



**EFFECTIVENESS OF STRATEGIC IMPLEMENTATION PROCESS ON
COMPETENCY BASED CURRICULUM EDUCATION SYSTEM IN NAIROBI CITY
COUNTY, KENYA**

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ABSTRACT

The integration of the Competency-Based Curriculum (CBC) in Nairobi County, Kenya, brought forth opportunities and hurdles within the education realm. Although designed to furnish students with practical skills and competencies, the CBC encountered impediments stemming from insufficient infrastructure, unprepared teachers, and institutional resistance to change. This study sought to examine the influence of strategic implementation of the Competency-Based Curriculum Education System in Nairobi County, Kenya. It was guided by the following research objectives: to determine how the availability of resources influenced the effectiveness of the Competency-Based Curriculum Education System in Nairobi County, Kenya; to establish the influence of stakeholder involvement on the effectiveness of the Competency-Based Curriculum Education System in Nairobi County, Kenya. The target population of this study consisted of 50 school heads, 50 KICD officers, 50 UNESCO officers, and 600 teachers leading to 750. The sample size of this study comprised sixty (N=90) respondents who participated in the study. Questionnaires and an interview schedule were used to collect data. Instrument validity was conducted by seeking the expert perspective of a university supervisor, while instrument reliability was examined through the test-retest technique. Results, presented in frequencies and percentages, were analyzed using descriptive statistics for both quantitative and qualitative data with the help of the Statistical Package for Social Sciences (SPSS) Version 22.0. Descriptive data were summarized in tables and figures, using frequencies and percentages. The study established that sufficient resources, active stakeholder engagement, were critical for effective CBC implementation, and it recommended prioritizing resource allocation, and collaborative efforts among stakeholders. Future research should consider a broader geographical scope and explore additional variables affecting CBC effectiveness.

Key Words: Strategic Implementation, Competency-Based Curriculum Education System, Availability of Resources, Stakeholder Involvement

Background of the Study

In 2017 a new education system was launched, called the CBC (Competence Based Curriculum), designed by the Kenya Institute of Curriculum Development (KICD). This will be the third education system in Kenya; the first system was 7-4-2-3 which was phased out in 1985 by the 8-4-4 system. The Government introduced the Competency Based Curriculum (CBC) to replace the 8-4-4 system of education following the results of a needs assessment carried out countrywide by a team of experts (Kenya Year Book 2022, 2022). The assessment indicated that the 8-4-4 system had become unpopular, because it was examination acquainted and laid emphasis on academics at the expense of other education needs as opposed to orienting learners for employment and hence the need for the Competence Based Curriculum (Wanjohi, 2018).

The CBC system is a 2-6-3-3-3 model, this means students will spend 2 years in pre-primary, 6 years in primary (grade 1-6), 3 years in junior secondary (grade 7,8,9) 3 years in senior secondary (grade 10,11,12) and 3 years in vocational institutions and university (Tafuta Kenya, 2021). The pilot phase began with an original meeting with all the head teachers at the selected pilot schools on April 21, 2016, at KICD, which was presided over by the Cabinet Secretary, Ministry of Education. (Kenya Year Book 2022, 2022).

The curriculum, which is competency based emphasizes on application of formative assessment as the basis for enhancement of teaching and learning. The continuous assessment tests set to replace one-off examinations will be standardized and administered at various levels.

The goal of the new curriculum is to provide citizens with skills for the 21st century, by placing emphasis on the learner's capability, character, nationalism, and ability to coexist as a responsible citizen (Kenya Institute of Curriculum Development-Curriculum Reforms, 2023).

Statement of the problem

The implementation process of the Competency-Based Curriculum (CBC) in Nairobi County, Kenya, faces significant challenges that hinder its effectiveness in equipping students with practical skills and competencies. Notably, inadequate infrastructure and learning resources in schools pose a considerable barrier. According to the Kenya National Education Data (2021), approximately 65% of schools in Nairobi County lack essential facilities and technology crucial for CBC implementation. This deficit undermines teachers' ability to deliver the curriculum as intended, impacting the quality of students' learning experiences.

