

**INFLUENCE OF HEAD TEACHERS' SUPERVISION AND PLANNING STRATEGIES ON
LEARNER OUTCOMES UNDER THE COMPETENCY-BASED CURRICULUM (CBC) IN
PRIMARY SCHOOLS IN GANZE SUB-COUNTY, KILIFI COUNTY, KENYA**

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ABSTRACT

This study investigated the influence of head teachers' supervision and planning strategies on learner outcomes under the Competency-Based Curriculum (CBC) in primary schools in Ganze Sub-County, Kilifi County, Kenya. Using a mixed-methods descriptive survey design, data were collected from 247 respondents (106 head teachers, 212 teachers, 318 learners, and 8 education officers) via questionnaires, interviews, and document analysis. Quantitative findings revealed strong positive practices in supervision (classroom observations, $M = 4.63$; feedback, $M = 4.67$) and planning (resource allocation, $M = 4.97$; curriculum alignment, $M = 4.65$). Regression analysis showed a robust relationship ($R = 0.912$, $R^2 = 0.831$) between the two independent variables and CBC learner outcomes, with supervision exerting a stronger effect ($\beta = 0.662$) than planning ($\beta = 0.187$). Qualitative insights highlighted the role of consistent monitoring and participatory planning in fostering teacher accountability and competency acquisition, though gaps in long-term strategic planning and resource constraints persist. Anchored in Systems Theory and the School Effectiveness Model, the study concludes that enhanced head teacher capacity in supervision and inclusive planning is critical for CBC success in rural contexts. Recommendations include targeted TSC training, MoE resource support, and school-level participatory planning frameworks.

Keywords: Head Teacher Supervision, Strategic Planning, Learner Outcomes, Competency-Based Curriculum, Primary Schools, Ganze Sub-County

INTRODUCTION

Despite global success in CBC implementation in countries like Finland and Singapore, Kenya's rollout especially in rural areas like Ganze Sub-County has faced major leadership and systemic challenges. Globally, effective school supervision and planning strategies by headteachers have been instrumental in ensuring the successful implementation of Competency-Based Curriculum (CBC) systems. In countries such as Finland, Singapore, and the United Kingdom, structured leadership programs equip school heads with supervisory and strategic planning competencies necessary to guide teachers and enhance learning outcomes (Cheng & Chan, 2021; Mohd Nor & Abdul Razak, 2021; Zhu et al., 2023). For instance, the UK's National Professional Qualification for Headship (NPQH) provides comprehensive training on instructional supervision and school improvement planning, while Singapore emphasizes data-driven leadership and collaborative supervision to enhance learner competencies such as creativity and problem-solving (Young, 2011; Tseng, 2019). Similarly, regional models in South Africa and Ghana have demonstrated that professional leadership development and structured planning frameworks improve headteachers' ability to implement CBC and support teacher performance, resulting in better learner outcomes (Mpofu & Sefotho, 2024; Mensah, Ofori-Ansah & Amoah, 2017).

In Kenya, however, gaps in headteachers' supervision and planning strategies continue to impede CBC success, particularly in rural areas such as Ganze Sub-County. Despite the introduction of CBC in 2017 to promote critical thinking, creativity, and collaboration, many school leaders lack continuous professional training to conduct effective supervision or develop strategic school plans (TSC, 2022; KICD, 2023). Reports indicate that only about 40% of administrators in Ganze have undergone formal CBC-related leadership training, limiting their capacity to guide teachers and align school programs with CBC goals (Ganze Sub-County Education Office, 2023). Weak planning practices—such as inadequate timetabling, resource allocation, and monitoring—have further constrained effective implementation, contributing to low learner outcomes and poor competency acquisition. Strengthening headteachers' supervision and planning capacities through sustained leadership development initiatives is therefore essential for improving CBC outcomes in Kenya and bridging the gap with global best practices (Mpaata, 2019).

