

HEADTEACHERS' TEACHER CAPACITY BUILDING STRATEGIES' INFLUENCE ON LEARNERS' ACQUISITION OF CORE COMPETENCIES IN PUBLIC PRIMARY SCHOOLS IN NYANDARUA COUNTY, KENYA

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ABSTRACT

This paper investigates the role of capacity building as a strategic management practice employed by head-teachers and its influence on learners' acquisition of core competencies in public primary schools in Nyandarua County, Kenya. Despite the rollout of Kenya's Competency-Based Curriculum (CBC), performance in core competencies among learners remains uneven across counties. Nyandarua County, in particular, has consistently underperformed in comparison to neighboring regions. This study employs a descriptive survey design with quantitative and qualitative approaches to examine how head-teachers implement teacher development strategies and the extent to which these strategies affect learner outcomes. Drawing on Skills Acquisition Theory and Contingency Theory, the paper presents a synthesis of global, regional, and local literature, including policy analysis,

and primary data collected through questionnaires, interviews, and document analysis. Findings indicate that teacher-focused capacity building, comprising in-service training, professional mentoring, and collaborative learning platforms, significantly improves instructional delivery, thereby enhancing learners' core competencies in communication, critical thinking, digital literacy, and problem-solving. The paper concludes by recommending targeted investments in professional development, integration of continuous feedback systems, and strengthening of school leadership capacities to align teacher practices with CBC expectations.

Keywords: Capacity Building, Head-Teachers, Core Competencies, Competency-Based Curriculum, Instructional Leadership.

INTRODUCTION

The implementation of Kenya's Competency-Based Curriculum (CBC) since 2017 marked a transformative shift in the country's education sector. It seeks to equip learners with seven core competencies: communication and collaboration, critical thinking and problem solving, creativity and imagination, citizenship, digital literacy, learning to learn, and self-efficacy. However, the realization of these competencies is highly dependent on the ability of school leaders, particularly head-teachers, to facilitate teacher professional development. In Nyandarua County, Grade 6 learners continue to underperform in core competency assessments according to the Kenya Primary School Education Assessment (KPSEA) reports. This persistent gap is indicative of shortcomings in instructional delivery, which is closely linked to teacher capacity and the support they receive from school leadership.

Capacity building is broadly defined as the process of equipping individuals with the knowledge, skills, and tools necessary to perform effectively in their roles. In the context of primary education, it includes teacher training, coaching, mentoring, and ongoing professional development. Head-teachers play a crucial role as instructional leaders, facilitators of school improvement, and enablers of teacher capacity building. This paper aims to assess the strategies employed by head-teachers in Nyandarua County to enhance teacher capacity and the resulting impact on learners' acquisition of core competencies.

Statement of the Problem

Despite significant investments in curriculum reform, the effective implementation of the Competency-Based Curriculum (CBC) in Kenya has faced numerous challenges, particularly in rural counties like Nyandarua. National KPSEA results indicate that many learners are not meeting expected proficiency levels in core competencies. These outcomes raise concerns about the quality of instructional delivery, which is directly linked to teacher capacity. While the Teachers Service Commission (TSC) mandates regular teacher professional development, the actual execution of capacity building largely depends on school-level leadership. Head-teachers, as instructional leaders, play a pivotal role in facilitating teacher learning. However, there is limited empirical research that directly correlates head-teachers' capacity building efforts with learners' acquisition of CBC competencies. This study addresses this gap by exploring how head-teachers in Nyandarua County implement and manage capacity-building initiatives and what impact these have on learner outcomes.

Purpose of the Study

The purpose of this study is to investigate the role of capacity building as a head-teacher management strategy and its influence on learners' acquisition of core competencies in public primary schools in Nyandarua County, Kenya. Specifically, the study aims to understand the strategies employed by head-teachers to enhance teacher competencies and assess how these strategies impact the effectiveness of Competency-Based Curriculum (CBC) delivery. The ultimate goal is to provide evidence-based recommendations to strengthen instructional leadership and improve CBC implementation outcomes.

Objectives of the Study

- i) To establish the headteachers' teacher capacity building strategies in public primary schools in Nyandarua County, Kenya.
- ii) To determine the influence of headteachers' teacher capacity building strategies on learners' acquisition of core competencies in public primary schools in Nyandarua County, Kenya.

