
INFLUENCE OF CURRICULUM IMPLEMENTATION ON THE PERFORMANCE OF PUBLIC SECONDARY SCHOOLS IN MERU COUNTY, KENYA

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ABSTRACT

Purpose of the Study: This study examined the influence of curriculum implementation on the performance of public secondary schools in Meru County in Kenya.

Statement of the Problem: Despite increased government investment in education and the implementation of school improvement strategies, the performance of public secondary schools in Kenya remains inconsistent. Challenges related to instructional delivery, syllabus coverage, learner assessment, and curriculum supervision continue to affect educational outcomes in Meru County.

Methodology: The study was anchored on Higgins' 8-S Strategy Implementation Framework and adopted a mixed-methods approach using descriptive and correlational research designs. The target population comprised 395 principals of public secondary schools and 9 Sub-County Directors of Education in Meru County. A sample of 199 principals was selected through proportionate stratified random sampling, while all 9 Sub-County Directors of Education were included. Data were collected using questionnaires and interview schedules and analysed using descriptive statistics, Pearson correlation, and simple linear regression with SPSS Version 27.

Findings: A positive and statistically significant relationship was found between curriculum implementation and school performance ($r = 0.465$, $p < 0.05$). Regression analysis indicated that curriculum implementation significantly predicted school performance ($\beta = 0.407$, $t = 6.398$, $p = 0.000$). The model yielded an R^2 value of 0.216, implying that curriculum implementation accounted for 21.6% of the variation in school performance. Effective syllabus coverage, learner assessment, instructional supervision, benchmarking practices, and co-curricular participation were associated with improved institutional performance.

Conclusion: The study concludes that curriculum implementation is significantly associated with the performance of public secondary schools in Meru County.

Recommendations: The study recommends strengthening instructional supervision, learner assessment, syllabus coverage, benchmarking programmes, and curriculum monitoring mechanisms to enhance curriculum implementation and improve school performance outcomes in public secondary schools.

Keywords: *Curriculum implementation, school performance, instructional delivery, public secondary schools, strategic implementation, Meru County*

BACKGROUND TO THE STUDY

Public secondary schools in Kenya continue to experience disparities in academic and institutional performance despite increased government investment in education through free secondary education programs, curriculum reforms, teacher deployment, and infrastructural expansion initiatives. Although these interventions were intended to strengthen instructional effectiveness and improve learner achievement, many public secondary schools continue to record inconsistent Kenya Certificate of Secondary Education (KCSE) performance, weak syllabus completion rates, limited transition to higher education institutions, and uneven institutional effectiveness. These challenges have increasingly raised concerns about the effectiveness of curriculum implementation in public secondary schools.

Curriculum implementation remains a critical determinant of school performance because it influences instructional delivery, syllabus coverage, learner assessment, classroom engagement, and achievement of educational objectives. Effective curriculum implementation enhances coordination of instructional activities, strengthens learner support systems, improves assessment practices, and promotes attainment of institutional academic targets. Conversely, weak curriculum implementation contributes to delayed syllabus coverage, ineffective instructional supervision, inconsistent learner assessment, and poor academic outcomes that negatively affect school performance. Fullan (2021) established that effective implementation of instructional programmes significantly strengthens learner achievement and institutional effectiveness, while Hattie (2022) observed that structured instructional delivery and continuous learner assessment are associated with improved educational outcomes.

In Kenya, disparities in capacity for curriculum implementation continue to affect performance across public secondary schools due to differences in instructional supervision, teacher workload, learning resources, and institutional support systems. According to the Ministry of Education (2023), several counties continued to record low KCSE mean scores and limited university transition rates despite the implementation of national education reforms. In Meru County, variations in KCSE performance across public secondary schools have increasingly been associated with inconsistencies in syllabus coverage, learner assessment practices, instructional coordination, and curriculum supervision. Schools in resource-constrained and rural areas have continued to face challenges with instructional materials, teacher workload, benchmarking opportunities, and timely syllabus completion. These challenges have

contributed to uneven academic performance and institutional effectiveness among public secondary schools within the county.

