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Influence of Quality Assurance and Standards Officers' Classroom Observation Practices on Educational Outcomes in Public Secondary Schools in Meru County, Kenya

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ABSTRACT

This study evaluated the influence of Quality Assurance and Standards Officers' (QASOs) classroom observation practices on educational outcomes in public secondary schools in Meru County, Kenya. Utilizing a descriptive correlational research design, the study targeted 10,202 stakeholders across public secondary schools in five sub-counties (Imenti North, Imenti South, Igembe, Tigania, and Buuri). Yamane's formula and stratified proportionate random sampling were employed to select a sample of 385 respondents, comprising 10 QASOs via census, 15 principals, 74 Heads of Department (HODs), and 286 classroom teachers. Data were gathered using structured Likert-scale questionnaires for school staff and semi-structured interview guides for QASOs, achieving an overall response rate of 96.62% (n = 372). Statistical analysis executed via SPSS version 31 involved descriptive statistics, diagnostic evaluations, and regression models, complemented by qualitative thematic analysis. Diagnostic tests confirmed multivariate normality (D = 0.058, P = .200; W = 0.996, P = .361), absence of severe multicollinearity (VIF = 3.440), homoscedasticity (chi2 = 0.964, P = .326), and independence of errors (Durbin-Watson = 1.987). The overall multiple linear regression model accounted for 71.6% of the total variance in educational outcomes (R2 = .716, F5, 358 = 146.182, P < .001). Specifically, classroom observation practices were revealed to be a statistically significant positive predictor of educational outcomes ($\beta = .218$, t = 4.159, P < .001). Descriptive evaluations indicated moderate overall implementation of observation practices (Mean = 3.31, SD = 1.09), with strong ratings in appropriate instructional strategies (Mean = 3.53) and learner engagement (Mean = 3.49), but lower performance in communicating explicit lesson objectives (Mean = 2.93). It is concluded that direct monitoring of classroom instruction by QASOs significantly enhances educational effectiveness and student performance, emphasizing the need to transition observation from routine compliance toward developmental instructional coaching.

INTRODUCTION

Educational outcomes represent the explicit, measurable results of schooling that reflect what learners have achieved in terms of knowledge, skills, attitude, and competencies after participating in educational processes. Traditional measures of education success such as enrollment and completion have increasingly been complemented and in many frameworks supplanted by learning-based outcomes, which capture the actual proficiency levels learners attain in core domains such as reading, mathematics, and science. National examinations have been used as a proximate measure of educational outcomes, but this must be understood within broader quality assurance frameworks that monitor consistency, relevance, and alignment with curricular goals. This aligns with Sustainable Development Goal 4 (SDG 4), which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all and foregrounds outcomes over inputs or mere attendance. According to SDG indicator 4.1.1, tracking the proportion of learners achieving at least minimum proficiency levels in key subjects at benchmark stages of education makes it an internationally recognized measure of educational quality and effectiveness.

Supervisory practices of Quality Assurance and Standards Officers (QASOs) constitute a central mechanism through which education systems seek to safeguard and enhance the quality of teaching and learning in schools. In many education systems globally, QASOs are mandated to visit schools, do classroom observations, monitor curriculum implementation, assess instructional practices such as professional records and instructional planning, evaluate learning environments, and ensure compliance with established education standards and policies. Effective supervisory practices typically encompass regular school inspections, classroom observations, review of instructional records, assessment of learner progress, and provision of formative feedback to teachers and administrators. Through these activities, QASOs identify gaps in curriculum delivery, instructional methods, and assessment practices, recommending corrective measures aligned with national education goals.

Empirical literature demonstrates that supervisory practices influence educational outcomes primarily through their impact on instructional quality and school effectiveness. Teachers who receive constructive feedback and professional guidance are more likely to adopt

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learner-centered pedagogies, align classroom instruction with curriculum standards, and address diverse learner needs. When supervision is systematic, supportive, and focused on instructional improvement rather than fault-finding, it contributes to improved teacher competence, better lesson preparation, and more effective learner assessment—all of which are directly linked to improved educational outcomes such as learner achievement, retention, and completion.

