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THE CHALLENGES ENCOUNTERED IN IMPLEMENTING THE COMPETENCY-BASED CURRICULUM WITHIN JUNIOR SECONDARY SCHOOLS IN KENYA

(Research article)

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Abstract

This study investigated challenges faced by teachers in implementing Competency-Based Curriculum (CBC) at the Junior Secondary School (JSS) level in Kenya. Utilizing a mixed-method cross-sectional survey, 940 Junior Secondary School teachers in Nyeri County, Kenya, were randomly selected using random numbers. The study addressed the identification of challenges faced by Junior Secondary School teachers, assessed the prevalence of identified challenges at the junior secondary level in Kenya, and suggested proposals for addressing Competency Based Curriculum implementation challenges. Findings highlighted significant challenges including the lack of administrative support (88.7%), resource deficiencies (85.4%), inadequate access to teaching technologies (85.2%), teacher expertise gaps (87.8%), and challenges in assessing learning outcomes effectively (69.5%). Qualitative insights shed more light on concerns such as resource shortages, teacher welfare issues, curriculum complexities, and geographic disparities. The study's significance lies in advocating for administrative reforms, enhanced teacher support, comprehensive training programs aligned with Competency Based Curriculum standards, and strategic interventions like integrating Junior Secondary School within secondary schools, addressing resource scarcities, and prioritizing comprehensive teacher training to elevate pedagogical practices. These findings underscore the urgent need for collaborative efforts, curriculum revisions, and innovative assessments to ensure the successful implementation of Competency Based Curriculum at the Junior Secondary School level in Kenya, urging future research to explore tailored training efficacy, technology integration, and innovative teaching methodologies to enhance Competency Based Curriculum implementation effectiveness.

Keywords: Competency based curriculum, junior secondary school, JSS Teachers, CBC, CBE

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1. Introduction

1.1. Background to the problem

The concept of Competency-Based Curriculum (CBC) encompasses a versatile educational framework that lacks a universally agreed-upon definition, creating challenges in establishing standardized norms and theoretical foundations (Le, Wolfe, & Steinberg, 2014). Various scholarly perspectives converge to frame Competency Based Curriculum within educational discourse. For instance, Spady (1977) defines Competency Based Curriculum as a performance-oriented strategy focusing on demonstrating explicit learning outcomes vital for adept functioning across diverse life contexts. This approach underscores the essentiality of practical application and mastery of skills essential for real-life scenarios. Riesman (1979) complements this perspective by positioning Competency Based Curriculum as an educational paradigm rooted in societal roles, aiming to gauge student progress based on demonstrated competencies rather than adherence to traditional educational timelines. This shift emphasizes the application and demonstration of skills and knowledge relevant to real-world situations.

The essence of Competency Based Curriculum transcends varied terminologies such as problem-based or mastery-based learning, converging on the fundamental principle of outcome-based education (Gervais, 2016). Competency Based Curriculum fundamentally assesses and evaluates mastery encompassing knowledge, skills, attitudes, and behaviors, emphasizing a holistic approach to education rather than mere content acquisition. Implementations of Competency Based Curriculum in diverse countries in the world present diverse practices, providing insights into its adaptability across regions and educational contexts.

For instance, a study in Canada, by Llopart and Esteban-Guitart (2017) highlighted 'competent action' by contextualizing learning within everyday situations, reshaping curriculum designs to align with practical applications. Similarly, educational reforms in China underscored the priority of practical competency development within a structured compulsory education system, emphasizing the importance of real-world application in the learning process (Zhu, N., & Muju, Z., et al., 2007). Latin American countries like Guatemala and Uruguay showcased substantial educational transformations, placing emphasis on equity and quality enhancements through dynamic curricular reforms (Bray, M., & Suso, E. 2008).

These global experiences underscore the pressing need for context-driven curriculum reforms to effectively integrate Competency-Based Education within the diverse educational landscape of Kenya. Competency Based Curriculum stands as a paradigm shift towards a more personalized and flexible educational approach, aligning educational practices with the demands of the rapidly evolving contemporary world (Le et al., 2014; Spady, 1977; Riesman, 1979; Gervais, 2016). Despite its diverse interpretations and applications, Competency Based Curriculum signifies a pivotal transition towards an education system focused on holistic skill development and real-world applicability, challenging conventional paradigms and shaping the educational discourse in diverse global settings.