Although previous studies have examined educational leadership and institutional management practices within schools, limited empirical attention has been paid to how curriculum implementation influences the performance of public secondary schools, specifically in Meru County, Kenya. Addressing this gap is important for strengthening instructional coordination systems, improving curriculum delivery processes, and enhancing academic performance outcomes within public secondary schools.

Problem Statement

Public secondary schools in Kenya play an important role in promoting human capital development and socio-economic transformation. Despite sustained government investment through free secondary education, curriculum reforms, capitation funding, and teacher deployment programmes, many public secondary schools continue to experience inconsistent academic performance and weak institutional effectiveness. According to the Ministry of Education (2023), a substantial proportion of candidates continued to attain grades below university entry requirements in the Kenya Certificate of Secondary Education examinations, thereby limiting progression to higher education and skilled employment opportunities. In Meru County, several public secondary schools have consistently recorded fluctuating KCSE mean scores, delayed syllabus completion, inadequate instructional supervision, and inconsistent learner assessment practices.

Empirical evidence demonstrates that ineffective curriculum implementation is associated with poor instructional delivery, incomplete syllabus coverage, weak learner assessment systems, and reduced educational effectiveness. Fullan (2021) found that schools with ineffective instructional coordination systems tend to have lower learner achievement and weaker institutional performance, while Hattie (2022) observed that inconsistencies in curriculum delivery negatively affect academic outcomes. Despite these concerns, limited empirical evidence exists regarding how curriculum implementation influences the performance of public secondary schools, specifically within Meru County, Kenya. This study, therefore, sought to examine the influence of curriculum implementation on the performance of public secondary schools in Meru County, Kenya.

Research Objective

To determine the influence of curriculum implementation on the performance of public secondary schools in Meru County, Kenya.

Research Hypothesis

H₀₁: Curriculum implementation does not significantly influence the performance of public secondary schools in Meru County, Kenya.

LITERATURE REVIEW

Theoretical Review

Within Higgins' 8-S Strategy Implementation Framework, curriculum implementation is conceptualized as a strategic institutional process that influences performance of public secondary schools through alignment of strategy, structure, systems, staff, skills, style, shared values, and institutional goals (Higgins, 2005). In educational institutions, instructional activities such as syllabus coverage, learner assessment, lesson planning, classroom supervision, and instructional coordination constitute important implementation processes that influence academic outcomes and institutional effectiveness. The framework posits that effective coordination of institutional systems and instructional processes enhances teaching quality, learner engagement, accountability, and educational performance. Fullan (2021) established that effective curriculum implementation significantly enhances learner achievement and institutional effectiveness, while Hattie (2022) observed that structured instructional delivery and classroom supervision strengthen academic performance and educational quality.

The study was further underpinned by Instructional Leadership Theory, which explains the role of leadership in strengthening curriculum delivery and instructional effectiveness within schools. The theory emphasizes that school leadership influences teaching and learning through instructional supervision, curriculum coordination, learner assessment, teacher support, and monitoring of classroom activities. Hallinger (2021) observed that instructional leadership enhances institutional effectiveness by aligning instructional practices with academic goals, while Robinson et al. (2021) established that leadership indirectly improves learner achievement through strengthened instructional coordination and teaching quality. The theory,

therefore, complements Higgins' 8-S Strategy Implementation Framework by explaining how leadership practices strengthen curriculum implementation processes and improve performance outcomes within public secondary schools in Meru County, Kenya.

