



Relationship between School Leadership Support and Effective Implementation of Competency Based Education in Comprehensive Schools in Kikuyu Sub-County

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Abstract: *The implementation of Competency-Based Education (CBE) requires school-level leadership capable of translating curriculum expectations into effective teaching and learning practice. This study examined the relationship between school leadership support and effective implementation of CBE in comprehensive schools in Kikuyu Sub-County. The study was guided by Instructional Leadership Theory and Transformational Leadership Theory and adopted a mixed-methods approach to facilitate triangulation of quantitative and qualitative evidence. The study targeted 960 respondents comprising 60 headteachers and 900 teachers. A census approach was used for headteachers, while stratified random sampling was used to select teachers. The findings showed that school leadership support was generally high, with an overall mean of 4.04 (SD = 0.89). Encouraging teamwork and collaboration recorded the highest mean (M = 4.21, SD = 0.79), whereas provision of instructional materials recorded the lowest mean (M = 3.74, SD = 1.03). Pearson correlation showed a strong positive relationship between school leadership support and effective CBE implementation ($r = .684, p < .001, N = 232$). Regression analysis indicated that leadership support explained 46.8% of the variance in CBE implementation ($R^2 = .468$), and the model was statistically significant, $F(1, 230) = 198.462, p < .001$. Qualitative findings highlighted staff consultation, internal teacher mentoring, classroom supervision and delegation of academic responsibilities as important practices. The study concludes that school leadership support is an important enabling condition for effective CBE implementation, although resource provision, digital learning support, continuous teacher development and follow-up after supervision require strengthening.*

Keywords: *Competency-Based Education School leadership support, Instructional leadership, Transformational leadership, Curriculum implementation, Comprehensive schools, Kenya, Kikuyu Sub-County.*

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1. Introduction

Competency-Based Education (CBE) represents a significant shift from curriculum approaches that primarily emphasise content coverage and recall towards learning that develops demonstrable competencies, practical application, learner agency and transferable skills. Within this orientation, effective implementation depends not only

on curriculum design and teacher knowledge but also on the organisational conditions in which teaching and learning occur. School leadership is therefore central to translating curriculum policy into routine instructional practice.

School leaders influence curriculum implementation through instructional supervision, professional

development, provision and mobilisation of learning resources, communication, collaborative planning and the creation of a supportive school climate. In a competency-oriented system, these functions become particularly important because teachers are expected to use learner-centred pedagogies, integrate assessment with learning and develop competencies such as communication, collaboration, critical thinking, creativity and problem solving. Evidence on competency-based education similarly shows that implementation requires alignment between curriculum expectations, teacher capacity and school-level organisational support (Evans et al., 2020; Darling-Hammond *et al.*, 2020).

The Kenyan transition to competency-based curriculum and education has increased expectations for school-level leadership. Headteachers and other school leaders are expected to support teachers as they interpret curriculum requirements, redesign classroom practices, use competency-based assessment and respond to implementation challenges. The Kenya Institute of Curriculum Development has emphasised competency development, learner-centred approaches and assessment practices that focus on what learners can demonstrate rather than only what they can recall (Kenya Institute of Curriculum Development, 2020, 2021).

International evidence indicates that successful school leadership is associated with the creation of conditions that improve teaching and learning. Leithwood *et al.* (2020) argue that successful school leadership influences teaching and learning by establishing direction, developing people and redesigning organisational conditions. Darling-Hammond *et al.* (2020) similarly emphasise professional learning, supportive relationships and organisational conditions as important for effective educational practice. These perspectives are particularly relevant to CBE because curriculum reform requires teachers to change instructional roles, assessment practices and approaches to learner participation.

In Kenya, the implementation of CBE has nevertheless been accompanied by challenges related to teacher preparedness, access to resources, professional development and the translation of policy requirements into classroom practice. The study materials indicate that schools in Kikuyu Sub-County experience differences in leadership support, instructional resources, teacher capacity-building opportunities and digital learning support. Such differences provide a basis for examining whether school leadership support is statistically associated with effective implementation of CBE.