Moreover, the implementation of the Competency Based Curriculum in Kenya has transitioned beyond its initial two phases and has now traversed into the third level, the Junior Secondary School (Junior Secondary School). While the Competency Based Curriculum adoption marked a significant departure from traditional educational frameworks in Kenya, its progression to the Junior Secondary School level has brought to light a myriad of challenges in its effective implementation (Opondo, Afwande, & Kamau, 2023).

The focus has shifted from the foundational stages to the complexities encountered specifically within the Junior Secondary School phase. This stage, undoubtedly crucial in shaping students' educational trajectories, confronts notable hurdles and obstacles in integrating Competency Based Curriculum into the educational system. Notwithstanding, the progression of the Competency-Based Curriculum in Kenya from its inception to its current implementation at the Junior Secondary School level has been a transformative journey within the educational landscape. Introduced as a departure from the conventional 8-4-4 system, the Competency Based Curriculum aimed to revolutionize the educational approach by prioritizing practical skills, holistic competencies, and application-based learning. However, as Competency Based Curriculum expands into the Junior Secondary School level, it encounters a multitude of challenges.

The integration of the Competency Based Curriculum at the Junior Secondary School level in Kenya has unveiled an array of complex challenges hindering its seamless execution as observed in several leading newspapers. For instance, the Nation Newspaper's editorial on February 24, 2023, candidly highlighted the Junior Secondary School implementation as one of the most critical crises in the country, yet governmental actions to address this crisis seemed lacking (Editorial, 2023).

Moreover, The Star Newspaper on May 11, 2023, reported a stark reality in Mombasa, where only 50 percent of students have transitioned to the Junior Secondary School, with reluctance and apprehension among students and parents (Aura, 2023). The report emphasized underlying concerns about insufficient funding, inadequate infrastructure, teacher shortages, and heightened parental anxiety towards the Junior Secondary School system. Additionally, limited infrastructure was cited as posing a challenge in domiciling Junior Secondary School students within primary schools, raising concerns about effective implementation of Competency Based Curriculum in Junior Secondary School (Citizen Reporter, 2023).

The pressing concerns echoed by leading newspapers in Kenya reveal a mosaic of intricate challenges encountered during the transition of the Competency-Based Curriculum to the Junior Secondary School level. These challenges encompass a spectrum of issues encompassing financial deficits, inadequate infrastructure, teacher deficiencies, and parental anxieties. As this information starkly illuminates the predicaments within the Competency Based Curriculum framework, it underscores an immediate call for comprehensive research and decisive interventions. Although initial Competency Based Curriculum implementation in primary education has been studied, its extension to the Junior Secondary School level presents unexplored complexities.

Gaps in understanding unique challenges at the Junior Secondary School level pose potential hindrances. Thus, a thorough investigation is crucial to identify and address these challenges for effective Competency Based Curriculum implementation at the Junior Secondary School level in Kenya.

1.2. Review of Literature

Previous studies have delved into various aspects of Competency Based Curriculum implementation in Kenya. For instance, Momanyi and Rop (2019) investigated the preparedness of early grade primary school teachers for the implementation of the Competency-Based Curriculum in Kenya. The authors observed that Competency Based Curriculum was Introduced in 2016, and aimed to address concerns about graduate employability by emphasizing applied knowledge demonstration rather than overwhelming content. Using Stufflebeam's CIPP curriculum evaluation model, the researchers assessed the implementation of Competency Based Curriculum and its impact on teachers' readiness. The study revealed that teachers were inadequately prepared; their understanding of Competency Based Curriculum was vague, which significantly hindered their delivery and evaluation of the curriculum. The findings highlighted gaps in teachers' capacity, specifically in comprehending Competency Based Curriculum, aligning teaching resources, adapting teaching approaches, and evaluating the curriculum. To address these issues, the study recommended additional training sessions by the Kenya Institute of Curriculum Development (KICD) and the Ministry of Education to bridge the identified capacity gaps in pedagogy, assessment, and document preparation.

Moreover, Sifuna and Obonyo (2019) highlighted the potential benefits and challenges associated with implementing a competency-based curriculum in Kenyan primary schools. Their study emphasized the utilization of learner-centered teaching approaches, formative assessment methods, and a focus on cultivating competences and the practical application of knowledge tailored to the Kenyan educational environment. However, the authors identified significant obstacles encountered during the curriculum implementation, including insufficient teacher training, a scarcity of officially approved educational materials, and inadequate participation from educational stakeholders and parents in the curriculum reform process.

These limitations posed a risk to the successful implementation of the curriculum, raising concerns about its overall practicality unless deliberately addressed.