Statement of the Problem

Globally, the successful implementation of the Competency-Based Curriculum (CBC) in countries such as Finland and Singapore has been attributed to effective school leadership practices that emphasize systematic supervision and strategic planning to enhance learner competencies such as creativity, problem-solving, and collaboration (Cheng & Chan, 2021; Mohd Nor & Abdul Razak, 2021; Zhu et al., 2023). In contrast, Kenya continues to face significant challenges in these areas, particularly in rural counties like Kilifi, where school leadership remains a critical yet underexplored determinant of learner outcomes. Empirical evidence from Ganze Sub-County indicates that less than 45% of headteachers have received formal training on CBC-related supervision and planning strategies, resulting in inconsistent instructional monitoring, weak school planning, and uneven learner achievement (Ganze Sub-County Education Office, 2023; TSC, 2022). Recent assessments show that approximately 38% of Grade 6 learners in Ganze Sub-County have not attained proficiency in key CBC competencies, suggesting that ineffective headteacher supervision and planning may be hindering curriculum delivery and learner performance (KICD, 2023). While existing studies have examined leadership and academic performance in various Kenyan contexts (Ampofo, Onyango & Ogola, 2019; Omogi, 2020; Theodomir & Claire, 2022), they often overlook the integrated influence of supervision and planning strategies within primary schools under CBC, especially in marginalized rural settings. This gap shows the urgent need to examine how headteachers' supervision and planning strategies directly influence learner competency acquisition under CBC in Ganze Sub-County; a critical yet underexplored rural context.

Objectives of the Study

- To examine the head teacher's school supervision strategies and its influence on Learner outcomes under CBC curriculum in Ganze Sub-County
- To assess the head teacher's planning strategy and its influence on Learner outcomes under CBC curriculum in Ganze sub-county.

LITERATURE REVIEW

Head Teacher's School Supervision and Learner Outcomes

In Ghanaian senior high schools, Ampofo, Onyango, and Ogola (2019) looked at how the supervision of school heads affected teachers' role performance. They did find a statistically significant correlation between instructional supervision and teacher performance, but they only looked at secondary schools and teachers' output rather than students' abilities. Moreover, their findings relate to a context that does not operate under CBC principles.

Theodomir and Claire (2022) found a strong positive correlation between head teachers' instructional supervision and teacher performance in Rwanda's public primary schools. While their work underscores the importance of pedagogical support and supervision, it still centers on teacher performance metrics and not the development of learner competencies, which are central to CBC. Additionally, the Rwandan context, though regionally relevant, is shaped by different curricular and policy frameworks than those in Kenya.

Omogi (2020) explored the impact of instructional supervision on KCPE performance in Mbita Sub-County, Kenya. Though geographically closer and relevant to the Kenyan system, the study emphasized national exam scores, which CBC deliberately shifts away from. The focus on KCPE limits its applicability to CBC's multidimensional approach to assessing learner growth, which goes beyond exams to include skills, values, and attitudes.

Njogu (2020) focused on how head teachers' supervisory practices influence academic achievement in Kasarani Sub-County. Like the others, the study emphasized academic performance and highlighted challenges in classroom observation and supervision. However, it did not situate these practices within the CBC context or examine how they impact competency acquisition, which represents a major curricular and pedagogical shift in Kenya.

Planning Within the School and Learner Outcomes

Secondary school students in Rwanda were the subjects of an investigation by Odette and Andala (2022) into the connection between school strategy planning and their academic achievement. Their study found that effective strategic planning—particularly when it involved stakeholder participation and clear communication—had a statistically significant positive impact on learners' academic outcomes ($r = .298$, $p = .006$ for stakeholder involvement). These findings underscored the value of inclusive planning in shaping student performance indicators such as discipline, exam readiness, and class attendance. However, their analysis remained focused on academic performance in traditional exam-oriented settings, not on the development of learner competencies in skill-based curricula like Kenya's CBC.

Similarly, Kwaslema and Onyango (2021) investigated the link between strategic planning and academic performance in public secondary schools in Tanzania. They concluded that strategic plan implementation improved academic outcomes and that its success depended largely on stakeholder engagement and community buy-in. The researchers recommended that school heads involve all school community members in both the design and execution of strategic plans. While their findings affirm the utility of structured planning in enhancing school performance, they remain centered on exam outcomes and institutional compliance, with limited attention to student-centered competencies or pedagogical innovation.

Alogo (2021), working in the university context in western Kenya, explored how educational planning strategies influence institutional performance. His study revealed that administrative, curricular, and instructional planning positively affected teaching environments, graduate employability, and institutional reputation. Notably, instructional planning had a direct impact on learning effectiveness. While this research provides more understanding into the higher education sector, it does not directly address learner-level outcomes at the primary school level, nor does it engage with CBC implementation, which involves a more holistic, skills-based assessment of learners rather than academic attainment alone.