Furthermore, the readiness of teachers to implement the CBC is a pressing concern. Transitioning from a content-centered approach to a competency-based one requires substantial pedagogical adjustments and ongoing professional development. Insufficient teacher training may result in difficulties integrating competencies into lessons, ultimately impeding students' acquisition of desired skills. Additionally, a lack of understanding about curriculum changes among experts and teachers further complicates successful implementation. Given these challenges, there is a critical need for comprehensive research to examine the influence of strategic interventions on CBC implementation in Nairobi County.

By providing statistical evidence and valuable insights, this research aims to inform strategic improvements that will maximize the effectiveness of the Competency-Based Curriculum Education System, ultimately contributing to the educational advancement of Nairobi County and the realization of the CBC's potential. Thus, this study seeks to examine the Effectiveness strategic implementation on the Competency Based Curriculum Education System in Nairobi County, Kenya.

Objectives

The general objective of this study is to examine the Effectiveness strategic implementation on the Competency Based Curriculum Education System in Nairobi County, Kenya

The study was guided with the following research objectives.

- To determine how availability of resources influence the effectiveness of Competency Based Curriculum Education System in Nairobi County, Kenya.
- To establish the influence of stakeholder involvement on the effectiveness of Competency Based Curriculum Education System in Nairobi County, Kenya.

LITERATURE REVIEW

Theoretical Review

The Resource-Based Theory (RBT)

The Resource-Based Theory (RBT) is focused on assessing internal strengths and weaknesses related to an organization's resources, including how processes are managed and how resources are allocated and deployed, all to support the implementation of strategies (Wernerfelt, 2004; Barney, 2003). According to Montgomery (2004), the resource-based perspective places particular emphasis on the resources owned by a company or its partners and how these various resources can explain company performance and long-term growth or decline. This perspective provides insights into a company's resource landscape both before and during decision-making processes and the development of business strategies (Montgomery, 2004).

Barney (2003) emphasizes that successful strategy implementation relies on the strategic nature of the resources used. The contemporary view of the resource-based perspective includes various elements within a company, such as its organizational structure, the effectiveness of communication among team members responsible for coordinating information, and the commitment of key players in organizational management, all of which are essential for ensuring the proper implementation of strategies (Barney, 2003).

The effectiveness of firm strategies is contingent upon the efficient utilization and exploitation of existing resources. When firms have underused or untapped resources at their disposal, these represent unique and firm-specific opportunities that can be harnessed for strategic exploitation (Montgomery, 2004). The study applies the Resource-Based Theory because it provides a framework for understanding how internal resources, including human capital, financial assets, and infrastructure, can be strategically managed to support the successful implementation of CBC in educational institutions. By identifying, evaluating, and optimizing these resources, educational leaders can better position their organizations for effective CBC implementation and long-term growth.

Stakeholder management theory

Stakeholder management theory is closely associated with the pioneering work of R. Edward Freeman, who is widely recognized as its primary advocate and developer (Freeman, 1984). This theory holds significant importance in the realm of management and organizational studies, underscoring the crucial role of identifying and involving various stakeholders in an organization's decision-making processes. As per this theory, an organization's obligations extend beyond its shareholders to encompass a more comprehensive spectrum of stakeholders, encompassing employees, customers, suppliers, and the broader community. This perspective acknowledges the need to consider and balance the diverse interests of these stakeholders to ensure the organization's long-term success and sustainability (Donaldson & Preston, 1995).

The principal objective of stakeholder management theory is to furnish organizations with a structured framework to comprehend, prioritize, and address the concerns and interests of their stakeholders (Freeman, 2010). Through active engagement with stakeholders, organizations can cultivate positive relationships, bolster their reputation, and ultimately achieve strategic objectives while upholding ethical and socially responsible practices. Furthermore, effective stakeholder management is instrumental in reducing the likelihood of conflicts and crises, as organizations become more attuned to the expectations and needs of their stakeholders (Mitchell, Agle, & Wood, 1997).

Nonetheless, stakeholder management theory is not devoid of limitations. A significant challenge lies in determining the qualifications of stakeholders and how to prioritize their interests in decision-making processes. This can be a complex and subjective endeavor, given that different stakeholders may possess competing interests (Fassin & Gosselin, 2011). Furthermore, critics contend that the theory lacks clear guidance on how to balance stakeholder interests, particularly when they directly clash with one another (Phillips, 2003). In practice, organizations must address these challenges to effectively implement stakeholder management theory and consider the diverse perspectives of employees, customers, suppliers, and the community, thereby making decisions that adhere to ethical and socially responsible principles (Donaldson & Preston, 1995).