Comprehensive schools provide a relevant setting for examining this relationship because they require coordination of curriculum delivery, teacher support, assessment and resource use across an integrated school environment. The present study therefore examined the

relationship between school leadership support and effective implementation of CBE in comprehensive schools in Kikuyu Sub-County. The article retains the mixed-methods perspective of the underlying research and integrates statistical findings with qualitative evidence concerning leadership practices and implementation experiences.

1.1 Statement of the Problem

The implementation of CBE requires coordinated action at both classroom and school levels. Although curriculum frameworks and policy guidelines provide an overall direction, successful implementation ultimately depends on what teachers and school leaders do in daily practice. Schools may possess curriculum documents and trained teachers but still experience difficulties translating policy expectations into learner-centred instruction, competency-based assessment and the development of twenty-first-century skills.

School leadership is expected to address these challenges through instructional guidance, classroom supervision, teacher professional development, resource mobilisation, teamwork and follow-up. However, the extent to which such support is available and associated with effective CBE implementation may vary from one school to another. The study was therefore motivated by the need to generate context-specific empirical evidence on the relationship between school leadership support and effective CBE implementation in comprehensive schools in Kikuyu Sub-County.

The study also considered qualitative evidence concerning staff consultations, mentoring, classroom supervision and delegation of academic responsibilities. This was important because statistical relationships alone may not fully explain the mechanisms through which leadership support becomes visible in everyday curriculum implementation. The study consequently combined quantitative and qualitative evidence to provide a more comprehensive account of the relationship.

1.2 Purpose and Objectives of the Study

The purpose of the study was to investigate the relationship between school leadership support and effective implementation of Competency-Based Education in comprehensive schools in Kikuyu Sub-County.

The specific objectives were:

1. To assess the level of leadership support provided by school heads in comprehensive schools in Kikuyu Sub-County towards the implementation of Competency-Based Education.
2. To determine the relationship between school leadership support and the effectiveness of CBE

implementation in comprehensive schools in Kikuyu Sub-County.

3. To identify best practices in leadership support that contribute to the effective implementation of CBE in comprehensive schools in Kikuyu Sub-County.

1.3 Research Hypothesis

H₀: There is no statistically significant relationship between school leadership support and effective implementation of Competency-Based Education in comprehensive schools in Kikuyu Sub-County.

2. Literature Review

2.1 Conceptual Review

School leadership support refers to the actions, strategies and practices undertaken by school leaders to facilitate teaching, learning and curriculum implementation. In this study, leadership support was considered in terms of instructional guidance, facilitation of teacher training, provision of instructional materials, monitoring of classroom implementation and encouragement of teamwork and collaboration. These dimensions reflect the instructional, professional and organisational functions of school leadership.

Effective implementation of CBE refers to the extent to which curriculum expectations are translated into classroom practice through learner-centred pedagogy, competency-based assessment and development of twenty-first-century skills. Effective implementation therefore extends beyond the formal adoption of a curriculum and involves sustained changes in teaching, assessment and learner participation. Evans *et al.* (2020) emphasise that competency-based education requires attention to implementation processes and outcomes, while Darling-Hammond *et al.* (2020) highlight the importance of learning environments and professional conditions that enable effective instructional practice.

2.2 Theoretical Review

2.2.1 Instructional Leadership Theory

Instructional Leadership Theory emphasises the role of school leaders in directing attention towards teaching and learning through supervision, curriculum coordination, monitoring of instruction and support for teachers. This perspective is relevant to CBE because implementation requires leaders to maintain a sustained focus on instructional quality rather than limiting leadership to administrative functions. Instructional leaders clarify expectations, monitor classroom practice and provide feedback that can help teachers align instruction with curriculum goals. Leithwood *et al.* (2020) similarly identify the development of people and the redesign of

organisational conditions as important components of successful school leadership.

In the present study, Instructional Leadership Theory provides a basis for understanding how guidance, classroom monitoring, professional development and resource support may be associated with effective CBE implementation. The theory also provides a useful explanation for the qualitative finding that classroom supervision and internal mentoring were important leadership practices.