Theoretical Review

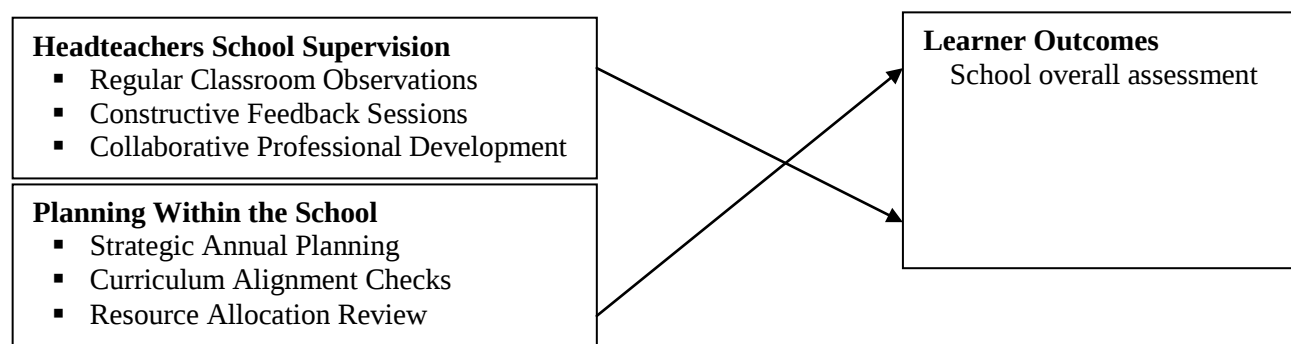
Systems Theory

Systems Theory, originally proposed by Ludwig von Bertalanffy and later adapted for educational contexts, views a school as a dynamic system composed of interrelated components working together toward shared objectives. Within this framework, the headteacher's supervision and planning strategies represent key systemic inputs that determine how effectively the school functions as an integrated unit (Abbas, Shahzad, Ekowati, Fenitra & Suhariadi, 2025). Effective supervision ensures that instructional processes align with the Competency-Based Curriculum (CBC), while strategic planning enables the efficient allocation of resources and coordination of school activities to support learner achievement. The principle of feedback and adaptation within Systems Theory is reflected through mechanisms such as teacher evaluations, learner assessments, and staff meetings, which provide critical information for refining supervision and planning practices (Ahmadi, Fadil & Miri, 2021). For instance, if learner outcomes fall below expected competency levels, a headteacher may adjust supervision schedules or revise school plans to address instructional gaps. Conversely, ineffective supervision or poor planning disrupts the systemic balance, leading to diminished teacher performance and reduced learner achievement. Therefore, Systems Theory underscores the interdependence between effective headteacher supervision, strategic planning, and sustained learner outcomes under the CBC framework (Gao, Wang & Fan, 2024; Mlenge, 2024).

The School Effectiveness Model

The School Effectiveness Model emphasizes that effective leadership, quality teaching, positive school climate, and stakeholder collaboration collectively enhance CBC-specific learner competencies: particularly collaboration, creativity, and problem-solving alongside overall learner outcomes (Cheng, 2022). Central to this model is the role of the headteacher in creating conditions that promote instructional improvement, professional development, and resource optimization. In relation to this study, the model aligns with the first objective, highlighting how consistent and purposeful supervision by headteachers strengthens teaching quality and ensures adherence to CBC standards (Ngole & Mkulu, 2021). It also supports the second objective on planning, emphasizing that structured goal-setting, resource allocation, and instructional organization enable schools to function efficiently and foster key CBC competencies such as collaboration, creativity, and problem-solving. Furthermore, the model shows that effective supervision and planning foster accountability and shared vision among teachers, leading to continuous instructional improvement. Schools with strong leadership structures tend to adapt better to curriculum changes and achieve higher learner performance levels. Thus, the School Effectiveness Model provides a comprehensive framework for understanding how headteachers' supervision and planning strategies directly influence learner outcomes under the CBC curriculum.