In addition, Akala (2021) critically examined the impediments observed during the initial phases of implementing the Competency-Based Curriculum in Kenya. The study underscored challenges related to inadequate human and material resources, incongruences between curriculum content and pedagogical practices, and limited public participation, concluding that the implementation of Competency Based Curriculum had been conducted hastily. This critique accentuated the urgency of promptly addressing these challenges to ensure optimal benefits for learners within the new educational framework. The findings from these studies align with the challenges identified by Kubai (2023). Kubai's study emphasized the challenges facing Competency-Based Assessment within Competency Based Curriculum, including a slow transition pace of learners, lack of educational policies, inadequate ICT infrastructure, insufficiently trained teachers, and negative stakeholder attitudes towards the curriculum. These challenges, including transition uncertainties and policy inadequacies, pose significant hindrances to the effective implementation of the Competency Based Curriculum framework at the Junior Secondary School level.

A study conducted by Muchira, Morris, and Wawire (2023) investigated the implementation challenges and lessons learned from Competency-Based Curriculum (CBC) models in the United States and South Korea. Their research aimed to provide insights applicable to Kenya's Competency Based Curriculum framework. In their scoping review, they highlighted the improvements in problem-solving skills, lifelong learning, self-efficacy, and learner autonomy resulting from Competency Based Curriculum implementation in the USA and South Korea.

Challenges identified across the three countries included inadequate teacher training opportunities, insufficient funding, and inconsistencies in pedagogical approaches and assessment methods. The authors recommended aligning educational goals across various levels and employing evidence-based strategies from other nations to address implementation challenges in Kenya. This global perspective offers potential strategies for addressing challenges encountered in implementing the Competency-Based Curriculum at the junior secondary level in Kenya.

Studies examining the Competency-Based Curriculum implementation in Kenya therefore, highlight several challenges and potential solutions in the educational system. These investigations emphasized issues such as inadequate teacher preparedness, a lack of clear policies, insufficiencies in educational resources, incongruences between curriculum content and pedagogical practices, and negative stakeholder attitudes. The slow transition pace, policy gaps, and resistance from stakeholders were notably highlighted within these studies. Furthermore, comparative analyses with other countries revealed common challenges of teacher training, funding inadequacies, and disparities in pedagogical approaches. Collectively, these findings stress the urgent need for comprehensive measures to address these challenges and bridge the gaps in teacher capacity, educational resources, and

stakeholder engagement for the effective implementation of the Competency-Based Curriculum, particularly at the Junior Secondary School level in Kenya.

The current study investigated the specific challenges encountered during the implementation of the Competency-Based Curriculum (CBC) at the Junior Secondary School level, focusing on perspectives from Junior Secondary School teachers in Nyeri County, Kenya. The research aimed to delve into the issues faced by teachers, encompassing their preparedness, resource inadequacies, alignment between curriculum and pedagogy, stakeholder engagement, and funding limitations. By exploring these challenges from the viewpoint of Junior Secondary School teachers in Nyeri County, the study aimed to provide valuable insights into the complexities hindering effective Competency Based Curriculum implementation and proposed strategies to address these issues within the local educational context.

1.2.1. Problem Statement

The implementation of the Competency Based Curriculum at the Junior Secondary School level in Kenya is facing an array of challenges that are impeding its effective execution. Despite the program's earlier successes and the government's commitment to its realization, the transition to the Junior Secondary School level has unearthed complex hurdles in integrating Competency Based Curriculum into the educational system. Leading newspapers in Kenya have reported on these issues, emphasizing the immediate need for comprehensive research and strategic interventions to understand the unique complexities encountered during the extension of Competency Based Curriculum to the Junior Secondary School level. This situation underscores the necessity for an in-depth investigation to address and navigate the distinct challenges posed by the implementation of Competency Based Curriculum at the Junior Secondary School level in Kenya.

1.3. Research Objectives

The study was guided by the following objectives:

1. To identify challenges in implementing the Competency-Based Curriculum (CBC) at the junior secondary level in Kenya.
2. To assess the impact of identified challenges on Competency Based Curriculum implementation at the junior secondary level in Nyeri county, Kenya.
3. To propose recommendations for addressing identified challenges in implementing Competency Based Curriculum at the Junior Secondary School level in Kenya

The study sought to answer the following research questions:

1. What are the primary challenges faced by Junior Secondary School teachers in Kenya during the implementation of the Competency-Based Curriculum (Competency Based Curriculum)?