Empirical Literature

Curriculum Implementation and Performance

Curriculum implementation significantly influences institutional performance by determining how instructional activities, syllabus coverage, learner assessment, and teaching processes are coordinated within educational institutions. Effective curriculum implementation enhances instructional quality, learner engagement, and achievement of educational objectives by translating curriculum goals into effective classroom practices. Fullan (2021) established that effective curriculum implementation improves learner achievement and institutional effectiveness through coordinated instructional delivery, while Hattie (2022) observed that schools achieve improved academic outcomes when instructional processes are effectively supervised and aligned with educational objectives. Similarly, Darling-Hammond et al. (2022) noted that effective curriculum implementation depends on instructional supervision, learner assessment, teacher support, and monitoring systems.

Empirical evidence further demonstrates that effective curriculum implementation enhances academic performance and institutional effectiveness. OECD (2022) reported that schools with effective curriculum coordination and instructional monitoring systems demonstrate stronger academic outcomes compared to institutions with weak implementation mechanisms. UNESCO (2023) similarly emphasized that effective instructional delivery significantly contributes to sustainable educational outcomes. Within Kenya, Oduor and Waweru (2021) found that disparities in instructional supervision and syllabus coverage contributed to variations in academic performance across public secondary schools, while Mwangi and Muturi (2022) observed that ineffective curriculum coordination negatively affected institutional performance. Despite these findings, limited empirical attention has been directed toward examining how curriculum implementation influences the performance of public secondary schools within Meru County, thereby creating the gap that this study sought to address.

Conceptual Framework

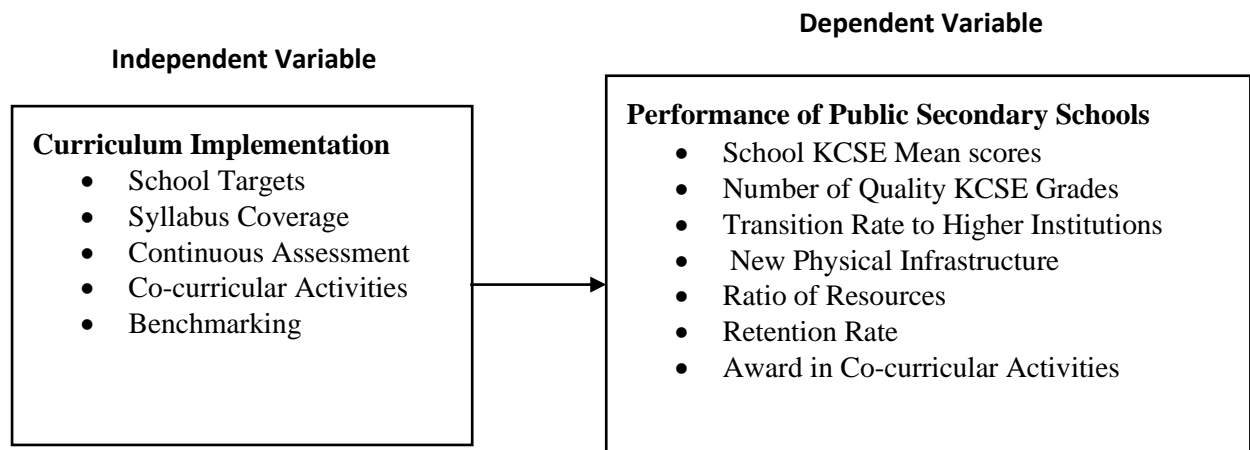


Figure 1: Conceptual Framework

MATERIALS AND METHODS

The study adopted a positivist research philosophy, which emphasizes objective measurement and empirical examination of relationships among variables using quantitative procedures. A descriptive and correlational research design was adopted to examine the relationship between curriculum implementation and performance of public secondary schools in Meru County, Kenya. The target population comprised 395 principals of public secondary schools and 9 Sub-County Directors of Education within Meru County. Using proportionate stratified random sampling techniques, a sample of 199 principals was selected, while all the 9 Sub-County Directors of Education participated through a census approach.