Conceptual Framework



Independent Variables

Dependent Variable

Figure 1: Conceptual Framework

METHODOLOGY

Research Design

This study adopted a mixed-methods descriptive survey design to investigate how headteachers' supervision and planning strategies influence learner outcomes under the Competency-Based Curriculum (CBC) in primary schools in Ganze Sub-County. The integration of both quantitative and qualitative methods allowed for a comprehensive understanding of the relationship between leadership practices and learner achievement. Quantitative data provided measurable trends on how supervision and planning affected CBC performance, while qualitative data offered deeper insights into the contextual realities and experiences of teachers and administrators. The descriptive survey design was appropriate as it enabled the researcher to examine existing conditions and relationships without manipulating the study environment, thus accurately capturing how headteachers' supervisory practices and planning mechanisms shape curriculum delivery and learner outcomes. This approach facilitated data triangulation through questionnaires, interviews, and document analysis, ensuring credible and holistic findings aligned with the study's objectives (Creswell, 2014; Mugenda & Mugenda, 2003).

Target Population and Sample Size

The target population for this study consisted of 644 participants drawn from 106 primary schools in Ganze Sub-County, Kilifi County. It included 106 headteachers, 212 teachers, and 318 learners, representing those directly involved in the implementation of the Competency-Based Curriculum (CBC). Additionally, eight education officers from both county and sub-county levels were included due to their strategic roles in monitoring, supervision, and policy implementation. These officers comprised officials from the Ministry of Education (MoE) and the Teachers Service Commission (TSC), including directors, Quality Assurance and Standards Officers (QASOs), and human resource officers. Their inclusion provided institutional perspectives on CBC implementation, complementing school-level insights on headteachers' supervision and planning strategies and their influence on learner outcomes.

A sample size of 247 respondents was determined using Yamane's formula (1967), ensuring adequate representation across all participant categories. Stratified random sampling was applied to select headteachers, teachers, and learners proportionately from each school, with learners further stratified by grade level to capture variations across CBC stages: specifically Grade 1–3 (Early Years) and Grade 4–6 (Middle Years), ensuring representation of foundational competency development in lower grades and more complex skill application in upper primary. Simple random sampling within each stratum minimized bias and ensured fair representation. Purposive sampling was used to select the eight education officers, given their limited number and specialized responsibilities in CBC oversight. This sampling combination provided a balanced and

comprehensive dataset, integrating both quantitative and qualitative insights to examine how headteachers' supervision and planning strategies influence learner outcomes in Ganze Sub-County.

Data Collection and Analysis

The study utilized questionnaires, interviews, and document analysis to collect both quantitative and qualitative data relevant to the research objectives. The questionnaire was structured with both closed- and open-ended questions to capture demographic details and insights into head teachers' management strategies specifically supervision and planning and their impact on learner outcomes under the Competency-Based Curriculum (CBC). Likert scales were employed for quantitative assessment, while open-ended questions provided richer contextual information. Data collection followed proper authorization from Mount Kenya University and the National Commission for Science, Technology, and Innovation (NACOSTI), alongside consent from school heads and participants.

Data analysis combined descriptive and inferential statistical techniques with thematic analysis to ensure comprehensive interpretation. Descriptive statistics summarized key variables through measures of central tendency and dispersion, while inferential analyses such as correlation and regression tested the relationships between management strategies and learner outcomes SPSS v27 was used. Thematic analysis of qualitative data identified recurring patterns related to head teachers' practices. Ethical standards were strictly observed, ensuring informed consent, privacy, confidentiality, and participant welfare. For minors, assent was sought in addition to parental consent. All data were securely stored and anonymized to safeguard participants' identities.

RESULTS

Head Teacher's School Supervision Strategies

The analysis of head teachers' school supervision strategies responses is presented in Table 1

Table 1: Responses on Headteachers School Supervision Strategies

Head Teachers School Supervision Strategies	Mean	Std. Deviation
Teachers feel supported and empowered by the head teacher's supervision, leading to increased motivation and dedication to their roles.	4.87	.341
Collaborative professional development activities, facilitated by the head teacher, foster a culture of continuous learning and growth among staff members.	4.78	.535
Feedback sessions provided by the head teacher are constructive, specific, and aimed at improving teaching effectiveness.	4.67	.860
The head teacher consistently conducts regular classroom observations to monitor teaching practices and student engagement.	4.63	1.019
Teachers feel supported and empowered by the head teacher's supervision, leading to increased motivation and dedication to their roles.	4.55	.634
Collaborative professional development activities, facilitated by the head teacher, foster a culture of continuous learning and growth among staff members.	4.38	.724