2. How do the challenges identified in implementing the Competency-Based Curriculum (CBC) specifically impact the Junior Secondary Schools in Nyeri county, Kenya?
3. What strategies can be recommended to mitigate the challenges encountered in implementing the Competency-Based Curriculum (CBC) at the Junior Secondary School level in Kenya?

2. Method

2.1. Research Design

A mixed method cross-sectional survey design was used to collect comprehensive data from Junior Secondary Schoolteachers in public schools in Nyeri County, Kenya. This method entailed gathering data at a specific moment in time, allowing assessment of Junior Secondary School teacher's perceptions, experiences, and challenges related to competency-based curriculum implementation. The mixed method utilized a structured questionnaire to collect quantitative and qualitative information in regard to perceived challenges, curriculum effectiveness, resource availability, and support systems. The survey approach enabled systematic data collection from a varied range of teachers, providing significant insights into their viewpoints without the need for ongoing observations or intervention

2.1. Population of the Study

The population for this study comprised all Junior Secondary School teachers in public schools in Nyeri County, Kenya comprising of 1200 individuals.

2.2. Sample Size

The sample size of 940 was chosen based on its ability to provide statistically significant and reliable data while ensuring representation across Nyeri County's diverse Junior Secondary School teacher population of 1200. This sample size, aligned with a confidence level of 95% and a margin of error of 3%, strikes a balance between precision and feasibility in survey research (Lakens, 2022). It allows for capturing a range of perspectives on the implementation challenges and effectiveness of the competency-based curriculum.

2.3 Sampling procedure

The sampling procedure commenced with the acquisition of a comprehensive list of Junior Secondary Schoolteachers from the Teachers Service Commission (TSC) county office in Nyeri. Each teacher in the list was assigned a unique identifier. To achieve the desired sample size of 940 from an estimated population of 1200, a random selection process was employed using a computer-generated random number generator. Teachers were chosen by generating random numbers within the range of the total number of teachers until the sample size was reached. The selected teachers' eligibility was verified based on their status as Junior

Secondary School teachers in public schools, and their contact details were obtained from the list for questionnaire dissemination. In cases of ineligibility or non-responses, replacements were randomly chosen from the original list to ensure the final sample size. Efforts were made to ensure representation across various schools and geographic locations within Nyeri County. Ethical considerations, including confidentiality and anonymity, were upheld throughout the sampling process.

2.4 Data collection tool

An online questionnaire with five sections was utilized. Section one collected demographic information, sections two and three utilized a 5-point Likert scale to assess perceived challenges and effectiveness of the competency-based curriculum. Section four investigated the availability of resources and support mechanisms, and the final section was open-ended for collecting additional comments, suggestions and sentiments. Construct validity of the items in the questionnaire was determined by analyzing the consistency between sections two and three, which utilized the Likert scale, and ensuring they actually measured perceived challenges and effectiveness as intended.

2.5 Data analysis

Quantitative data collected through Likert scales were analyzed using percentages to determine the level of agreement or disagreement with challenges and effectiveness. Confidence intervals were calculated to estimate the range within which the true population percentages were likely to fall. Open-ended responses underwent thematic analysis to identify recurring patterns and themes.

2.6 Limitations of the Study

While the methodology employed a mixed-method cross-sectional survey design to comprehensively capture data from Junior Secondary School teachers in Nyeri County, Kenya, there were certain limitations in the study:

1. **Sample Size Selection:** While the sample size of 940 was chosen to provide statistically significant data, there might be a chance of selection bias or underrepresentation of certain perspectives. The exclusion of a portion of the Junior Secondary School teacher population in Nyeri County from the study could have potentially overlook critical viewpoints or challenges faced by those not included in the sample.
2. **Generalizability:** The study's findings might not be universally applicable to all educational contexts due to the specificity of the region and the localized nature of the research. Different regions or educational settings might encounter distinct challenges that were not covered or represented adequately in this study.
3. **Response Bias and Interpretation:** The interpretation of open-ended responses through thematic analysis might have introduced subjective biases in identifying

patterns and themes. Moreover, respondents' biases or tendencies in expressing their challenges or viewpoints might have affected the overall interpretation of the qualitative data.