Conceptual Framework

According to Swanson (2013), a conceptual framework is a model of presentations where a researcher conceptualizes or presents the relationships between variables in a study. This study seeks to examine the effect of effective strategic implementation the effectiveness of Competency-Based Curriculum Education System in Kenya. The independent variables are availability of resources, stakeholder involvement. The dependent variable is the effectiveness of Competency-Based Curriculum Education System in Nairobi County, Kenya. Figure 1 shows the conceptual framework of the study.

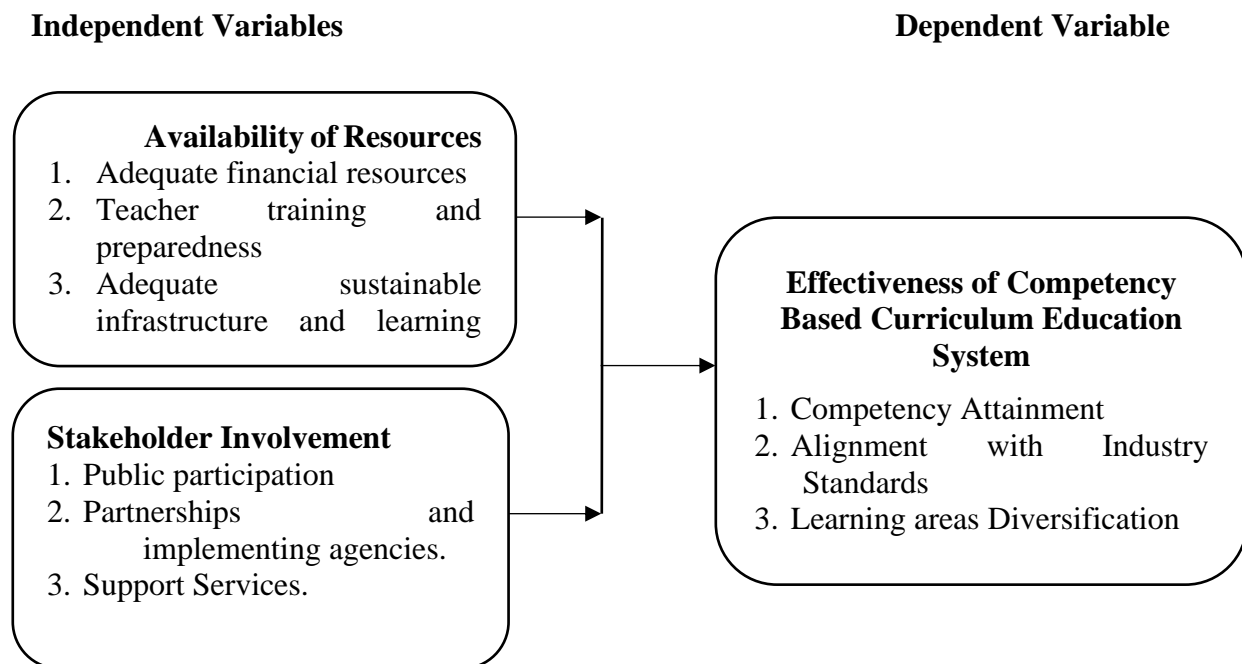


Figure 1: Conceptual framework

Adequate of Resources

The presence of resources encompasses physical, financial, and human assets, including materials, infrastructure, financial backing, and qualified educators, which are essential for supporting the implementation of the Competency-Based Curriculum (CBC).

Financial resources are pivotal for the successful implementation of a Competency-Based Curriculum (CBC). Adequate funding is a cornerstone, enabling essential components like curriculum development, teacher training, and infrastructure provision. In cases of financial inadequacy, educational institutions may encounter challenges in establishing and sustaining an effective CBC system (Muthiani & Ngware, 2016). This scarcity of funding can lead to issues like overcrowded classrooms, insufficiency of teaching materials, and limited opportunities for teacher professional development.

The desired strategy must be rooted in what is financially sustainable in the organization. The money or assets that are used to reimburse or finance the organization doings is referred to as

the finance resources (Homburg, Krohmer & Workman, 2004). The basic assumption is that all strategy implementation activities attract some expenditure.