The study is grounded in theoretical and empirical literature and aims to fill both conceptual and contextual gaps in research on the management of CBC implementation in Kenya.

LITERATURE REVIEW

Globally, capacity building in education has been linked to improved learning outcomes. According to Darling-Hammond et al. (2017), teacher quality is the most significant school-based factor in determining student achievement. High-performing education systems such as those in Finland, South Korea, and Singapore prioritize continuous professional development (CPD) for educators to remain competent, motivated, and responsive to curriculum innovations. These systems embed mentorship, peer observation, and collaborative lesson planning into daily teaching practice (OECD, 2019).

In Sub-Saharan Africa, capacity building has been hindered by inadequate funding, centralized training structures, and irregular professional development opportunities (Ramadhani, 2017). Nevertheless, studies by Tikly et al. (2020) show that when school leaders take ownership of teacher learning, meaningful instructional change is possible. In Uganda and Rwanda, school-based teacher learning communities have contributed to measurable improvements in pedagogical quality and student engagement.

In the Kenyan context, Ajuoga and Keta (2021) found that the frequency and quality of teacher development activities are positively associated with successful CBC implementation. The Teachers Service Commission (TSC) has institutionalized Teacher Professional Appraisal and Development (TPAD), yet the degree of school-level implementation varies widely. Katou and Schwinghammer (2020) argue that local school leaders must act as instructional coaches who foster growth through feedback, shared goals, and resource facilitation. Suchyadi et al. (2020) highlight the impact of mentorship and collegial coaching on enhancing teacher reflective practice.

Additionally, research by Isaboke, Mweru, and Wambiri (2021) emphasized that digital literacy training is essential for teachers to engage students meaningfully in CBC. Capacity building that includes ICT integration empowers teachers to use interactive content and assessment tools, thus enhancing core competencies like critical thinking and collaboration. Pellegrino and Hilton (2019) affirm that teachers trained in inquiry-based and experiential learning approaches are more effective in developing learners' competencies.

Theoretical Framework

The study is underpinned by two complementary theories that elucidate the mechanisms through which capacity building influences educational outcomes:

- **Skills Acquisition Theory** (DeKeyser, 2020): This theory explains learning as a staged process where individuals progress from cognitive (declarative knowledge) to associative (practice-based) and finally to autonomous (routine execution) stages. In education, this progression is mirrored in how teachers internalize and apply pedagogical knowledge. Capacity building interventions such as workshops, simulations, and collaborative planning facilitate this development by providing repeated exposure and feedback mechanisms. The theory is particularly relevant to

CBC, where active, learner-centered pedagogies require high levels of teacher competence and adaptability.

- **Contingency Theory** (Fiedler, 1964; Koskei & Chepchumba, 2020): Contingency theory posits that the effectiveness of leadership styles depends on situational factors, including organizational structure, team maturity, and task complexity. In school contexts, head-teachers must adapt their management and capacity-building strategies to suit their specific environments. Schools in Nyandarua County, for instance, vary widely in terms of enrollment, teacher experience, and access to resources. As such, successful head-teachers employ differentiated strategies, ranging from individualized coaching to collaborative inquiry, that are responsive to school needs. This flexibility aligns with the CBC's emphasis on contextualized, learner-driven education.

Together, these theories offer a robust conceptual lens to analyze how head-teachers' leadership in capacity building contributes to the acquisition of core competencies among learners.

RESEARCH METHODOLOGY

This study utilized a descriptive survey research design to investigate the influence of capacity building on learners' acquisition of core competencies. This approach was selected because it allows for the collection of both qualitative and quantitative data, enabling a comprehensive understanding of phenomena as they occur in natural educational settings.

Target Population and Sampling

The study population comprised 345 head-teachers and 1,325 teachers in public primary schools offering Grades 4 to 6 in Nyandarua County. Stratified sampling was employed to ensure representation across the county's five educational sub-counties: Ol Kalou, Kinangop, Kipipiri, Ol Jorok, and Ndaragwa. From this, a total sample of 224 respondents (40 head-teachers and 184 teachers) was selected using proportional and simple random sampling techniques.