4. **Time Sensitivity:** The data collected at a specific moment might not account for temporal changes or evolving challenges in Competency Based Curriculum implementation. Challenges faced by Junior Secondary School teachers could vary over time, and the study might not capture these dynamic shifts accurately

3. Results

3.1 Demographic data

3.1.1 Teaching Experience among Junior Secondary School Teachers

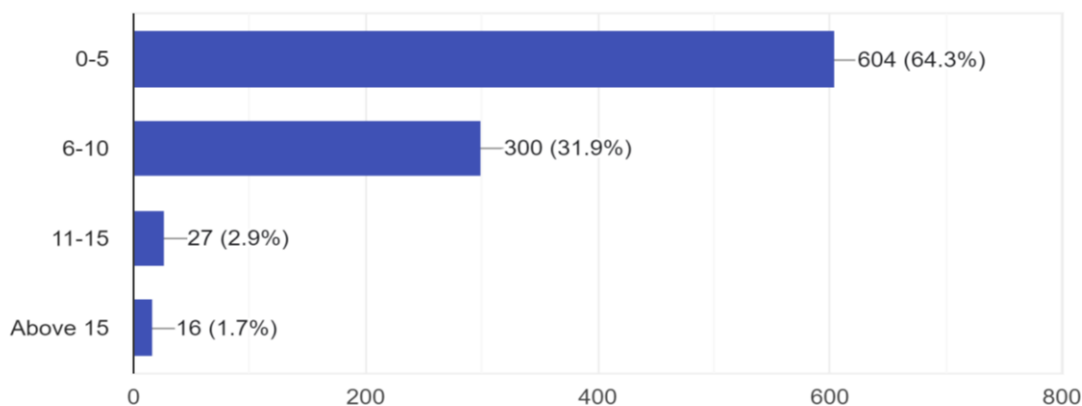


Figure 1. Distribution of Teaching Experience among Junior Secondary School Teachers

The data from Figure 1 showcase a notable distribution in teaching experience among surveyed Junior Secondary School teachers. The majority, constituting 64.3% (605 teachers), reported having 0-5 years of experience, followed by 31.9% (300 teachers) with 6-10 years of experience. Comparatively, a smaller percentage of teachers reported longer tenures, with 2.9% (27 teachers) having 11-15 years of experience and only 1.7% (16 teachers) indicating more than 15 years of teaching experience. This distribution underscores a predominant presence of Junior Secondary School teachers with relatively limited teaching experience

3.1.2 Educational Qualifications among Junior Secondary School Teachers

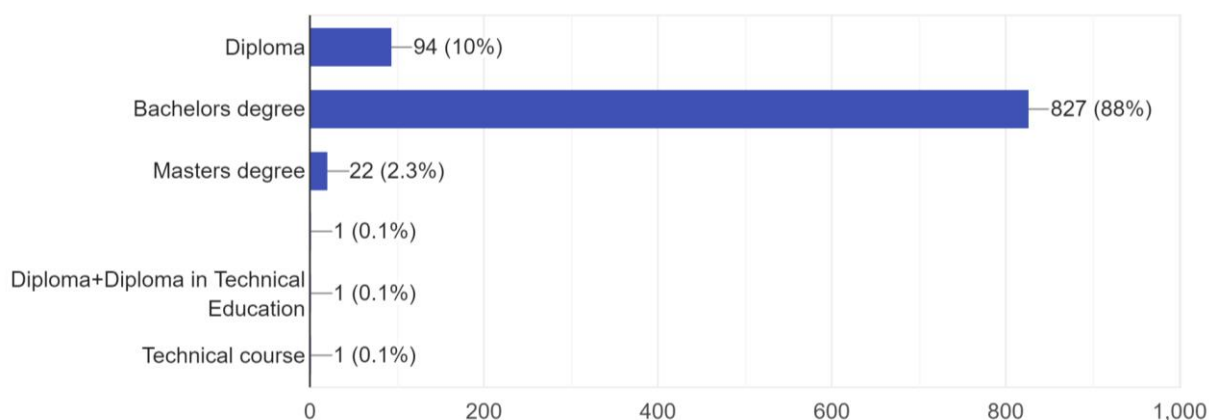


Figure 2. Distribution of Educational Qualifications among Junior Secondary School Teachers

Figure 2 reveals that 88% of surveyed Junior Secondary Schoolteachers have a Bachelor's degree in education, with 10% holding a Diploma. A smaller proportion of teachers, 2.3%, have Master's degrees, and 0.1% have educational qualifications beyond a Master's level. This highlights a varied range of educational qualifications within the surveyed population, with a majority of teachers possessing Bachelor's degrees.