Primary data were collected using structured questionnaires and interview schedules that contained both closed- and open-ended items. A pilot study was conducted to assess the validity and reliability of the research instruments before the main data collection exercise. Content and construct validity were assessed through expert review, while reliability was established using Cronbach's alpha coefficient, where a threshold of 0.7 was considered acceptable.

Quantitative data were analyzed using descriptive statistics, Pearson correlation analysis, and simple linear regression analysis using SPSS Version 27. Diagnostic tests were conducted before regression analysis to assess assumptions of normality, linearity, homoscedasticity, and multicollinearity. Normality was assessed using skewness and kurtosis statistics, which were within the acceptable thresholds. Linearity and homoscedasticity were assessed using scatterplots of standardized residuals against predicted values, which confirmed acceptable

distribution patterns for regression analysis. Ethical considerations were observed through NACOSTI authorization, informed consent, confidentiality, and respondents' voluntary participation.

RESULTS AND DISCUSSIONS

Response Rate

This section presents the response rate achieved during data collection and evaluates its adequacy for statistical analysis in the study context. Data were obtained from a sample comprising 199 principals of public secondary schools and 9 Sub-County Directors of Education in Meru County. Of the targeted respondents, 180 principals returned completed questionnaires, while all 9 Sub-County Directors of Education participated in the interviews. This resulted in response rates of 90.45% among principals and 100% among Sub-County Directors of Education. All returned instruments were examined and confirmed to be complete and suitable for analysis, thereby providing a reliable dataset for subsequent statistical procedures.

The response rates achieved were considered adequate for meaningful statistical analysis and interpretation of findings. In survey-based research, response rates above 70% are generally regarded as strong indicators of data reliability and reduced non-response bias. The high participation among principals, who constituted the primary unit of analysis, ensured sufficient representation of the study population. This level of response supported the application of inferential statistical techniques, including correlation and regression analysis. Consequently, the dataset was considered robust and appropriate for examining the relationship between curriculum implementation and performance of public secondary schools.

Table 1: Response Rate

Respondents	Sample Size	Response Rate	Percentage
Principals	199	180	90.45
Sub-County Directors of Education	9	9	100

Descriptive Analysis of Curriculum Implementation Variable

Curriculum implementation is a critical dimension of strategy implementation in public secondary schools, as it directly influences teaching effectiveness and student performance outcomes. In this study, curriculum implementation was examined through indicators such as syllabus coverage, co-curricular participation, assessment practices, benchmarking activities, and instructional supervision. The descriptive results presented in Table 2 indicate that respondents generally agreed that curriculum implementation significantly influences school performance. Specifically, curriculum implementation influencing performance recorded a high mean score ($M = 3.96$, $SD = 1.080$), suggesting that principals perceived instructional delivery as a key determinant of academic outcomes. Similarly, implementation of varied curriculum approaches recorded a mean of 3.51 ($SD = 1.080$), indicating moderate agreement that schools adopt diverse instructional strategies to support teaching and learning processes. These findings support empirical literature demonstrating that effective curriculum delivery enhances learner achievement and institutional performance (Darling-Hammond et al., 2021; UNESCO, 2022).

The findings further emphasized the role of co-curricular activities in supporting curriculum implementation and improving school performance. Respondents strongly agreed that participation in co-curricular activities nurtures student talents and enhances performance in competitions ($M = 4.13$, $SD = 1.090$). Involvement in co-curricular activities was also perceived to positively influence academic performance ($M = 3.65$, $SD = 1.096$), indicating that holistic educational approaches contribute to learner development and institutional effectiveness. Subject-target mean scores influencing KCSE performance recorded a mean of 3.77 ($SD = 1.046$), while school targets, acting as a roadmap toward planned performance outcomes, recorded a mean of 4.02 ($SD = 1.016$). Syllabus coverage was further identified as a critical determinant of academic achievement ($M = 4.03$, $SD = 1.162$), while completion of the syllabus before KCSE examinations recorded a mean of 3.91 ($SD = 1.120$). Curriculum implementation strategies aiding syllabus coverage also recorded a mean of 3.92 ($SD = 1.070$), indicating that structured instructional planning and adherence to curriculum timelines significantly enhance educational outcomes.