The analysis of head teachers' school supervision strategies in Ganze Sub-County underscores the centrality of effective instructional leadership in enhancing learner outcomes under the Competency-Based Curriculum (CBC). The findings reveal that strong supervision practices—such as regular classroom observations ($M = 4.63$, $SD = 1.019$), constructive feedback ($M = 4.67$, $SD = 0.860$), and teacher empowerment ($M = 4.87$, $SD = 0.341$)—significantly contribute to teacher motivation, improved instructional quality, and ultimately, better learner competency acquisition. These findings align with the School Effectiveness Model (Cheng, 2022), which emphasizes that effective leadership and well-structured internal processes create an environment conducive to high learning outcomes. Similarly, the Systems Theory suggests that schools function as

interdependent units; when head teachers provide consistent supervision and professional support, the interconnected subsystems teachers, learners, and administrative structures operate harmoniously, resulting in improved curriculum delivery and learner performance.

Empirical literature supports these findings, illustrating that effective supervision enhances teacher performance and instructional outcomes. Ampofo, Onyango, and Ogola (2019) found a positive link between head teachers' supervision and teacher performance in Ghanaian secondary schools, although their context did not operate under CBC principles. Likewise, Theodimir and Claire (2022) in Rwanda observed that consistent pedagogical supervision led to improved teacher performance, echoing the findings in Ganze Sub-County. However, both studies primarily emphasized teacher performance rather than the broader learner competencies central to CBC. In contrast, Omogi (2020) in Mbita and Njogu (2020) in Kasarani highlighted the influence of supervision on exam-based achievement, revealing gaps in understanding supervision's impact on holistic learner development. The present study thus extends these insights by demonstrating that supervision in the CBC era promotes creativity, problem-solving, and collaboration—competencies that go beyond traditional academic performance indicators.

Educational officials assess the effectiveness of head teachers' supervision strategies in ensuring proper CBC implementation. Supervision plays a crucial role in shaping how well schools align with CBC requirements. The strategies used by head teachers directly influence the teaching and learning process, affecting how Learner outcomes under CBC curriculum are achieved.

Official 1 noted

“Supervision is the backbone of successful CBC implementation. Without close monitoring, some teachers might revert to old teaching methods, which do not support competency-based learning.”

Strong supervision helps ensure that teachers apply learner-centered methodologies and adhere to CBC guidelines. However, weak supervision can hinder effective implementation, leading to inconsistency in competency acquisition.

Head Teacher's Planning Strategies

The analysis of head teachers' planning strategies responses is presented in Table 2.

Table 2: Head Teachers Planning Strategies

Head Teachers Planning Strategies	Mean	Std. Deviation
The school conducts thorough reviews of resource allocation to ensure equitable distribution of resources such as textbooks, teaching aids, and facilities.	4.97	.217
Proper resource allocation ensures that students have access to necessary learning materials and facilities, supporting their academic progress and performance in assessments like the Learner outcomes under CBC curriculum examinations in Ganze sub-county.	4.72	.943
Curriculum alignment checks contribute to the coherence and relevance of instruction, leading to improved student understanding and retention of key concepts.	4.65	.958
Effective strategic planning positively influences teacher preparedness and instructional quality, thus enhancing student learning outcomes.	4.62	.992
Curriculum alignment checks are regularly performed to ensure that teaching materials and methods are in line with the curriculum standards and requirements.	4.46	.706
The school conducts strategic annual planning to align educational goals and objectives with the needs of students and the community.	3.29	1.449

The analysis of head teachers' planning strategies in Ganze Sub-County shows the centrality of strategic planning in facilitating effective Competency-Based Curriculum (CBC) implementation and improving learner outcomes. The findings reveal that deliberate planning in resource allocation ($M = 4.97$, $SD = 0.217$), curriculum alignment ($M = 4.65$, $SD = 0.958$), and teacher preparedness ($M = 4.62$, $SD = 0.992$) strongly influences the quality of teaching and learning under CBC. Schools that conducted regular curriculum reviews and equitable resource distribution reported higher levels of student engagement and competency development. These practices align with the Systems Theory, which views the school as an interconnected system where planning, coordination, and resource utilization form critical subsystems that must work harmoniously to achieve desired outcomes. Similarly, the School Effectiveness Model emphasizes that clear organizational planning, supported by effective leadership, contributes to instructional coherence, goal attainment, and improved learner performance (Cheng, 2022). However, the relatively low mean score ($M = 3.29$, $SD = 1.449$) on strategic annual planning indicates that long-term goal alignment remains inconsistent, revealing a need for enhanced foresight and structured participatory planning in Ganze schools.