2.2.2 Transformational Leadership Theory

Transformational Leadership Theory complements the instructional perspective by emphasising shared vision, motivation, collaboration, professional learning and organisational change. CBE implementation involves substantial change in teachers' instructional roles, assessment practices and expectations of learners. Leaders who communicate a clear direction, encourage teamwork and facilitate professional learning may therefore create conditions that enable teachers to adapt to curriculum change.

The theory is particularly relevant to the study because teamwork and collaboration received the highest rating among the assessed leadership practices. The qualitative findings also identified staff consultations and delegation of academic responsibilities as mechanisms for increasing teacher participation and ownership. Transformational leadership therefore helps explain how relational and motivational practices can complement instructional supervision in supporting curriculum reform.

2.3 Empirical Review

Evidence from international literature indicates that competency-based reforms require strong implementation conditions. Evans *et al.* (2020) show that competency-based education involves complex implementation processes in which curriculum design, instructional practice and assessment need to be aligned. Darling-Hammond *et al.* (2020) further emphasise the importance of professional learning, supportive relationships and school environments in promoting effective educational practice.

Research on successful school leadership has consistently linked leadership practices with improvement in teaching and learning conditions. Leithwood *et al.* (2020) identify strong school leadership as an important organisational resource that influences teaching quality through direction setting, development of people and organisational redesign. These functions correspond closely with the support expected from school leaders during curriculum reforms.

Teacher professional development is another important component of curriculum implementation. The World Bank (2020) emphasises that professional development for competency-based curricula should be sustained and connected to teachers' practical instructional needs. One-time training may be insufficient where teachers need continuing opportunities to interpret curriculum requirements, practise new pedagogies and receive feedback.

Resource provision also matters because teachers require appropriate learning materials and digital resources to implement learner-centred and competency-oriented approaches. The comparatively lower rating for provision of instructional materials in the present study is therefore consistent with the broader literature showing that leadership support operates within material and institutional constraints.

The Kenyan evidence reviewed in the study similarly points to the importance of leadership support, teacher preparedness, professional learning and resources in curriculum reform. However, there remains limited empirical evidence specifically examining the relationship between school leadership support and effective CBE implementation within comprehensive schools in Kikuyu Sub-County. The present study addresses this contextual gap.

2.4 Research Gap

Existing literature provides substantial evidence on school leadership, curriculum reform and competency-based education. However, much of the available evidence examines leadership effectiveness broadly, teacher preparedness, curriculum implementation challenges or learner outcomes. Fewer studies directly examine the statistical relationship between school leadership support and effective CBE implementation within a specific sub-county context.

A further gap concerns the integration of quantitative and qualitative evidence. Statistical evidence can demonstrate whether leadership support is associated with implementation, while qualitative evidence can explain the practices through which such support is experienced by teachers. The present study addresses these gaps by examining school leadership support and CBE implementation together and by triangulating quantitative findings with qualitative evidence from participants.

2.5 Conceptual Perspective

The study conceptualised school leadership support as the independent variable and effective CBE implementation as the dependent variable. School leadership support was operationalised through instructional guidance, teacher training, provision of instructional materials, classroom monitoring and encouragement of teamwork. Effective CBE implementation was reflected in learner-centred pedagogy, competency-based assessment and development of twenty-first-century skills.

Table 1: Conceptual Framework

Independent Variable	Indicators	Dependent Variable	Indicators
School Leadership Support	Guidance; teacher training; instructional materials; classroom monitoring; teamwork	Effective CBE Implementation	Learner-centred pedagogy; competency-based assessment; 21st-century skills

The framework assumes that stronger school leadership support is associated with more effective implementation of CBE. The relationship may also be affected by contextual conditions such as resource availability, teacher workload, school environment and access to professional learning. These contextual factors were not treated as independent predictors in the reported regression model.

3. Methodology

The study used a mixed-methods approach combining quantitative and qualitative evidence. The quantitative component measured the level of school leadership support and examined its statistical relationship with effective CBE

implementation. The qualitative component provided contextual explanations of leadership practices and teachers' experiences during CBE implementation. Integration of the two strands strengthened interpretation through triangulation.

