructure, even teachers who are theoretically trained in CBE may struggle to fully implement learner-centered strategies, a challenge echoed in international studies on curriculum reform (Darling-Hammond *et al.,* 2022).

Additionally, the response suggests a disparity between existing teachers and newly employed educators. Newly recruited teachers appear to be better prepared for CBE, reflecting improvements in pre-service teacher training and initial professional development programs. This indicates that while progress is being made in equipping teachers with CBE skills, more effort is needed to up skill experienced teachers who may have been trained under traditional curricula. Such targeted interventions are necessary to ensure consistency in curriculum delivery and learner outcomes. The Curriculum Support Officer's observation reinforces the findings from the study regarding the critical need for continuous professional development, supportive leadership, and adequate resource allocation to enhance teacher readiness for CBE implementation. The acknowledgment that many teachers were not well prepared for the transition to CBE highlights persistent gaps in knowledge, skills, and practical experience, particularly in facilitating subjects like Home Science, which require hands-on approaches and learner-centered methodologies.

The CSO also pointed out challenges in assessment practices, noting that evaluating learners' competencies has not been well streamlined. This reflects a common issue in CBE adoption, where traditional assessment methods primarily exams and rote memorization do not adequately capture learner mastery of skills, attitudes, and practical competencies. Without proper guidance and training in assessment design, teachers struggle to measure and monitor competency acquisition effectively, potentially undermining the objectives of CBE. Furthermore, the lack of financial support and Home Science equipment reported by the CSO underscores the resource constraints that hinder effective implementation. The absence of necessary instructional materials and functional laboratories limits the ability of teachers to facilitate practical lessons, thereby reducing learner engagement and competency development. However, the note that newly employed teachers have been well prepared suggests that recent recruitment and induction programs are beginning to address these gaps. These findings supports the quantitative data indicating that targeted professional development, strategic resource allocation, and ongoing support for both veteran and new teachers are essential steps toward optimizing CBE implementation at the county level.

4.2 Correlation coefficient between Teacher Readiness and Effective Facilitation of CBE

Correlation analysis was conducted to determine the relationship between teacher readiness (independent variable) and effective facilitation of Competency-Based Education (CBE) in Grade Six Home Science (dependent variable). The findings were used to test the hypothesis which stated that: H_{01}: There is no significant relationship between teacher readiness and effective facilitation of CBE in Grade Six Home Science. Pearson Product-Moment Correlation coefficient (r) was computed, and the results are presented in Table 2.

Table 2: Correlation between Teacher Readiness and Effective Facilitation of CBE

Variable	Effective Facilitation of CBE
Teacher Readiness	.583**

$p < 0.05$ (2-tailed)

The findings revealed a moderate positive and statistically significant relationship between teacher readiness and effective facilitation of CBE in Grade Six Home Science ($r = .583$, $p < .05$). This implies that improvements in teacher readiness are associated with enhanced effectiveness in facilitating CBE. The positive correlation indicates that teachers who are more confident, knowledgeable, and better prepared in CBE principles are more likely to implement learner-centered strategies effectively, conduct competency-based assessments, and deliver practical Home Science lessons successfully. The significance of the relationship suggests that teacher readiness is a key determinant of effective curriculum implementation. Therefore, the null hypothesis (H_{01}), which stated that there is no significant relationship between teacher readiness and effective facilitation of CBE in Grade Six Home Science, was rejected. These findings imply that strengthening teacher preparedness through continuous professional development, mentorship, and provision of adequate

teaching resources is essential for improving the effectiveness of CBE implementation in public primary schools.