3.2. Perceived Challenges in Implementing the Competency-Based Curriculum

3.2.1 School Based Challenges

Table 1. School-environment challenges in implementing Competency Based Curriculum in Junior Secondary Schools

Challenges	Significant Challenge (%)	Sample Size (n)	Margin of Error	Confidence Interval (95%)
Lack of support from school administration in implementing and adapting to the competency-based curriculum.	88.7%	940	±1.03%	(87.67%, 89.73%)
Inadequate access to technology and digital resources for teaching	85.2%	940	±1.92%	(83.28%, 87.12%)
Overcrowded classrooms impacting effective implementation	70.7%	940	±1.92%	(68.78%, 72.62%)
Insufficient time allocated for lesson planning and adaptation to the new curriculum	62.8%	940	±1.92%	(60.88%, 64.72%)
Limited availability of educational resources and manipulatives for practical learning	85.4%	939	±1.53%	(83.87%, 86.93%)

Table 1 presents confidence intervals for the percentage prevalence of school-based challenges encountered in implementing a competency-based curriculum in Junior Secondary School. These intervals provide a statistical range around the reported percentages, offering insights into the precision or uncertainty associated with these estimates. The data portrays several key challenges. Lack of support from school administration in implementing and adapting to the competency-based curriculum is reported at a high prevalence of 88.7% (95% CI: 87.67% to 89.73%) respondents with a margin of error of $\pm 1.03\%$. This significant finding underscores a critical need for enhanced administrative backing of teachers to successfully implement the competency-based curriculum in Junior Secondary Schools. Moreover, a significant challenge is evident in the limited availability of educational resources and practical learning tools, denoted by an overwhelming percentage of 85.4% (95% CI: 83.87% to 86.93%). Similarly, inadequate access to technology and digital resources for teaching stands out significantly at 85.2% (95% CI: 83.28% to 87.12%), highlighting a critical challenge with a relatively narrow confidence interval. Overcrowded classrooms, impacting the effective implementation of the Competency Based Curriculum, are identified at a noteworthy 70.7% (95% CI: 68.78% to 72.62%). Additionally, insufficient time allocated for lesson planning and adaptation to the new curriculum emerges as a concern, with 62.8% (95% CI: 60.88% to 64.72%). These confidence intervals suggest a relatively tight estimation for some challenges, emphasizing the urgency of addressing resource scarcity, technological inadequacy, classroom capacity issues, and time constraints to ensure successful implementation of the Competency Based Curriculum in Junior Secondary Schools.

3.2.1 Teacher Based Challenges

Table 2. Teacher-based challenges in implementing Competency Based Curriculum in Junior Secondary Schools

Challenges	Significant challenge (%)	Sample Size (n)	Margin of Error	Confidence Interval (95%)
Lack of expertise in handling certain areas of the curriculum due to lack of training in the areas	87.8%	940	$\pm 1.52\%$	(86.28%, 89.32%)
Challenges in assessing and evaluating competency-based learning outcomes	69.5%	940	$\pm 1.92\%$	(67.58%, 71.42%)
Inadequate assessment tools or methods that align with the competency-based framework	70.8%	939	$\pm 1.92\%$	(68.88%, 72.72%)
Limited collaboration opportunities among teachers to align teaching methods with the competency-based curriculum	61.4%	939	$\pm 1.92\%$	(59.48%, 63.32%)
Difficulties in fostering self-directed learning and autonomy among students	56.3%	939	$\pm 1.92\%$	(54.38%, 58.22%)

Table 2 outlines crucial teacher-based challenges encountered in implementing competency-based curriculum within Junior Secondary Schools. A significant challenge arises from the lack of expertise in certain curriculum areas due to lack of training in those areas, identified at a substantial 87.8% (95% CI: 86.28% to 89.32%). Challenges related to assessing and evaluating competency-based learning outcomes (69.5%, 95% CI: 67.58% to 71.42%) and inadequate alignment of assessment tools with the curriculum framework (70.8%, 95% CI: 68.88% to 72.72%) present notable hurdles. Additionally, limited collaboration opportunities among teachers (61.4%, 95% CI: 59.48% to 63.32%) and difficulties fostering self-directed learning among students (56.3%, 95% CI: 54.38% to 58.22%) emerge as significant impediments. These findings underscore critical challenges in staffing and assessment strategies, necessitating enhanced collaboration and targeted approaches to successfully implement the competency-based curriculum in Junior Secondary Schools.

3.3 Analysis of Open-Ended Responses

Several recurring themes emerged from the qualitative analysis of open-ended responses provided by participants. Notably, participants frequently mentioned the following themes:

Junior Secondary School Domicile and Integration

Participants frequently suggested domiciling Junior Secondary Schools (currently domiciled in primary schools) within secondary schools. This suggestion is based on the perception that secondary schools offer superior resources, subject-specific teachers, and necessary facilities for effective teaching compared to primary institutions.