Therefore, for these activities to be carried out successfully, financial allocation plays a critical role. Zaribaf and Hamid (2010) that while providing financial resources (budgeting) which to support strategies, care should be taken to ensure that financial resources are allocating to units in appropriate to their contribution of strategic role and that consuming resources (inputs) will cause desired outputs. They conclude that successful implementing of strategies results from integrating and coordination of technological innovations, production processes, marketing, financing and personnel to achieve the defined goals.

The availability of qualified and motivated educational professionals is indispensable for the delivery of a student-centered, competency-based education. In situations where enough competent educators are lacking, the quality of CBC can be compromised. Constraints in resource availability may contribute to a shortage of qualified teachers, thereby hindering the success of the CBC initiative.

The presence of these resources is integral, ensuring that students have the necessary tools to effectively develop their competencies.

Stakeholder involvement

Stakeholder involvement involves engaging a range of parties, such as teachers, parents, students, and community members, in the planning and execution of the CBC. This participation encompasses diverse groups, such as educators, parents, students, community members, and policymakers, all of whom hold roles in shaping the effectiveness of CBC. Educators, especially teachers, bear a central role in the CBC. Their comprehension, acceptance, and interaction with the curriculum are of paramount importance. A study by Johnson (Johnson, Smith, & Davis, 2019) explored the impact of teacher involvement on CBC implementation in a rural school district. The results indicated that when teachers actively engaged with the curriculum, students exhibited enhanced outcomes. The study emphasized that teachers who feel a sense of commitment to the CBC system are more likely to deliver it effectively.

Parental participation is another substantial factor. A study by Smith and Davis (2020) delved into the role of parental engagement in CBC within a primary school context. The research revealed that active parental involvement in their children's education, along with an understanding of CBC's objectives, positively influenced student performance. This study underscored the significance of establishing avenues for parental participation in and support for CBC implementation.

Student involvement is crucial for CBC's success as well. A study by (Lee & Chen, 2018) investigated the impact of student engagement within a high school CBC program. The findings demonstrated that students who actively participated in setting their learning objectives and tracking their progress displayed higher motivation and a better grasp of their competencies. This research highlighted the necessity for students to be actively engaged in the learning process for CBC to be effective.

Community/public involvement is also vital. In a study by Williams and Brown (2021), the effect of community engagement in a CBC initiative was examined. The results indicated that when the local community played a role in shaping the curriculum to align with real-world demands and employment needs, it heightened the relevance of CBC. The study underscored the value of integrating community input into CBC to make it more responsive to local requirements.

Competency Based Curriculum System

Competency-based education (CBE) represents an innovative approach to curriculum design and delivery, focusing on student mastery of specific competencies rather than adhering to

traditional time-based models. Research conducted by Smith and Jones (2018) delved into the impact of CBE on student outcomes in higher education, revealing that students in competency-based programs exhibited higher levels of mastery and retention of course content compared to their counterparts in traditional programs. This indicates that CBE not only provides a more flexible and personalized learning experience but also enhances student-learning outcomes.

Examining the implementation of CBE in a high school setting, Johnson et al. (2020) found that students in competency-based programs displayed elevated levels of engagement and motivation compared to their peers in traditional classrooms. This suggests that CBE contributes to a more student-centered learning environment, fostering autonomy and intrinsic motivation.

A study conducted by Brown and Davis (2019) examined various studies on competency-based education across different educational levels. The analysis consistently demonstrated a positive correlation between competency-based approaches and student achievement. The researchers concluded that CBE is linked to improved academic performance and heightened student satisfaction, underscoring its potential to address diverse learning needs and foster a more effective learning environment.

Competency-based education has shown promise in addressing equity and diversity in education. A study by Garcia and Rodriguez (2021) explored the impact of CBE on underrepresented minority students in higher education, revealing that competency-based programs provided a more inclusive learning environment. This allowed students from diverse backgrounds to progress at their own pace and demonstrate mastery, irrespective of traditional barriers, potentially narrowing achievement gaps and promoting greater equity in educational outcomes.

The implications of competency-based education extend to workforce development, as highlighted in a report by the World Economic Forum (2022). The report emphasized the alignment between CBE and the skills demanded by the contemporary job market. It underscored the necessity for a shift from time-based credentials to competency-based credentials to better prepare individuals for the evolving demands of the workforce. As industries increasingly prioritize specific skills over traditional degrees, the competency-based education model offers a responsive and adaptive approach to ensuring individuals possess the skills necessary for success in the professional arena.