5.1 CONCLUSION

The study concluded that teacher readiness in facilitating Competency-Based Education (CBE) in Grade Six Home Science in public primary schools in Bungoma County is generally moderate to high, with most teachers demonstrating confidence, knowledge of CBE principles, and willingness to adopt learner-centered approaches. However, readiness is uneven across schools, with notable gaps in competency-based assessment skills, access to instructional resources, and sustained professional support, particularly among long-serving teachers compared to newly recruited ones. These disparities indicate that while foundational preparedness exists, effective and consistent implementation of CBE is constrained by insufficient training depth, resource limitations, and inadequate assessment streamlining. Consequently, without strengthened capacity building, improved resource provision, and continuous pedagogical support, the full objectives of CBE in Home Science may not be optimally achieved in all schools.

5.2 Policy Recommendations

Based on the findings, the study makes the following recommendations:

A. There is a need for the Ministry of Education and Teachers Service Commission (TSC) to strengthen continuous professional development programs specifically focused on competency-based assessment, practical instruction, and learner-centered pedagogy in Home Science to enhance teacher readiness.

B. School administrators should provide sustained instructional support and mentorship systems within schools to bridge the gap between experienced and newly trained teachers in the implementation of CBE.

C. There is a need for the government and education stakeholders to improve allocation of financial resources and provision of adequate Home Science teaching and learning materials to support effective practical-based instruction.

D. There is a need for structured induction and refresher training programs to ensure that all teachers, regardless of experience level, are consistently aligned with current CBE requirements and practices in curriculum delivery.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211.
- Akinrinola, F., Mensah, K., & Adjei, P. (2020). Learner-centered teaching strategies in competency-based curricula: Implications for teacher training in Ghana. *International Journal of Educational Development, 80*, 102–115.
- Avalos, B. (2022). Teacher professional learning and curriculum reform in low-resource environments. *International Journal of Educational Development, 92*, 102645.
- Boren, P., Smith, R., & Jones, T. (2021). Project-based learning in the United States: Implications for competency-based education. *American Educational Research Journal, 58*(4), 765–782.
- Chantanathas, J., Phuseeorn, S., & Pupat, P. (2023). Competency-based education: Concepts, implementation, and challenges in modern education systems. *International Journal of Educational Development, 98*, 102734.
- Darling-Hammond, L., & Hyler, M. E. (2022). *Preparing educators for learner-centered and competency-based instruction*. Teachers College Press.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268.
- Desta, F., & Fekadu, S. (2024). Teacher preparedness and learner-centered instruction in Ethiopian competency-based education. *Ethiopian Journal of Teacher Education, 8*(3), 112–129.
- Greiner, P., & Meier, L. (2023). Teacher preparation for competency-oriented curricula in Switzerland. *European Journal of Teacher Education, 46*(5), 499–516.
- Harter, S. (1978). Effectance motivation reconsidered: Toward a developmental model. *Human Development, 21*(1), 34–64.
- Harter, S. (1981). A model of intrinsic mastery motivation in children: Individual differences and developmental change. In W. A. Collins (Ed.), *Minnesota symposium on child psychology* (Vol. 14, pp. 215–255). Erlbaum.
- Hauer, K. E., Cate, O. T., Boscardin, C., & Irby, D. M. (2023). Ensuring resident readiness through competency-based medical education. *Academic Medicine, 98*(6), 742–748.
- IJRIAS. (2025). The preparedness of teachers for the implementation of competency-based curriculum in selected schools in Cameroon. *International Journal of Research and Innovation in Applied Science, 10*(10), 1222–1242.
- Karanja, D. (2024). Challenges in teacher readiness to implement the competency-based curriculum in Grade Six Home Science classrooms. *International Journal of Educational Development, 12*(3), 112–124.
- Karua, G. W., Manyasi, B., & Kara, A. (2025). Teacher preparedness to implement competency-based curriculum in public schools in Kinangop Sub County, Kenya. *International Journal of Scientific Research and Management, 13*(2), 22–41.