The study also examined the role of continuous assessment and benchmarking practices in supporting curriculum implementation. Continuous assessment, which improves KCSE performance, recorded a mean of 3.95 ($SD = 1.159$), suggesting that regular learner evaluation

helps identify instructional gaps and improve teaching effectiveness. However, benchmarking with better-performing schools recorded a relatively lower mean of 3.11 (SD = 1.212), while implementation of benchmarking lessons recorded a mean of 3.05 (SD = 1.174), indicating inconsistent benchmarking practices across schools. Nevertheless, respondents agreed that benchmarking improves performance (M = 3.52, SD = 1.075). Respondents further moderately agreed that deviations from curriculum implementation were discouraged (M = 3.60, SD = 1.247), while implementation of curriculum guidelines as prescribed by the Ministry of Education recorded a mean of 3.79 (SD = 1.030). The aggregate mean score for curriculum implementation (M = 3.72, SD = 1.166) indicated general agreement that it significantly influences school performance. These findings align with Instructional Leadership Theory, which emphasizes instructional coordination, curriculum supervision, learner assessment, and effective instructional delivery in improving institutional performance outcomes.

Table 2: Statistics on Curriculum Implementation by Principals (N = 180)

Statement	N	Mean	Std. Deviation
A varied curriculum is implemented in public secondary schools	180	3.51	1.080
Curriculum implementation influences performance	180	3.96	1.080
Co-curricular activities improve performance	180	4.13	1.090
Co-curricular involvement influences academic performance	180	3.65	1.096
Subject target mean scores influence KCSE performance	180	3.77	1.046
School targets act as a roadmap to performance	180	4.02	1.016
Syllabus coverage influences performance	180	4.03	1.162
Syllabus completed before KCSE	180	3.91	1.120
Implementation strategies aid syllabus coverage	180	3.92	1.070
Continuous assessment improves performance	180	3.95	1.159
School benchmarks with better-performing schools	180	3.11	1.212
Lessons from benchmarking are implemented	180	3.05	1.174
Benchmarking improves performance	180	3.52	1.075
Deviations from the curriculum are not encouraged	180	3.60	1.247

Statement	N	Mean	Std. Deviation
Curriculum implemented as per Ministry guidelines	180	3.79	1.030
Aggregate Mean / SD		3.72	1.166

Descriptive Analysis on Performance of Public Secondary Schools

Performance of public secondary schools in this study was defined as the extent to which institutions achieved desired academic outcomes, operational efficiency, and institutional growth indicators, such as KCSE results, transition rates, retention levels, and infrastructural development. The descriptive findings indicated that respondents moderately agreed that performance was reflected through achievement of specific KCSE mean scores ($M = 3.33$, $SD = 1.290$), suggesting that academic performance remained a central benchmark for evaluating school success. Respondents further strongly agreed that performance was influenced by clearly defined goals, stakeholder effort, and institutional commitment ($M = 4.14$, $SD = 1.238$), highlighting the importance of coordinated effort in achieving performance outcomes. Schools setting ambitious KCSE targets also recorded moderate agreement ($M = 3.65$, $SD = 1.096$), while progressive improvement in KCSE mean scores was rated at 3.50 ($SD = 1.070$).

The findings further revealed moderate ratings regarding improvement in quality grades ($M = 3.38$, $SD = 1.178$) and transition rates to colleges and universities ($M = 3.48$, $SD = 1.165$), suggesting that academic gains were incremental rather than transformative. Student retention rates above 50% recorded a mean of 3.69 ($SD = 1.202$), indicating relatively stable enrolment and progression. However, infrastructure development based on strategic plans recorded a moderate mean of 3.19 ($SD = 1.298$), while adequacy of physical facilities recorded a mean of 3.13 ($SD = 1.322$), suggesting infrastructural constraints affecting institutional performance. Similarly, resource-student ratio satisfaction recorded a moderate mean ($M = 3.08$, $SD = 1.268$), indicating pressure on available educational resources.