Research Instruments

The study employed multiple data collection tools:

- **Questionnaires:** Structured questionnaires were administered to teachers to gather quantitative data on their exposure to and perceptions of capacity building activities.
- **Interviews:** Semi-structured interviews were conducted with head-teachers to obtain qualitative insights into the planning, delivery, and perceived impact of teacher development initiatives.
- **Document Analysis:** Learners' performance records and school-based training registers were examined to triangulate and validate self-reported data.

Validity and Reliability

Content validity was ensured through expert review by university faculty and curriculum specialists. A pilot study was conducted in two schools from a neighboring sub-county to

test the clarity and relevance of the instruments. Internal consistency was measured using Cronbach's Alpha, with a coefficient of $\alpha = 0.782$ for the teacher questionnaire, indicating good reliability.

Data Analysis

Quantitative data were analyzed using the Statistical Package for Social Sciences (SPSS), employing descriptive statistics (means, frequencies, and percentages) and inferential statistics (linear regression) to determine relationships between capacity building and learner outcomes. Qualitative data from interviews were transcribed, coded thematically, and analyzed to provide contextual understanding and augment the numerical findings.

This mixed-methods approach provided a nuanced perspective on the role of head-teachers in capacity building and how these practices shape the acquisition of core competencies in learners under the CBC framework.

RESEARCH RESULTS

The study findings are presented in both narrative and tabular formats to comprehensively illustrate the relationship between head-teachers' capacity building strategies and learner outcomes.

Table 1 shows that a large majority of teachers participated in various professional development initiatives. The data indicate that in-service training sessions were attended by 88% of teachers, followed closely by school-based workshops at 86%. Mentorship and coaching programs had a participation rate of 81%, while ICT integration seminars were attended by 77%. These findings suggest that head-teachers were proactive in implementing a variety of teacher capacity-building strategies. This proactive approach likely facilitated the transfer of knowledge and skills necessary for effective CBC implementation.

Table 1: Teacher Participation in Capacity Building Activities

Activity Type	Percentage of Teachers Involved (%)
In-service training sessions	88%
School-based workshops	86%
ICT integration seminars	77%
Mentorship and coaching programs	81%

Table 2 presents the model summary of a regression analysis conducted to determine the influence of head-teachers' capacity building strategies on learners' acquisition of core competencies. The results show a correlation coefficient (R) of 0.444, indicating a moderate positive relationship. The coefficient of determination (R Square) is 0.197, suggesting that approximately 19.7% of the variance in learners' core competency acquisition can be explained by head-teachers' capacity building strategies. The F-statistic (F = 52.257) and a significance level (p = 0.000) indicate that the model is statistically significant.

Table 2: Regression Summary - Influence of Capacity Building on Core Competencies

Model	R	R Square	Adjusted R Square	Std. Error	F	Sig. (p)
Capacity Building	0.444	0.197	0.193	0.617	52.257	0.000

Table 3 provides the coefficients of the regression analysis. The unstandardized coefficient (B) for capacity building is 0.284, meaning that a one-unit increase in capacity building is associated with a 0.284 increase in the score of learners' acquisition of core competencies. The standardized beta coefficient ($\beta = 0.444$) reinforces the strength of this relationship. The t-value (7.227) and the significance value (p < 0.05) confirm that capacity building has a statistically significant impact on learners' acquisition of core competencies.

Table 3: Coefficients of Regression Analysis

Variable	Unstandardized Coefficients B	Std. Error	Beta	t	Sig. (p)
Constant	2.934	0.209	,	14.030	0.000
Capacity Building	0.284	0.039	0.444	7.227	0.000

1. Discussion

The findings of this study substantiate the crucial role of head-teachers in facilitating teacher capacity building, which significantly affects learners' acquisition of core competencies under the CBC framework. Both quantitative and qualitative data confirm that a variety of

professional development strategies, ranging from formal workshops to school-based mentoring, are instrumental in shaping teacher performance and, consequently, learner outcomes.

The regression analysis revealed a statistically significant positive correlation between capacity building and learner achievement, explaining approximately 19.7% of the variance in core competencies. This finding aligns with previous studies by Darling-Hammond et al. (2017) and Suchyadi et al. (2020), who argue that systematic teacher development interventions translate into improved instructional practices. The beta value ($\beta = 0.284$) in the regression output indicates that improvements in teacher capacity have a measurable, direct effect on learner performance, particularly in competencies such as communication, problem-solving, and digital literacy.