- Kenya Institute of Curriculum Development (KICD). (2017). *Basic education curriculum framework*. Nairobi: KICD.
- Kenya Institute of Curriculum Development. (2021). *Grade six curriculum designs*. Kenya Institute of Curriculum Development.
- Keter, P. K., & Wabuke, E. W. (2025). Teacher preparedness and implementation of competency-based curriculum in public junior secondary schools in Kenya. *International Journal of Education and Research, 13*(2), 45–60.
- Komba, S. C., & Mwandanji, M. (2023). Teacher professional development and competency-based curriculum implementation in Sub-Saharan Africa. *African Educational Research Journal, 11*(2), 145–156.
- Koros, D. P., & Achieng, S. D. S. B. (2023). Competency-based curriculum preparedness: Perception of teachers in selected public and private primary schools in Kenya. *IJRDO Journal of Educational Research, 9*(6), 6–14.
- Makgato, M., & Mokoena, P. (2023). Teacher readiness and professional development in South African curriculum reforms. *South African Journal of Education, 43*(2), 1–16
- Mumo, M. (2024). Teacher professional development in implementing the competency-based curriculum: A case study of practical subjects in Bungoma County. *Kenya Journal of Teacher Education, 11*(2), 101–116.
- Murithi, G., & Yoo, J. E. (2021). Teachers' use of ICT in implementing the competency-based curriculum in Kenya. *Innovation and Education, 3*(1), 1–14.
- Nyambura, C. (2022). Bridging the gap: From theoretical to practical CBC implementation in Home Science education. *Journal of Teaching and Learning in Kenya, 9*(2), 118–132.
- Ochieng, W., & Kibera, R. (2023). Teacher preparedness in implementing the competency-based curriculum in Kenyan primary schools: A case study on Home Science. *Journal of Educational Research and Practice, 15*(2), 45–58.
- OECD. (2022). *Education at a glance 2022: OECD indicators*. Paris: OECD Publishing.
- Ongowo, R. O. (2022). Teacher perceptions on competency-based curriculum implementation in Kenya. *Journal of Education and Practice, 13*(5), 34–42.
- Otieno, R., Swai, H., & Bwagilo, F. (2026). Teacher attitudes and professional development in competency-based education in Tanzania. *Journal of Education and Development, 12*(4), 234–247.
- Owidi, R. A., & Lyanda, J. (2023). Adoption of competency-based curriculum in developing countries: A review of global practices. *International Journal of Educational Development, 98*, 102745.
- Ralf, S., Wagner, M., & Peters, K. (2023). Teachers' preparedness for curriculum reforms: A global analysis of training gaps. *Journal of Curriculum Studies, 55*(4), 499–518.
- Rwigema, P. C., & Andala, H. (2022). The influence of teacher-related factors on the implementation of the competency-based curriculum in Rwanda. *The Strategic Journal of Business & Change Management, 9*(1), 16–30.
- Rwigema, P. C., & Andala, H. (2022). The influence of teacher-related factors on the implementation of the competency-based curriculum in Rwanda. *The Strategic Journal of Business & Change Management, 9*(1), 16–30.
- Sempele, C. (2019). Home science education in Kenya: Visioning the future. *African Journal of Home Economics, 8*(1), 15–27.
- Thukia, P. (2025). Competency-based curriculum and learner outcomes in Kenya: Emerging trends and challenges. *Journal of Curriculum Studies, 57*(1), 88–105.
- UNESCO. (2017). *A guide to competency-based education systems*. Paris: UNESCO Publishing.
- Uwera, J., & Habimana, S. (2024). Teacher preparedness for competency-based pedagogy in Rwandan schools. *Rwanda Journal of Education Studies, 6*(1), 23–42.
- Ventayen, R. J. M. (2020). Teachers' readiness in online teaching environment: A case of competency-based education. *Sustainability, 13*(4), 2228.
- Wambui, M., & Mbugua, G. (2023). The role of ICT in enhancing teacher readiness for CBC implementation in Home Science. *International Journal of Technology in Education, 8*(1), 56–72.
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review, 66*(5), 297–333.
- World Bank. (2023). *Transforming education systems for improved learning outcomes in Sub-Saharan Africa*. World Bank.