The results further demonstrated that curriculum implementation, leadership, communication, and monitoring significantly influenced school performance. Curriculum implementation determining school success recorded a mean of 3.91 ($SD = 1.120$), while leadership influencing resource allocation and performance recorded a mean of 3.79 ($SD = 1.337$). Communication enhancing performance recorded a mean of 3.74 ($SD = 1.124$), while monitoring critical to

institutional success recorded a relatively high mean of 3.98 (SD = 1.502). The average mean score of 3.53 (SD = 1.287) confirmed that the performance of public secondary schools was moderately effective. These findings support the Resource-Based View Theory, which emphasizes that institutional performance is influenced by effective deployment and management of organizational resources and strategic processes.

Table 3: Statistics on Performance by Principals

Performance Indicators	N	Mean	Std. Deviation
Performance indicated by KCSE mean scores	180	3.33	1.290
Performance influenced by goals and stakeholder effort	180	4.14	1.238
School sets ambitious KCSE targets	180	3.65	1.096
KCSE mean scores have progressively improved	180	3.50	1.070
Students attaining quality grades have improved	180	3.38	1.178
Transition rate to colleges/universities is increasing	180	3.48	1.165
Student retention above 50%	180	3.69	1.202
Infrastructure developed as per the strategic plan	180	3.19	1.298
Adequate physical facilities available	180	3.13	1.322
Awards in co-curricular competitions	180	3.16	1.229
Resource-student ratio satisfactory	180	3.08	1.268
Financial performance improved	180	3.38	1.150
Curriculum implementation determines success	180	3.91	1.120
Leadership influences resource allocation	180	3.79	1.337
Communication enhances performance	180	3.74	1.124
Monitoring critical to success	180	3.98	1.502
Average		3.53	1.287

Bivariate Correlation Analysis

The results presented in Table 4 indicate a statistically significant positive relationship between curriculum implementation and performance of public secondary schools ($r =$

0.465, $p < 0.01$). This suggests that effective curriculum implementation practices, including syllabus coverage, instructional supervision, learner assessment, benchmarking, and co-curricular participation, are associated with improved academic outcomes and institutional performance. The findings imply that schools with stronger instructional delivery systems and effective curriculum coordination mechanisms are more likely to achieve improved learner outcomes and institutional effectiveness than schools with weak instructional implementation processes. These findings support empirical literature indicating that effective curriculum implementation significantly enhances instructional quality and learner achievement (Fullan, 2021; Hattie, 2022).

The positive and statistically significant relationship further confirms Instructional Leadership Theory, which emphasizes that institutional performance depends on effective instructional coordination, curriculum supervision, and learner assessment processes. The findings therefore demonstrate that strengthening curriculum implementation systems is essential for improving the performance of public secondary schools in Meru County.

Table 4: Pearson Correlation Tests Analysis

Category	X2	Y
Curriculum Implementation (X2)	1	
Sig. (2-tailed)		
N	180	
Performance of Public Secondary Schools (Y)		1
Pearson Correlation	.465**	
Sig. (2-tailed)	.000	
N	180	180

** Correlation is significant at the 0.01 level (2-tailed)

Test of Hypothesis

The hypothesis examined the influence of curriculum implementation on the performance of public secondary schools in Meru County, Kenya. The null hypothesis (H01) stated that curriculum implementation has no significant influence on the performance of public

secondary schools in Meru County, Kenya. To test this hypothesis, Pearson correlation analysis and simple linear regression analysis were conducted to determine the nature and strength of the relationship between curriculum implementation and school performance. The regression model summary presented in Table 5 provides the correlation coefficient (R), coefficient of determination (R²), adjusted R², and standard error of estimate, which collectively explain the predictive relationship between curriculum implementation and school performance.