One respondent vividly expressed the challenges faced due to inadequate subject-specific teachers, stating, "Lack of enough teachers is a significant challenge in delivering to the students. Like how do I even teach music and I have never studied it in my life or even interacted with those musical instruments. We need help!" This sentiment underscores the necessity for subject-specific expertise and resources within the educational framework to facilitate quality teaching and learning experiences.

Rethinking and Reorganization

Calls for a comprehensive reevaluation of the Junior Secondary Schools system were prevalent among respondents. Suggestions focused on restructuring the framework, addressing curriculum complexities, and implementing strategic management approaches. One respondent stated:

"The success of the Competency Based Curriculum depends on the willingness and the goodwill of the government and the other relevant stakeholders. If the government provided funds for implementation enough and on time, things would run easily. The government should reconsider the domiciling of the Junior School learners to the nearby Day Secondary Schools where the issue of human resource and infrastructure will be solved. The learning environment in most of the primary schools is not conducive otherwise a whole generation will just be wasted."

This sentiment highlighted the crucial role of governmental support and the potential benefits of reorganizing educational structures to enhance resource availability and foster a conducive learning environment for students.

Teacher Involvement and Welfare

Participants emphasized the pivotal role of teacher involvement within the school setting. However, Junior Secondary Schoolteachers expressed sentiments of being undervalued in comparison to their counterparts in primary schools. Commonly raised issues encompassed their exclusion from training programs, limited involvement in curriculum development, scarcity of resources, inadequate training, low morale attributed to insufficient remuneration, and excessive workload. Regarding the exclusion of Junior Secondary School teachers from training opportunities, one respondent lamented, "Deployed Junior Secondary School teachers are sidelined in training yet they need to be skilled with current Junior Secondary School curriculum. Good example is, they were not included in CEMASTE (Centre for Mathematics, Science, and Technology Education in Africa) training."

Resource Shortages and Curriculum Challenges

Concerns were expressed regarding the scarcity of digital devices, inadequate resources, and limited access to laboratories for practical lessons. Participants also highlighted the challenging nature of the curriculum content, coupled with time constraints, impacting the effective teaching of certain subjects.

Teacher Internship and Motivation

Intern teachers conveyed a need for confirmation and improved motivation. They expressed feelings of demoralization, stress, and a lack of motivation due to inadequate stipends, lack of support, and deficient facilities.

Management and Governmental Support

Participants raised complaints regarding poor management, insufficient support from educational authorities (such as the Teachers Service Commission (TSC) and Ministry of Education (MOE)), and a lack of responsiveness to teachers' needs. One intern expressed frustration, stating, "An intern is someone who is still learning then the government and TSC decided to give us the whole responsibility of being pioneers and paying peanuts for the donkey work?! Cheap Labour might cost the lives of these children."

Examination and Teaching Quality

Concerns were articulated regarding the frequency of exams, misalignment of exams with the Competency-Based Curriculum (Competency Based Curriculum), and teachers handling subjects beyond their expertise. These factors were seen as negatively impacting teaching quality and student learning.

Geographical Disparities

Notable disparities between urban and rural schools were identified. Urban schools were observed to receive more attention, resources, and pilot programs compared to rural schools.

Grade-Level Specific Challenges

Specific challenges mentioned included the perceived shallow content in Grade 7 textbooks and the delayed release of Grade 8 books.

4. Discussion

In the investigation of challenges faced in implementing the Competency Based Curriculum in Junior Secondary Schools, several categories of challenges developed, including school-based and teacher-based challenges, as well as thematic insights gained from open-ended responses.

The analysis of teaching experience among surveyed Junior Secondary School teachers illustrated a significant concentration within the lower experience brackets. Specifically, the majority of teachers (64.3%) reported having 0-5 years of teaching experience, followed by a substantial proportion (31.9%) with 6-10 years of teaching. Conversely, a notably smaller percentage of teachers reported medium to long tenures, with only 2.9% having 11-15 years of experience, and merely 1.7% indicating an experience exceeding 15 years. This distribution highlights a prevailing presence of Junior Secondary School teachers with relatively limited teaching experience.

Kini and Podolsky (2016) revealed a significant correlation between teaching experience and teacher effectiveness. The authors observed that while teachers improve in their initial years, they continue to enhance their effectiveness throughout their careers, albeit at slower rates. Analyzing multiple studies, Kini and Podolsky (2016) observed that the vast majority of teachers demonstrated a positive and significant correlation between teaching experience and teacher effectiveness.