The target population comprised 960 respondents drawn from comprehensive schools in Kikuyu Sub-County. The population consisted of 60 headteachers and 900 teachers. A census approach was used for headteachers, while stratified random sampling was used to select teachers. The study records indicate a targeted sample of 243 respondents for the final response stage. Of these, 232 respondents completed and returned the research instruments.

Table 2: Study Population

Category	Targeted	Returned	Response Rate (%)
Headteachers	60	56	93.3
Teachers	183	176	96.2
Total	243	232	95.5

Source: Primary data, 2026.

The response rate of 95.5% was considered adequate for analysis. Respondents included school leaders and teachers who were directly involved in curriculum implementation. The gender distribution comprised 101 males (43.5%) and 131 females (56.5%). Teaching experience was distributed across below five years (20.7%), 6–10 years (31.5%), 11–15 years (26.7%) and above 15 years (21.1%).

Data were collected using a structured rating scale, a document analysis guide and a focus group discussion guide. The structured rating scale used a five-point Likert-type response format. Document analysis was used to examine school records related to curriculum implementation and leadership practices, while focus group discussions generated qualitative information concerning leadership support, implementation experiences and areas requiring improvement.

Validity was supported through expert review of the research instruments and alignment of items with the study constructs. Reliability was assessed through a pilot study and Cronbach's alpha, with the reported coefficient of 0.82

indicating acceptable internal consistency for the rating scale. Quantitative data were analysed using descriptive statistics, Pearson product-moment correlation and simple linear regression. Statistical significance was assessed at $p < .05$. Qualitative data were analysed thematically following the principles of thematic analysis described by Braun and Clarke (2021).

Ethical procedures included informed consent, confidentiality, anonymity through coding and voluntary participation. Participants were informed about the purpose of the study and their right to withdraw. The final journal submission should retain the exact ethics approval and research authorisation details contained in the approved research documentation.

4. Results and Discussion

4.1 Level of School Leadership Support

Table 3: Level of School Leadership Support

Leadership practice	support	Mean	SD	Level
Guidance on CBE implementation		4.12	0.84	High
Facilitate teacher training		4.05	0.91	High
Provide instructional materials		3.74	1.03	High
Monitor classroom implementation		4.08	0.88	High
Encourage teamwork and collaboration		4.21	0.79	High
Overall		4.04	0.89	High

Source: Primary data, 2026.

The descriptive findings indicate that the 232 respondents reported a generally high level of school leadership support, with an overall mean of 4.04 (SD = 0.89). All assessed practices were rated positively. Encouraging teamwork and collaboration recorded the highest mean ($M = 4.21$, $SD = 0.79$), followed by guidance on CBE implementation ($M = 4.12$, $SD = 0.84$), classroom

monitoring ($M = 4.08$, $SD = 0.88$) and facilitation of teacher training ($M = 4.05$, $SD = 0.91$). Provision of instructional materials recorded the lowest mean ($M = 3.74$, $SD = 1.03$), although the rating remained positive.

The findings suggest that school leaders were particularly active in promoting teamwork, providing curriculum

guidance and monitoring classroom implementation. The prominence of teamwork is consistent with transformational leadership perspectives, which emphasise collaboration, shared responsibility and professional engagement during organisational change. It is also consistent with instructional leadership perspectives that place teaching and learning at the centre of school leadership.

The comparatively lower rating for instructional materials is important because leadership commitment may not always be sufficient to overcome resource limitations. CBE requires learning materials that support learner-centred activities, practical tasks and assessment. The finding therefore indicates that strengthening leadership support should be accompanied by institutional and system-level mechanisms for resource mobilisation.

The qualitative findings reinforced the quantitative pattern. Participants reported frequent staff consultations in which school administrators and teachers discussed curriculum

implementation strategies, reviewed progress and addressed challenges. Internal teacher mentoring was also identified as a mechanism for strengthening professional learning. Classroom supervision enabled school leaders to monitor instructional practice and provide guidance, while delegation of academic responsibilities increased teacher participation and shared ownership.