However, the influence of QASO supervisory practices on educational outcomes is contingent on how supervision is conducted. Research indicates that infrequent school visits, limited follow-up on recommendations, inadequate logistical support, and perceptions of supervision as punitive can weaken its effectiveness. In Africa, supervisory practices play a pivotal role in bridging the gap between education policy and classroom practice, but formal systems of external inspection and supervision are often hampered by resource limitations and structural weaknesses. In Kenya, empirical research provides mixed evidence on the effectiveness of QASOs' supervisory practices. Studies in various counties reveal that irregular visits, inadequate logistical support, limited implementation of supervisors' reports, and teacher resistance blunts the influence of supervision on educational outcomes. In Meru County specifically, external quality assurance remains inconsistent and under-resourced, highlighting a need for up-to-date, context-specific empirical investigation into how QASO supervisory practices shape learner achievement.

Statement of the Problem

Evaluating secondary education quality relies heavily on measuring learning outcomes, a priority underscored by reliance on standardized national tests. Public high schools across Kenya carry the mandate of preparing students with essential skills and knowledge for university transition, economic contribution, and active citizenship. Within this framework, Quality Assurance and Standards Officers (QASOs) are tasked with overseeing institutional operations to safeguard teaching standards and syllabus delivery, operating on the premise that active monitoring drives academic performance. Despite this structure, research within Kenya yields conflicting conclusions regarding the true efficacy of QASO supervision. Focus on Meru County reveals significant knowledge gaps: existing data on quality assurance oversight is minimal, piecemeal, and outdated, with little research directly connecting officer practices to concrete student attainment indicators. As a result, uncertainty persists about whether ongoing supervisory strategies successfully boost academic success or if systemic operational barriers continually neutralize their benefits. This absence of localized empirical data presents a major obstacle to formulating targeted, evidence-based policy improvements for quality assurance frameworks.

Proposed Solution

To address the clear gap in empirical evidence within

the regional context, this study focuses on examining the influence of classroom observation practices by Quality Assurance and Standards Officers on educational outcomes in public secondary schools in Meru County, Kenya. By directly investigating classroom observation—a supervisory practice in which QASOs visit classrooms to directly monitor teaching methods, teacher-learner interactions, and the implementation of instructional strategies—the study systematically links observational supervisory mechanisms to specific learner achievement indicators. The study tested the following null hypothesis at a 0.05 significance level.

Study Hypothesis

H02: There is no statistically significant relationship between classroom observation practices by Quality Assurance and Standards Officers and educational outcomes in public secondary schools in Meru County.

LITERATURE REVIEW

Instructional supervision is increasingly recognized as a critical factor in shaping educational outcomes. Instructional leaders who prioritize teaching and learning through classroom observation, feedback, and targeted professional development help foster positive school cultures and improve teaching practices. Empirical evidence shows that teachers who receive constructive feedback and professional guidance during supervisory observations are more likely to adopt learner-centered pedagogies, align classroom instruction with curriculum standards, and address diverse learner needs.

This study is grounded in Instructional Leadership Theory, advanced by Philip Hallinger (1985, 2003), which posits that leadership practices directly focused on teaching and learning are central to improving student performance. The theory emphasizes defining clear instructional goals, supervising and evaluating instruction, monitoring learner progress, coordinating curriculum implementation and providing feedback to teachers. Within this framework, leadership is conceptualized not merely as administrative oversight, but as deliberate engagement with classroom practices and instructional quality. Although originally developed to describe the role of school principals, the theory applies directly to external supervisory structures such as QASOs, whose mandate includes classroom observation and direct monitoring of pedagogical delivery. Instructional Leadership Theory anchors the independent variable by conceptualizing QASO classroom observation practices as leadership-driven mechanisms that shape instructional processes, assuming that when supervision is developmental, collaborative, and focused on instructional improvement, it contributes to enhanced classroom practices and ultimately improved learner achievement.

Scope of the Study

Geographical Scope: Public secondary schools in Meru County, Kenya, focusing on a representative sample of schools across different sub-counties to capture variations

in supervision practices and educational outcomes.