Table 5: Linear Regression Model Summary

Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	0.465	0.216	0.209	0.907

Predictors: (Constant), Curriculum Implementation

Dependent Variable: Performance of Public Secondary Schools

The regression model summary in Table 5 indicates a moderate positive relationship between curriculum implementation and performance of public secondary schools, as reflected by a correlation coefficient (R) of 0.465. The coefficient of determination (R² = 0.216) implies that curriculum implementation explained 21.6% of the variation in performance of public secondary schools in Meru County, Kenya. The adjusted R² value of 0.209 further confirms the stability of the regression model after adjusting for sample size and model estimation. The findings suggest that schools with stronger curriculum implementation systems were associated with improved institutional performance outcomes.

Table 6: ANOVA of Linear Regression Model for Curriculum Implementation

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	52.915	1	52.915	40.934	0.000
Residual	192.063	178	1.079		
Total	244.978	179			

Dependent Variable: Performance of Public Secondary Schools

Predictors: (Constant), Curriculum Implementation

The ANOVA results presented in Table 6 confirm that the regression model was statistically significant at the 95% confidence level ($F = 40.934$, $p = 0.000$). The findings indicate that curriculum implementation significantly predicted performance of public secondary schools in Meru County, Kenya. The regression model, therefore, demonstrated adequate explanatory capacity in assessing the association between curriculum implementation and school performance outcomes.

Table 7: Linear Regression Coefficients

Predictor	Unstandardized Coefficients (β)	Std. Error	Standardized Coefficient (Beta)	t	Sig.
Constant	2.103	0.234	–	8.996	0.000
Curriculum Implementation	0.407	0.064	0.432	6.398	0.000

Dependent Variable: Performance of Public Secondary Schools

The regression coefficients presented in Table 7 indicate that curriculum implementation had a positive and statistically significant influence on the performance of public secondary schools ($\beta = 0.407$, $t = 6.398$, $p = 0.000$). The findings imply that improvements in curriculum implementation were associated with improvements in school performance outcomes. The standardized beta coefficient further confirms that curriculum implementation was a significant predictor of performance of public secondary schools in Meru County, Kenya.

The findings further indicated that effective syllabus coverage, continuous learner assessment, instructional supervision, benchmarking activities, and co-curricular participation were associated with improved academic and institutional performance outcomes. However, the findings should be interpreted within the context of a descriptive-correlational research design, which establishes statistical association rather than direct causality.

Based on the regression findings presented in Tables 5, 6, and 7, the null hypothesis (H_0), which stated that curriculum implementation has no significant influence on the performance of public secondary schools in Meru County, Kenya, was rejected. The study, therefore,

concluded that curriculum implementation significantly predicts performance of public secondary schools in Meru County, Kenya.

CONCLUSIONS

The study concluded that curriculum implementation significantly influences the performance of public secondary schools in Meru County, Kenya. Effective curriculum delivery, learner assessment practices, syllabus coverage, instructional supervision, and benchmarking systems were associated with improved academic and institutional performance outcomes among public secondary schools. The study further established that curriculum implementation constitutes an important component of institutional strategy implementation within educational institutions.

RECOMMENDATIONS

Public secondary schools should strengthen curriculum implementation systems through enhanced instructional supervision, continuous learner assessment, timely syllabus coverage, and structured benchmarking programs. School administrators should ensure effective coordination of curriculum delivery processes and adherence to Ministry of Education instructional guidelines to improve institutional performance outcomes. The Ministry of Education and county education authorities should further strengthen instructional monitoring systems, teacher support programs, and curriculum supervision mechanisms to enhance the effectiveness of curriculum implementation within public secondary schools in Meru County, Kenya.

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