Qualitative interviews enriched the understanding of how head-teachers operationalize capacity building in diverse contexts. In well-resourced schools, head-teachers often partnered with NGOs and local government programs to provide ICT training and learner-centered pedagogical workshops. In contrast, head-teachers in lower-resourced schools adapted by initiating informal mentoring and peer-learning groups. This flexibility supports the relevance of Contingency Theory, which posits that leadership effectiveness depends on situational context.

Additionally, teachers who reported regular involvement in CPD initiatives expressed greater self-efficacy and enthusiasm in implementing CBC activities. They demonstrated a better grasp of formative assessment, active learning techniques, and cross-disciplinary teaching, competencies identified as critical under the CBC framework. These observations mirror findings by Pellegrino and Hilton (2019), who emphasized the relationship between well-trained educators and learner engagement.

The discussion also highlights the role of head-teachers as instructional leaders rather than administrative figures. In schools where head-teachers were perceived as supportive and involved in instructional matters, teachers felt more empowered to innovate, experiment, and collaborate. These schools reported better CBC performance outcomes, corroborating Odhiambo's (2022) assertion that leadership support is the linchpin of effective curriculum reform.

Moreover, the study identified several systemic challenges that mitigate the full realization of capacity-building outcomes. These include limited funding for teacher training, unequal access to ICT resources, and inconsistent support from external education authorities. These barriers underscore the need for a coordinated approach involving the Ministry of Education, Teachers Service Commission, and other stakeholders to standardize and support head-teachers' efforts.

In summary, the discussion affirms that capacity building is not a peripheral management function but a core leadership responsibility that significantly determines how effectively learners acquire core competencies. Head-teachers who actively design, implement, and monitor capacity-building strategies directly influence the quality of teaching and learning in their institutions.

Conclusion

This study set out to examine the influence of capacity building as a head-teacher management strategy on learners' acquisition of core competencies in public primary schools in Nyandarua County. Drawing on the Skills Acquisition and Contingency Theories, and grounded in empirical findings from both quantitative and qualitative data, the study establishes that head-teachers play a central role in shaping instructional quality through strategic teacher capacity development.

The findings reveal that schools where head-teachers actively initiate and sustain professional development activities show higher learner proficiency in CBC core competencies. This is evidenced by the significant correlation between capacity building and learner achievement, supported by a beta value of 0.284 and an R^2 of 0.197. These statistics illustrate that nearly one-fifth of the variance in learners' acquisition of competencies can be explained by head-teachers' capacity-building efforts. Furthermore, the study confirms that diverse strategies, including in-service training, mentorship, ICT training, and reflective practice, collectively enhance teacher readiness and pedagogical effectiveness.

The conclusions also reinforce that effective capacity building is highly contextual, and its success depends on the leadership style, adaptability, and resourcefulness of head-teachers. Schools in more resource-constrained environments benefit when head-teachers adopt flexible, grassroots-based approaches such as peer coaching and local resource mobilization. The ability of head-teachers to adapt strategies to their unique school settings underscores the value of Contingency Theory in educational leadership.

In addition, the role of capacity building extends beyond technical knowledge acquisition to include motivation, collaboration, and reflective teaching practice. When teachers are supported through sustained leadership, they are more likely to embrace CBC's learner-centered ethos, leading to improved learner outcomes. This holistic influence, spanning both pedagogical competence and instructional culture, demonstrates the multifaceted value of capacity building.

Therefore, it can be concluded that capacity building, under the stewardship of proactive and skilled head-teachers, is a transformative management strategy. It has a profound impact not only on teacher effectiveness but also on learners' ability to thrive under the CBC framework. The continued success of CBC in Kenya depends significantly on strengthening this linkage between school leadership and instructional improvement.

Future policies and school-based programs must prioritize structured, equitable, and context-sensitive capacity-building systems to foster inclusive, competency-driven education. The study's findings thus provide a foundation for informed interventions by education authorities and stakeholders seeking to bridge the implementation gaps in Kenya's education reform agenda.

Recommendations

1. The Ministry of Education should institutionalize CBC-aligned CPD programs and ensure equitable access across counties.
2. Head-teachers should receive leadership training focused on instructional supervision and teacher development.
3. Schools should establish internal mentorship systems and teacher learning communities.
4. Investment in ICT and instructional resources should be increased to support modern pedagogical practices.

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