Empirical evidence reinforces these observations. Odette and Andala (2022), in their study of Rwandan secondary schools, found that effective strategic planning particularly when inclusive of stakeholders significantly enhanced academic achievement. Their findings highlight the role of collaborative planning and communication in shaping performance outcomes, which resonates with the present study's observation that planning under CBC thrives when teachers and community members participate actively. However, their context remained exam-oriented, unlike Kenya's CBC, which values practical skills, creativity, and learner-centered competencies. Similarly, Kwaslema and Onyango (2021) reported that strategic planning in Tanzanian schools improved academic outcomes, emphasizing the importance of stakeholder involvement and community buy-in—concepts that are equally vital for CBC's holistic approach. Although their research focused on examination results, it underscores that participatory planning frameworks can also drive competency-based learning success when adapted to CBC's philosophy. Supporting this view, Alogo (2021) demonstrated that instructional and curricular planning in higher education enhanced institutional performance and graduate employability, affirming that well-coordinated planning fosters efficiency and learning effectiveness, mirroring the CBC principle that structured preparation improves the acquisition of practical skills. In the context of Ganze Sub-County, these insights highlight that planning within schools operates as a systemic mechanism, when leadership, teachers, and resources align toward shared goals, learners are more likely to achieve CBC competencies. Empirical evidence reinforces these observations. Odette and Andala (2022), in their study of Rwandan secondary schools, found that effective strategic planning, particularly when inclusive of stakeholders, significantly enhanced academic achievement ($r = .298$, $p = .006$). Their findings highlight the role of collaborative planning and communication in shaping performance outcomes, which resonates with the present study's observation that planning under CBC thrives when teachers and community members participate actively. However, their context remained exam-oriented, unlike Kenya's CBC, which values practical skills, creativity, and learner-centered competencies.

Similarly, Kwaslema and Onyango (2021) reported that strategic planning in Tanzanian schools improved academic outcomes, emphasizing the importance of stakeholder involvement and community buy-in—concepts that are equally vital for CBC's holistic approach. Although their research focused on examination results, it underscores that participatory planning frameworks can also drive competency-based learning success when adapted to CBC's philosophy. Supporting this view, Alogo (2021) demonstrated that instructional and curricular planning in higher education enhanced institutional performance and graduate employability, affirming that well-coordinated planning fosters efficiency and learning effectiveness, mirroring the CBC principle that structured preparation improves the acquisition of practical skills. In the context of Ganze Sub-County, these insights highlight that planning within schools operates as a systemic mechanism—when leadership, teachers, and resources align toward shared goals, learners are more likely to achieve CBC competencies.

Proper planning is essential for schools to align their activities with CBC expectations. Educational officials discuss how head teachers in Ganze Sub-County develop plans to ensure smooth implementation of CBC. Effective planning contributes significantly to the achievement of Learner outcomes under CBC curriculum by structuring learning activities, providing necessary resources, and ensuring timely execution of tasks.

Official 3 shared

“Some head teachers hold weekly planning meetings with their teachers, ensuring that learning materials and activities are well-structured to meet CBC requirements. Others, however, struggle due to a lack of training or limited resources.”

Challenges such as inadequate funding, limited teacher training, and infrastructure constraints have been observed to negatively impact planning efficiency in some schools.

Regression Results

Regression analysis was done to determine the relationship between the variables. The model summary is presented in Table 3

Table 3: Regression Model Summary

Model	R	R Square	Adjusted R Square
1	.912 ^a	.831	.829

a. Predictors: (Constant), Planning within the school , Head teacher's school supervision

The regression results reveal a strong positive relationship ($R = 0.912$) between head teachers' school supervision, planning within the school, and learner outcomes under the CBC curriculum, with the model explaining 83.1% of the variance ($R^2 = 0.831$). This indicates that effective supervision and strategic planning significantly enhance CBC performance. These results align with findings by Odette and Andala (2022) and Kwaslema and Onyango (2021), who showed that inclusive and well-structured planning improves learning outcomes, and with Alogo (2021), who emphasized that coordinated instructional planning enhances learning effectiveness. Consistent with the Systems Theory and School Effectiveness Model, the findings affirm that when head teachers' supervision and planning operate cohesively as part of an integrated school system, they create the conditions necessary for improved learner competencies and effective CBC implementation. The coefficients of the regression model are presented in Table 4