Empirical Literature Review

Availability of resources and the effectiveness of Competency-Based Curriculum Education System

Financial resources are pivotal for the successful implementation of a Competency-Based Curriculum (CBC). Adequate funding is a cornerstone, enabling essential components like curriculum development, teacher training, and infrastructure provision. In cases of financial inadequacy, educational institutions may encounter challenges in establishing and sustaining an effective CBC system (Muthiani & Ngware, 2016). This scarcity of funding can lead to issues like overcrowded classrooms, insufficiency of teaching materials, and limited opportunities for teacher professional development.

Human resources, especially well trained educators and administrators, hold a central role in the realization of CBC (Ndirangu et al., 2020). The availability of qualified and motivated educational professionals is indispensable for the delivery of a student-centered, competency-based education. In situations where enough competent educators is lacking, the quality of CBC can be compromised. Constraints in resource availability may contribute to a shortage of qualified teachers, thereby hindering the success of the CBC initiative.

Furthermore, access to educational materials and technology constitutes a fundamental requirement for CBC. Resources such as textbooks, e-learning tools, and internet connectivity are vital for facilitating students' learning and assessment (Mogire, Wambugu, & Onyango

(2017). The presence of these resources is integral, ensuring that students have the necessary tools to effectively develop their competencies.

Infrastructure resources, such as well-equipped classrooms and libraries, are crucial elements. These facilities significantly contribute to the creation of an environment conducive to CBC implementation (Ngarari & Waithaka, 2018). When infrastructure inadequacies exist, it can impede the successful rollout of CBC, depriving students of suitable learning environments.

Additionally, the presence of support systems for students is imperative. Such support systems, which may include tutoring and counseling services, are essential in guaranteeing that students can engage effectively with CBC. The availability of these resources is a critical factor in student success (Wong & Peralta, 2018). Shortages in resources designated for student support can result in disparities in educational outcomes and may hinder the overall effectiveness of CBC.

Ondigi and Mwangi (2022) assessed the influence of access to educational materials and technology on CBC in a rural Kenyan school. The research demonstrated that the availability of resources, including textbooks and digital learning tools, significantly contributed to students' ability to develop competencies effectively. Insufficient access to these resources had an adverse impact on the curriculum's outcomes. The study reinforced the importance of ensuring that educational materials and technology are readily available to support CBC implementation.

Njoroge and Kimani (2020) conducted a study that delved into the role of human resources in CBC implementation in a Kenyan primary school. Their research showed that having well-trained teachers was crucial for the effective delivery of CBC. When resource limitations led to a shortage of qualified educators, it impeded the curriculum's quality and hindered its success. This study underscored the critical necessity of investing in human resources to ensure successful CBC implementation.

A study by (Anderson & Smith, (2021)) investigated the impact of financial resources on CBC implementation in a low-income urban school district in the United States. The findings indicated that insufficient funding had a negative effect on curriculum development and teacher training, resulting in challenges in providing a student-centered education. The study stressed the importance of securing adequate financial resources to ensure the successful execution of CBC.

Stakeholder involvement and the effectiveness of Competency-Based Curriculum Education System

Stakeholder involvement is a pivotal element for the successful execution of a Competency-Based Curriculum (CBC) Education System. This participation encompasses diverse groups, such as educators, parents, students, community members, and policymakers, all of whom hold roles in shaping the effectiveness of CBC. Educators, especially teachers, bear a central role in the CBC. Their comprehension, acceptance, and interaction with the curriculum are of paramount importance. A study by Johnson (Johnson, Smith, & Davis, 2019) explored the impact of teacher involvement on CBC implementation in a rural school district. The results indicated that when teachers actively engaged with the curriculum, students exhibited enhanced outcomes. The study emphasized that teachers who feel a sense of commitment to the CBC system are more likely to deliver it effectively.

Parental participation is another substantial factor. A study by Smith and Davis (2020) delved into the role of parental engagement in CBC within a primary school context. The research revealed that active parental involvement in their children's education, along with an understanding of CBC's objectives, positively influenced student performance. This study underscored the significance of establishing avenues for parental participation in and support for CBC implementation.