Moreover, the findings suggested a diverse spectrum of educational qualifications among Junior Secondary School teachers. The majority of surveyed teachers possess Bachelor's degrees in education, accounting for 88% of the population. Additionally, 10% hold Diplomas, while a smaller proportion, 2.3%, have attained Master's degrees, and a minimal 0.1% possess educational qualifications surpassing a Master's level. This variation in educational attainment underscores the prevalence of Bachelor's degrees among the surveyed teacher population.

Ngeno (2023) emphasizes the significance of teacher training and academic qualifications in implementing the Competency-Based Curriculum (Competency Based Curriculum). The study highlighted a moderate positive impact of teacher training on Competency Based Curriculum implementation, with seminars and workshops playing a significant role in supporting the execution of the curriculum. The findings stress the necessity of recruiting and training teachers who are updated and aligned with Competency Based Curriculum standards to facilitate a smoother implementation process.

A robust emphasis surfaced on key challenges pertinent to the school environment. Notably, an acute deficiency in administrative support, reported at 88.7% (95% CI: 87.67% to 89.73%), highlighted the imperative need for reinforced administrative backing. Additionally,

substantial concerns manifested regarding the limited availability of educational resources (85.4%) and inadequate access to technology for teaching (85.2%). Overcrowded classrooms (70.7%) and insufficient time allocation for lesson planning (62.8%) also emerged as significant hurdles, warranting immediate attention. These findings underscore the urgency to address resource deficiencies, technological inadequacies, and classroom constraints to ensure successful Competency Based Curriculum implementation in Junior Secondary Schools. The pressing need for increased administrative backing, evidenced by the high prevalence of challenges related to inadequate support from school administration warrants immediate policy attention. Reforming administrative structures and policies to offer substantial support to teachers becomes imperative for successful Competency Based Curriculum implementation.

The challenges faced by teachers in implementing the Competency Based Curriculum were pronounced. Notably, the absence of expertise in specific curriculum areas due to inadequate training (87.8%) posed a substantial obstacle. The identified lack of expertise in specific curriculum areas due to inadequate training calls for comprehensive teacher development programs. Focused training initiatives should aim to equip teachers with subject-specific expertise aligned with the Competency Based Curriculum curriculum.

Additionally, challenges in assessing learning outcomes (69.5%) and aligning assessment tools with the curriculum framework (70.8%) presented notable hurdles. Moreover, limited collaboration opportunities among teachers (61.4%) and difficulties fostering self-directed learning among students (56.3%) highlighted critical staffing and pedagogical impediments. Addressing these challenges necessitates enhanced collaboration and strategic approaches to effectively implement the Competency Based Curriculum in Junior Secondary Schools. Continuous curriculum review, incorporating feedback from teachers, and aligning assessment methods with the Competency Based Curriculum framework are essential for effective implementation.

Qualitative analysis unveiled recurring themes in participant feedback. Participants advocated for domiciling Junior Secondary Schools within secondary institutions, advocating for the superior resources and subject-specific expertise secondary schools offer. Furthermore, concerns over teacher involvement and welfare were prominent, highlighting teacher exclusion from training programs, insufficient resources, and workload issues. Issues pertaining to resource shortages, geographical disparities, and grade-specific challenges were also highlighted, illustrating the multifaceted nature of impediments in Competency Based Curriculum implementation.

5. Conclusions

The findings underscore the complexity surrounding the implementation of the Competency-Based Curriculum (CBC) in Junior Secondary Schools. Deficiencies in administrative support and inadequate teacher expertise emerged as prominent challenges, alongside limitations in assessments and resource shortages. To address these challenges effectively, interventions should focus on restructuring administrative policies to provide robust support systems for

teachers. Comprehensive training programs aligned with Competency Based Curriculum standards are essential to equip teachers with the necessary skills. Moreover, establishing collaborative platforms among teachers to share best practices and resources could significantly enhance Competency Based Curriculum implementation and student learning outcomes.

Further investigation into the effectiveness of specific teacher training programs tailored to Competency Based Curriculum requirements could offer insights into the most effective pedagogical approaches. Moreover, comparative studies between schools that successfully address Competency Based Curriculum challenges and those that struggle could provide valuable strategies for effective implementation. Furthermore, examining the role of technology integration and innovative teaching methodologies in Competency Based Curriculum implementation could offer modern solutions to existing challenges.

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