Table 4: Coefficients of the Regression Model

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.529	.084		6.299	.000
Head teacher's school supervision	.662	.026	.814	25.018	.000
Planning within the school	.187	.035	.176	5.406	.000

a. Dependent Variable: Performance of learners in CBC competences

The regression equation is as presented below

$$Y = 0.529 + 0.662X_1 + 0.187X_2$$

Y – Performance of learners in CBC competences

X₁– Head teacher's school supervision

X₂– Planning within the school

The regression equation indicates that both head teachers' school supervision and planning within the school positively influence learner outcomes under the CBC curriculum. The constant value (0.529) implies that even without the influence of these two factors, learner performance maintains a moderate baseline, while the coefficient for supervision (0.662) demonstrates that it has a stronger effect on learner outcomes compared to planning (0.187). This suggests that effective supervision—through classroom observation, feedback, and professional support—plays a more direct role in improving CBC competencies. These findings are consistent with those of Theodomir and Claire (2022), who reported that instructional supervision strongly enhances teacher effectiveness, and with Ampofo, Onyango, and Ogola (2019), who found similar positive correlations between supervision and performance. The influence of planning aligns with Odette and Andala (2022) and Kwaslema and Onyango (2021), who emphasized that strategic and inclusive planning contributes to improved educational outcomes. In line with the Systems Theory and School Effectiveness Model, these results affirm that when supervision and planning interact cohesively, they create a structured and responsive school environment that promotes effective CBC implementation and stronger learner competencies.

CONCLUSION AND RECOMMENDATION

The study concludes that head teachers' school supervision plays a vital role in enhancing learner outcomes under the Competency-Based Curriculum. Effective supervision ensures that teachers remain accountable, lessons are well-delivered, and instructional methods align with CBC objectives. Through consistent monitoring, feedback, and mentorship, head teachers promote teaching quality and learner engagement, leading to improved acquisition of competencies such as critical thinking and collaboration. Strengthening supervisory practices can therefore enhance instructional consistency, motivate teachers, and ensure continuous improvement in CBC implementation.

Planning within the school also emerged as a critical determinant of learner performance. Strategic planning enables schools to align goals, allocate resources effectively, and organize instructional activities in ways that support competency development. When head teachers engage teachers and stakeholders in planning, it fosters ownership, coordination, and responsiveness to learner needs. The study implies that enhancing participatory and data-driven planning processes can improve curriculum delivery, resource management, and the overall effectiveness of CBC implementation in Ganze Sub-County.

The Teachers Service Commission should strengthen capacity-building programs for head teachers, focusing on effective supervision, instructional leadership, and long-term strategic annual planning under the CBC framework. Specialized training modules on participatory, data-driven annual planning, explicitly addressing the identified gap ($M = 3.29$), should be prioritized to equip head teachers with skills in goal-setting, stakeholder engagement, and alignment of school plans with CBC competencies. Regular mentorship, performance monitoring, and accountability measures that reward effective supervision and planning should be institutionalized.

The Ministry of Education should provide adequate policy support and prioritized resource allocation to directly address critical implementation barriers in Ganze Sub-County, including inadequate funding, limited teacher training, and infrastructure constraints. This includes timely provision of CBC-aligned teaching and learning materials, infrastructure upgrades (classrooms, ICT facilities), and sustained in-service training for both head teachers and teachers. The ministry should also establish regular school-level CBC evaluation mechanisms to identify planning and supervision gaps and deliver targeted interventions for equitable learner outcomes.

School management should institutionalize participatory and data-driven annual planning cycles that actively involve teachers, parents, and community members in decision-making. To close the strategic planning deficit ($M = 3.29$), schools must adopt structured templates for annual work plans that include clear CBC competency targets, resource forecasts, and monitoring milestones. Effective internal supervision and collaborative

planning should be embedded in school routines to enhance teaching quality, accountability, and sustained competency-based learning success.

Areas for Future Research

Future studies should examine the long-term effects of head teachers' supervision on learner competency development under the CBC framework. Such research could explore how different supervision styles, feedback mechanisms, and teacher support systems influence the acquisition of practical skills and attitudes among learners. A longitudinal approach would provide deeper insight into how sustained supervisory practices contribute to continuous improvement in teaching and learning outcomes.