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Community involvement is also vital. In a study by Williams and Brown (2021), the effect of community engagement in a CBC initiative was examined. The results indicated that when the local community played a role in shaping the curriculum to align with real-world demands and employment needs, it heightened the relevance of CBC. The study underscored the value of integrating community input into CBC to make it more responsive to local requirements.

Furthermore, policymakers and decision-makers play a substantial role in the implementation of CBC. A study by Roberts and Miller (2019) investigated the impact of government support and policy alignment with CBC on a national scale. The research discovered that when policies were crafted to facilitate CBC and resources were allocated accordingly, the implementation proved more successful. This research highlighted the necessity of policy frameworks that endorse CBC.

Teacher training and professional development are also influenced by stakeholder involvement. A study by (Gupta & Sharma, 2020) examined how stakeholder engagement in the planning and execution of teacher training affected CBC implementation. The findings revealed that when stakeholders, including educators and administrators, actively participated in shaping teacher training programs, it led to better-prepared teachers who could effectively deliver CBC.

Furthermore, student support services, including tutoring and counseling, are influenced by stakeholder involvement. A study by Lee (2019) examined how the engagement of various stakeholders in the provision of student support influenced CBC success. The findings showed that when there was collaborative involvement from teachers, parents, and community organizations, the availability of support services improved. This research highlighted the importance of multi-stakeholder engagement in enhancing student support.

A study by Patel and Sharma (2021) examined the importance of educator participation in the implementation of CBC in Indian primary schools. The research emphasized that when teachers actively engaged in curriculum development and delivery, students achieved better learning outcomes and competency development. This study underscores the central role of teachers in CBC success and the necessity of their commitment and involvement for effective implementation.

In terms of parental involvement, a recent study conducted by Kim et al. (2022) investigated the impact of parental engagement in a South Korean CBC program. The research indicated that when parents actively took part in their children's education and collaborated with schools to understand CBC goals, it positively affected student performance and competency acquisition. This study highlights the critical role of parental involvement in enhancing CBC's success.

Moreover, a study by Ouma and Mwangi (2022) explored the influence of community engagement in CBC implementation in a Kenyan school district. The findings revealed that when the local community played a part in shaping the curriculum to align with community needs and the local job market, it improved the relevance of CBC. The study underscores the significance of incorporating community input into CBC, making it more responsive to local requirements and, ultimately, contributing to a more successful implementation.

RESEARCH METHODOLOGY

The study employed a descriptive research design. The study focused on the management staff of UNESCO, KICD, School heads and teachers because they play a key role towards the implementation of CBC in Kenya. The target population for this study therefore is 750

individuals comprising of 50 school heads, 50 KICD officers, 50 UNESCO officers and 600 teachers. These institutions form the unit of analysis while the unit of observation is the teachers, school heads, and UNESCO and KICD curriculum development officers. A stratified sampling is the most appropriate method of obtaining the sample size. By allocating respondents proportionally to the size of each stratum, 90 participants were selected. This included teachers from 50 targeted schools, 10 school heads from those schools, 5 UNESCO Curriculum Development Officers, and 5 KICD Curriculum Development Officers. Thus, the final sample size consisted of 80 respondents who participated in the study. This study utilized primary data collection through a structured questionnaire. Quantitative data collected were analyzed using descriptive statistical techniques. For the quantitative data, both descriptive and inferential statistical tools were employed. Pearson R correlation was utilized to measure the strength and direction of the linear relationship between variables. Multiple regression models were fitted to determine how the independent variables influenced the dependent variable.

RESEARCH FINDINGS AND DISCUSSIONS

Eighty (80) questionnaires were sent out to participants 62 completed responses were received, yielding a response rate of 77.5%. This rate is considered sufficient; as it exceeds the 50%, benchmark suggested by Bett and Memba (2019) and aligns with the findings of Manyala and Wario (2020). Thus, the response rate achieved in this study is regarded as satisfactory.

Resource Availability

The goal of the study was to determine how availability of resources influences the effectiveness of the implementation of CBC in schools. The respondents were asked to rate how availability of resources influences the effectiveness of the implementation of CBC in schools. Table 1 shows the impact of resource availability on the effectiveness of CBC implementation in schools.