Target Focus: Classroom observation practices by QASOs as the specific supervisory practice (independent variable), evaluated against educational outcomes measured through learner achievement indicators such as national examination performance, progression rates, and school-based assessment results (dependent variable).

Target Respondents

QASOs, school principals, and teachers as primary respondents directly engaged in school supervision and instructional processes.

Study Justification

The findings generate direct empirical evidence on the relationship between supervisory classroom observation practices of QASOs and educational outcomes in public secondary schools in Meru County. By identifying how classroom observation influences learner achievement, the findings inform County and National Education authorities in refining supervision strategies to enhance teaching quality and student performance. The study benefits school administrators and teachers by highlighting effective classroom supervision approaches, guiding targeted improvements in instructional planning and classroom practices. Furthermore, it addresses critical literature gaps in Kenya by providing context-specific evidence to assist the Ministry of Education and County Education Offices in designing targeted training programs for QASOs, allocating resources effectively, and establishing robust monitoring frameworks that strengthen quality assurance systems.

MATERIALS AND METHODS

Location of the Study

The study was conducted in Meru County, which comprises five sub-counties: Imenti North, Imenti South, Igembe, Tigania, and Buuri. These sub-counties exhibit variations in socio-economic profiles, school typologies (national, extra-county, county, and sub-county schools), geographical settings (urban, peri-urban, and rural), and student performance trends. This heterogeneity provides a robust context for the analysis of supervisory practices undertaken by Quality Assurance and Standards Officers (QASOs) and their differential influence on educational outcomes.

Research Design

The study adopted a descriptive correlational research design. The choice of a descriptive correlational design was appropriate because the study sought to examine the relationship between supervisory practices of QASOs and educational outcomes in public secondary schools without manipulating any variables. The independent variable (supervisory practices, specifically regular school inspection) and the dependent variable (educational outcomes) already exist within the natural school setting; therefore, an experimental design would be impractical

and ethically inappropriate. The descriptive component enabled systematic documentation of the nature, frequency, and patterns of supervisory practices across schools. According to Creswell and Creswell (2023), the correlational component permits statistical determination of the direction and magnitude of the relationship between supervisory practices and educational outcomes. This design was suitable for establishing whether significant associations exist and for estimating the predictive value of supervisory practices, while acknowledging that causality cannot be inferred.

Study Population

The study population comprised 10 QASOs serving in the county, 392 principals who served as chief institutional administrators and instructional leaders in public secondary schools, 1,960 Heads of Departments (HODs) who served as middle-level instructional leaders coordinating subject implementation, monitoring curriculum delivery, and directly interfacing with both teachers and external supervisors, and 7,840 classroom teachers who were the primary implementers of curriculum and the direct recipients of supervisory feedback. Collectively, these four categories constitute a total study population of 10,202 respondents, representing all key administrative and instructional stakeholders within public secondary schools in Meru County who are directly involved in or affected by supervisory practices and educational outcomes.

Sampling Procedure and Sample Size

The sample size was determined using Yamane's (1967) formula, which is suitable for calculating sample sizes from a finite population:

$$n = \frac{N}{1 + N(e^2)}$$

where

n=sample size

N=Population size

e=margin of error

With a confidence level of 95%, the margin of error is 5%. Therefore,

$$n = \frac{10202}{1 + 10202(0.05e^2)}$$

$$n = 384.99 \text{ respondents}$$

Thus, the total sample size was calculated as 385 respondents. The distribution of the study population and the computed sample across all respondent categories is presented in Table 1 prior to detailing the selection techniques.

Sampling was conducted using a stratified proportionate random sampling technique to ensure adequate representation of all categories of respondents within the total population of 10,202. First, the population

Table 1: Distribution of the Sample

Category of Respondents	Target Population	Sample
QASOs	10	10
Principals	392	15
Heads of Departments	1,960	74
Classroom Teachers	7,840	286
Total	10,202	385

Source: Field Data (2026)

was stratified into four homogeneous groups based on professional role: QASOs, principals, HODs, and classroom teachers. Given the small number of QASOs (10), a census approach was adopted and all ten officers were included in the study. For principals, HODs, and classroom teachers, proportionate allocation was applied relative to each stratum's size in the population, yielding 15 principals, 74 HODs, and 286 classroom teachers. Within each stratum, simple random sampling using a random number generator was employed based on updated lists from public secondary schools in Meru County.