Further research should also focus on the role of school-level planning in enhancing CBC implementation across diverse contexts. Comparative studies between rural and urban schools could reveal how variations in resource availability, stakeholder engagement, and strategic goal-setting affect learner outcomes. This would help identify context-specific planning models that strengthen the effectiveness and sustainability of CBC in Kenya's education system.

REFERENCES

- Aboudahr, I., & Olowoselu, A. (2018). *Decision-making styles of principals and their effects on teacher performance in secondary schools*. Journal of Educational Administration and Policy Studies, 10(2), 45–57.
- Alogo, P. (2021). *Influence of educational planning strategies on institutional performance in universities in Western Kenya*. International Journal of Education and Research, 9(4), 32–45.
- Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2019). *Trends in global higher education: Tracking an academic revolution*. UNESCO Publishing.
- Ampofo, E. T., Onyango, G., & Ogola, F. (2019). *Instructional supervision and teacher role performance in secondary schools in Ghana*. Journal of Educational Management, 8(3), 66–79.
- Cheng, Y. C. (2022). *School Effectiveness and Improvement: Theory into Practice*. Routledge.
- Cheng, Y. C., & Chan, M. (2021). *Holistic approaches to education reform in Asia: Lessons from Singapore and Japan*. Asia Pacific Education Review, 22(3), 367–380.
- Cooper, D. R., & Schindler, P. S. (2014). *Business research methods* (12th ed.). McGraw-Hill Education.
- Dagala, M., Kilag, L., Unabia, A., & Arcillo, M. (2023). *Transformational school leadership and educational quality improvement in the 21st century*. International Journal of Educational Leadership and Management, 11(1), 55–70.
- Kiwale, M., & Muteti, J. (2020). *Teacher motivation and its influence on pupil performance in primary schools in Kenya*. African Journal of Education Studies, 7(2), 102–117.
- Kombo, D. K., & Tromp, D. L. A. (2015). *Proposal and thesis writing: An introduction*. Paulines Publications Africa.
- Kwaslema, J., & Onyango, G. (2021). *Strategic planning and academic performance in public secondary schools in Tanzania*. East African Journal of Education and Social Sciences, 2(3), 75–88.
- Macha, E., & Mhagama, L. (2022). *Teachers' participation in decision-making and work performance in public secondary schools in Tanzania*. African Journal of Educational Research and Development, 6(2), 89–104.

- Mohd Nor, N., & Abdul Razak, A. (2021). *Professional leadership training and school management effectiveness: Evidence from the UK's NPQH model*. Journal of Educational Leadership and Policy, 4(1), 20–34.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches*. Acts Press.
- Odette, M., & Andala, O. (2022). *School strategic planning and students' academic performance in secondary schools in Rwanda*. African Journal of Educational Management, 8(1), 54–63.
- Omogi, A. (2020). *Influence of instructional supervision on teachers' instructional practices in Mbita Sub-County, Kenya*. Educational Research Journal, 11(5), 71–81.
- Rimando, M., et al. (2015). *Data collection challenges and recommendations for early career researchers*. The Qualitative Report, 20(12), 2025–2036.
- Schmoker, M. (2018). *Results now 2.0: The case for a coherent system of teaching and learning*. ASCD.
- Taherdoost, H. (2016). *Validity and reliability of the research instrument: How to test the validation of a questionnaire/survey in a research*. International Journal of Academic Research in Management, 5(3), 28–36.
- Theodomir, T., & Claire, N. (2022). *Instructional supervision and teacher performance in Rwandan secondary schools*. East African Journal of Education, 4(1), 13–25.
- Tseng, C. (2019). *Leadership in education: Bridging policy and practice*. Journal of Global Education Policy, 6(2), 77–90.
- Young, M. (2011). *Education, knowledge, and the curriculum: Towards a new sociology of education*. Routledge.
- Zhu, C., He, L., Zhang, Y., & Wang, H. (2023). *Transformational leadership and school performance: The mediating role of teacher collaboration*. International Review of Education, 69(1), 77–94.
- Zou, W., Falcon, J. R., Alonso-Hernández, J., & León, M. (2023). *Teacher motivation and student engagement: The mediating role of instructional style in competency-based learning*. Educational Psychology International, 42(2), 112–126.