These findings are consistent with Leithwood et al. (2020), who emphasise leadership practices that develop people and improve organisational conditions. They also correspond with Darling-Hammond *et al.* (2020), who stress the importance of professional learning and supportive relationships in educational improvement.

4.2 Relationship between School Leadership Support and Effective CBE Implementation

Table 4: Relationship between School Leadership Support and Effective CBE Implementation

Variables	Leadership Support	CBE Implementation
Leadership Support	1	.684
CBE Implementation	.684	1

N = 232; Correlation is significant at the 0.01 level (2-tailed).

Pearson correlation analysis showed a strong positive relationship between school leadership support and effective CBE implementation ($r = .684$, $p < .001$, $N = 232$). The result indicates that higher levels of reported leadership support were associated with higher levels of effective CBE implementation. The null hypothesis stating that there was no statistically significant relationship between school leadership support and effective CBE implementation was therefore rejected.

The strength and direction of the relationship suggest that leadership support is an important school-based factor associated with CBE implementation. However, because the study used a non-experimental cross-sectional design, the result should be interpreted as evidence of statistical association and predictive contribution rather than proof that leadership support alone causes improvements in CBE implementation.

4.3 Regression Analysis

Table 5: Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error
1	.684	.468	.462	.516

Source: Primary data, 2026.

The regression model produced $R = .684$ and $R^2 = .468$. The R^2 value indicates that school leadership support explained 46.8% of the variation in effective CBE implementation within the study sample, while the

remaining 53.2% was associated with other factors not included in the model. These factors may include teacher preparedness, workload, resource availability, school context and other institutional conditions.

Table 6: ANOVA

Source	Sum of Squares	Df	Mean Square	F	Sig.
Regression	52.816	1	52.816	198.462	.000
Residual	60.945	230	.265		
Total	113.761	231			

Source: Primary data, 2026.

The ANOVA results show that the regression model was statistically significant, $F(1, 230) = 198.462$, $p < .001$. This indicates that the model provided a statistically significant prediction of CBE implementation from school leadership

support. The regression sum of squares of 52.816 compared with the residual sum of squares of 60.945 indicates that a substantial portion of the observed variation was associated with the predictor.

Table 7: Regression Coefficient

Variable	B	Std. Error	Beta	t	Sig.
Constant	1.124	.216	—	5.20	.000
Leadership Support	.652	.046	.684	14.09	.000

Source: Primary data, 2026.

The regression coefficient indicates that school leadership support was a significant positive predictor of CBE implementation ($B = .652$, $SE = .046$, $\beta = .684$, $t = 14.09$, $p < .001$). The fitted regression equation was $Y = 1.124 + 0.652X$, where Y represents effective CBE implementation and X represents school leadership support.

The result provides strong empirical evidence that school leadership support is statistically associated with CBE implementation in the study context. It is consistent with instructional leadership theory because school leaders

influence implementation through guidance, supervision, monitoring and professional support. It also supports transformational leadership theory because teamwork, consultation, mentoring and shared responsibility can strengthen teacher commitment and collective capacity for change.

4.4 Best Leadership Practices Supporting CBE Implementation

Table 8: Best Leadership Practices Supporting CBE Implementation

Leadership practice	Frequency/Identification
Encouraging teamwork	90.5%
Teacher professional development	88.4%
Monitoring instruction	83.6%
Provision of resources	81.5%
Stakeholder involvement	75.9%

Source: Primary and qualitative evidence, 2026.

The findings identified several leadership practices associated with effective CBE implementation. Encouraging teamwork was the most frequently identified practice, followed by teacher professional development, monitoring instruction, provision of resources and stakeholder involvement. Qualitative evidence gave further meaning to these patterns. Professional development improved teachers' understanding of curriculum requirements, instructional strategies and assessment approaches. Team planning and consultation

enabled teachers to share ideas and solve implementation challenges collectively. Regular supervision strengthened accountability and enabled leaders to identify implementation difficulties. Resource mobilisation helped schools address instructional needs, while stakeholder engagement broadened the support available for curriculum implementation.