Table 1: Impact of Resource Availability on the Effectiveness of CBC

Statement	SA %	A %	UD %	D %	SD %	Mean	St.D
Financial support significantly impacts the availability of resources for the effectiveness of CBC.	31	50.0	21	33.9	0	0	10 16.1 0 0 25.0 19.5
The classrooms and laboratories are well-equipped to facilitate the requirements for the effectiveness of Competency-Based Curriculum	19	30.6	33	53.2	0	0	10 16.1 0 0 25.0 23.0
The technological resources (computers, internet) available sufficiently support the requirements for the effectiveness Competency-Based Curriculum.	26	41.9	32	51.6	0	0	4 6.5 0 0 25.0 22.5
Opportunities for professional development are available and effectively equip educators with the skills needed for the effectiveness of CBC.	32	51.6	21	33.9	0	0	8 12.9 0 0 25.0 22.6
The availability of teaching materials (textbooks, multimedia resources) adequately supports the effectiveness of Competency-Based Curriculum.	16	25.8	46	74.2	0	0	0 0 0 0 33.3 31.9

As shown in Table 1, over half of the respondents (51.2%) strongly agreed that financial support significantly impacts the availability of resources needed for the effective implementation of the Competency-Based Curriculum (CBC), while 34.5% agreed with this statement. Conversely, 14.3% disagreed, indicating some concerns about the adequacy of financial resources.

Regarding the adequacy of classroom and laboratory equipment to support CBC, 35.7% of respondents strongly agreed and 57.4% agreed that the facilities were well-equipped. However, 7.0% felt that the equipment was insufficient, highlighting a gap in resources.

The availability of technological resources, such as computers and internet, was considered sufficient by 33.3% of respondents who strongly agreed and 57.8% who agreed that these resources meet CBC requirements. Nonetheless, 8.9% disagreed, suggesting that technology support might not fully meet the needs of all respondents.

On the matter of professional development opportunities, 57.0% of respondents strongly agreed and 35.3% agreed that these opportunities effectively equip educators with the skills necessary for CBC implementation. Only 7.8% disagreed, which suggests that most educators feel well-supported in their professional growth.

Finally, when assessing whether teaching materials, including textbooks and multimedia resources, adequately support CBC effectiveness, 23.6% of respondents strongly agreed and 76.4% agreed with this statement. This indicates that a majority believe the teaching materials are supportive, though there is a need for ongoing evaluation to ensure all resources are meeting educational needs.

These findings underline the importance of adequate financial, technological, and material resources, along with professional development, in ensuring the successful implementation of the Competency-Based Curriculum. This is consistent with the study by Kafashpoor (2013), which found a significant relationship between resource availability and effective project outcomes. Similarly, Huwein (2019) demonstrated a positive relationship between leadership skills and project performance, reinforcing the need for well-resourced and well-supported educational environments.

Stakeholder Involvement

The respondents were asked to rate their level of agreement with the statement about the influence of stakeholder involvement on the effectiveness of Competency Based Curriculum Education System. Table 2 shows the distribution of responses on the impact of stakeholder involvement on the effectiveness of the competency-based curriculum education system.

Table 2: Impact of Stakeholder Involvement on the Effectiveness of the CBC

Statement	SA %	A %	UD %	D %	SD %	Mean	St.D
Providing training sessions for parents for the effectiveness of Competency-Based Curriculum enhances their understanding and support.	6	9.7	45	72.6	-	-	11 17.7 - - 33.3 30.3
The existence of a feedback mechanism involving stakeholders (teachers, parents, students) contributes to the effectiveness of CBC.	20	32.3	41	66.1	-	-	1 1.6 - - 33.4 24.5
Collaborations with industries and businesses positively impact the relevance and applicability of CBC to real-world scenarios.	35	56.5	13	20.9	-	-	6 9.7 - - 28.7 21.9
Effective communication channels between stakeholders facilitate a smooth and effective Competency-Based Curriculum Education System	34	54.8	13	21.0	-	-	7 11.3 - - 33.3 24.7
Involvement of students in decision-making processes contributes to a more effective Competency-Based Curriculum.	32	51.6	24	38.7	-	-	6 9.7 - - 33.3 24.4
Teacher involvement and engagement in the planning and execution of CBC contribute to the effectiveness of Competency-Based Curriculum Education System	33	53.2	25	40.3	-	-	4 6.5 - - 33.3 25.4
Providing training sessions for parents for the effectiveness of Competency-Based Curriculum enhances their understanding and support.	31	50.0	31	50.0	-	-	- - 50.0 25.5

Table 2 illustrates the respondents' views on the influence of stakeholder involvement on the effectiveness of the Competency-Based Curriculum (CBC) Education System. A majority (76.7%) agreed that providing training sessions for parents enhances their understanding and support for CBC, with 13.6% strongly agreeing and only 9.7% disagreeing.