The findings indicate that effective leadership is multidimensional. Collaborative leadership creates opportunities for professional learning and collective

problem solving; instructional supervision strengthens accountability and provides feedback; professional development improves teacher capacity; and delegation promotes shared responsibility. These practices are consistent with the two theoretical perspectives guiding the study.

4.5 Areas Requiring Improvement

Despite the generally positive relationship between leadership support and CBE implementation, participants identified several areas requiring further attention. First, leadership support needs to be consistent across schools. Second, schools require increased funding for CBE instructional resources. Third, teachers require more sustained capacity-building opportunities rather than relying only on occasional training. Fourth, access to digital learning materials and ICT support should be improved. Fifth, teachers should be more actively involved in curriculum planning and school-level decisions. Finally, classroom supervision should be followed by constructive feedback, mentoring and continued monitoring.

These areas are important because leadership support operates within broader organisational conditions. A school leader may provide strong instructional guidance while being constrained by inadequate resources or limited opportunities for professional development. The findings therefore support a coordinated approach involving school leaders, teachers, the Ministry of Education, the Teachers Service Commission, Boards of Management and other education stakeholders.

5. Conclusion and Recommendations

5.1 Conclusion

This study examined the relationship between school leadership support and effective implementation of Competency-Based Education in comprehensive schools in Kikuyu Sub-County. The findings show that school leadership support was generally high, with an overall mean of 4.04 (SD = 0.89). Teamwork and collaboration received the highest rating, while provision of instructional materials recorded the lowest rating.

The study established a strong positive relationship between school leadership support and effective CBE implementation ($r = .684$, $p < .001$). Regression analysis further showed that leadership support explained 46.8% of the variation in CBE implementation and significantly predicted the dependent variable. The qualitative evidence supported the statistical findings by identifying staff consultation, internal mentoring, classroom supervision and delegation of academic responsibilities as important leadership practices.

The study concludes that effective CBE implementation requires more than curriculum policy and teacher effort. It

depends on school-level leadership that coordinates instruction, supports professional learning, encourages collaboration, monitors implementation and helps mobilise resources. At the same time, resource constraints, limited digital access and insufficient follow-up after supervision remain important areas requiring attention.

5.2 Recommendations

Based on the findings of this study, the following recommendations were made:

1. School heads should strengthen instructional supervision by combining classroom monitoring with constructive feedback, mentoring and follow-up. Supervision should be developmental and focused on improving teaching practice rather than compliance alone.
2. Schools should institutionalise collaborative professional learning through staff consultations, peer mentoring, subject or grade-level planning and professional development activities aligned with CBE requirements.
3. The Ministry of Education and the Teachers Service Commission should strengthen continuous professional development that responds to practical teacher needs in learner-centred pedagogy, competency-based assessment, digital learning and development of twenty-first-century skills.
4. Boards of Management and other stakeholders should strengthen resource mobilisation, particularly for instructional materials, digital learning resources and ICT infrastructure required for effective CBE implementation.
5. Teachers should be actively involved in curriculum planning and school-level implementation decisions. Greater participation can strengthen ownership and improve the fit between leadership initiatives and classroom realities.
6. Education stakeholders should strengthen follow-up mechanisms after teacher training and classroom supervision so that newly acquired knowledge and skills are sustained in practice.

5.3 Limitations of the Study

The study was conducted in comprehensive schools in one sub-county, which limits the extent to which the findings can be generalised to all Kenyan schools. The use of self-reported quantitative data may also introduce response bias. The non-experimental design supports conclusions about association and predictive contribution rather than causal effects. In addition, school-level differences in resources, workload, school size and contextual conditions may influence implementation in ways not fully captured by the model.

5.4 Implications for Policy and Practice

The findings suggest that CBE implementation policy should recognise school leadership as an important enabling condition. Leadership development programmes should equip school heads with practical skills in instructional supervision, professional learning, collaborative planning, resource mobilisation and change management. Policy support should also address the material conditions under which leadership operates, particularly access to learning resources, digital materials and ICT infrastructure. At school level, leadership practices should be organised around continuous improvement, teacher participation and evidence-based follow-up.

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