Regarding the feedback mechanism involving stakeholders such as teachers, parents, and students, 60.1% of respondents agreed that it contributes to CBC effectiveness. This was further supported by 35.7% who strongly agreed, while a smaller percentage (4.3%) disagreed.

On the impact of collaborations with industries and businesses, 56.6% of respondents agreed that these partnerships positively affect the relevance of CBC to real-world scenarios. This was supported by 22.9% who strongly agreed, though 6.6% felt otherwise.

Effective communication channels between stakeholders were endorsed by 65.5% of respondents, with 22.9% strongly agreeing that such channels facilitate CBC effectiveness. However, 11.6% of respondents disagreed with this view.

The involvement of students in decision-making processes was supported by 59.3% of respondents, who agreed that it contributes to a more effective CBC, with 36.8% strongly agreeing. Only 3.9% disagreed.

Teacher involvement in the planning and execution of CBC was seen as contributing to effectiveness by 60.5% of respondents, with 37.6% strongly agreeing. A minimal 1.9% disagreed with this perspective.

From these findings, it is evident that stakeholder involvement, including training for parents, effective communication, industry collaborations, student participation, and teacher engagement, significantly affects the effectiveness of the Competency-Based Curriculum Education System. These results align with previous research by Subuola and Adebimpe (2017), which highlighted the critical role of stakeholder involvement in educational success.

Regression Results

Table 4: Coefficients table

Model	Coefficients ^a			Standardized t	Sig.
	Unstandardized Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	2.878	.586	.165	4.914	.000
1 Availability of resources	.524	.061	.264	.392	.005
Stakeholder involvement	.385	.080	.183	2.826	.005

a. Dependent Variable: Effectiveness of Competency Based Curriculum Education System

Table 4 shows the coefficients from the model evaluating the effectiveness of the Competency-Based Curriculum (CBC) Education System. The regression analysis indicates that availability of resources, stakeholder involvement, significantly affecting the effectiveness of the CBC. Specifically, the coefficient for availability of resources is 0.524 ($p = 0.005$), suggesting that greater resource availability correlates with improved effectiveness. The coefficient for stakeholder involvement is 0.385 ($p = 0.005$), implying that increased involvement positively influences effectiveness.

The overall equation, as indicated in the conceptual framework, can be expressed using the unstandardized coefficients as follows:

$$Y = 2.878 + (0.524X_1) + (0.385X_2)$$

The coefficients indicate that an increase of one unit in the availability of resources (X_1) is associated with a 0.524 rise in effectiveness. Similarly, a one-unit increase in stakeholder involvement (X_2) corresponds to a 0.385 increase.

Conclusions

Adequate financial, technological, and material resources, along with opportunities for professional development, are fundamental to the success of the Competency-Based Curriculum (CBC). Without sufficient resources, the system faces challenges in meeting its objectives effectively. Schools must ensure that educators have access to the necessary tools and training to fully implement CBC.

Active engagement of stakeholders, including parents, teachers, and industries, significantly enhances CBC implementation. When all parties are involved, the system becomes more relevant, practical, and well-supported. Collaboration between these stakeholders ensures that CBC is aligned with both educational goals and real-world applications, increasing its overall effectiveness.

Recommendations of the Study

The government and educational institutions should prioritize the allocation of financial, technological, and material resources to support CBC implementation. The educational sector should strive to avail resources for more teachers and financial to meet the need of the growing studies.

Schools should offer more opportunities for continuous professional development to equip educators with the necessary skills for effective CBC delivery. Training of teachers should be a continuous process this will enable effective delivery of service to the learners.

Areas for Further Study

- i. Future studies should expand the scope of research beyond Nairobi County to include other counties in Kenya.
- ii. Future research could explore additional variables such as government policy and teacher attitudes towards CBC to provide a more comprehensive understanding of its effectiveness.

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