Research Instruments

A multi-method data collection approach was utilized, combining structured questionnaires for principals, HODs, and classroom teachers with semi-structured interview guides for QASOs.

Structured Questionnaire

The structured questionnaire for principals, HODs, and classroom teachers was organized into clearly defined sections aligned to the study variables, predominantly employing a five-point Likert scale (1 = \text{Strongly Disagree} to 5 = \text{Strongly Agree}). Section A captured demographic background characteristics (designation, gender, academic qualification, teaching experience). Section B gathered information to measure the extent and effectiveness of regular school inspections conducted by QASOs (frequency of visits, scope and comprehensiveness, transparency of procedures, alignment with instructional improvement, and perceived impact on performance). Sections C through F evaluated classroom observation, professional records, learners' progress, and post-supervision feedback, while Section G measured the dependent variable, educational outcomes (examination performance trends, teaching quality, curriculum coverage, learner discipline, and overall school effectiveness).

Semi-Structured Interview Guide

The semi-structured interview guide was used to gather detailed, qualitative insights from QASOs regarding how they conceptualize and operationalize their mandate in relation to educational outcomes. It systematically explored the frequency, structure, and focus areas of regular school inspections, procedures and criteria used during observations, evaluation methods, feedback mechanisms, and challenges encountered. Verbal

interviews were audio-recorded, transcribed verbatim, and systematically analyzed using thematic analysis techniques.

Pilot Study

A pilot study was conducted in Tharaka Nithi County prior to the main study to test the feasibility, clarity, and suitability of the research instruments and procedures. Tharaka Nithi County was selected because it shares key administrative, socio-economic, and educational characteristics with Meru County while remaining distinct to prevent sample contamination. The pilot sample comprised approximately 10\% of the main study population (2 QASOs, 2 principals, 7 HODs, and 29 classroom teachers). Data from the pilot was used solely to refine the instruments and was excluded from the final analysis.

Validity

Validity testing involved evaluating content, construct, and face validity. Content validity was established through expert judgment and pilot testing, where university supervisors reviewed the research tools and provided feedback to ensure that each instrument adequately sampled the intended constructs.

Reliability

The internal consistency reliability of the questionnaire items was assessed using Cronbach's Alpha Coefficient analysis executed via SPSS version 31 following the pilot study. The resulting alpha coefficients were 0.82 for the principal's questionnaire, 0.76 for the HODs' questionnaire, and 0.79 for the teachers' questionnaire. These values exceed the standard threshold of 0.70 recommended by DeVellis (2016) and Taber (2018), confirming acceptable scale reliability.

Data Collection Procedures

An introductory letter from the Graduate School at Chuka University was acquired to obtain a research license from the National Commission for Science, Technology and Innovation (NACOSTI). Copies were presented to the Sub-County Director of Education and Heads of Schools for authorization. Principals, HODs, and teachers completed the self-administered structured questionnaires, which were collected immediately or within an agreed timeframe. QASOs participated in face-to-face, semi-structured interviews that were audio-

recorded with consent and supplemented by field notes.

Ethical Considerations

Participation was entirely voluntary, with informed consent obtained from all respondents following a detailed explanation of the study's purpose and procedures. Participants were informed of their right to withdraw at any point without penalty. Confidentiality and anonymity were strictly maintained by omitting personal identifiers and coding all instruments and transcripts. All physical and digital data were stored securely with restricted access.

Data Analysis

The study combined quantitative and qualitative analytical methods. Quantitative data from the questionnaires were analyzed using SPSS version 31. Descriptive statistics

(frequencies and percentages) summarized demographic data and baseline perceptions. For the target objective evaluating regular school inspection, inferential statistical analysis involving Pearson's product-moment correlation and Simple Linear Regression was executed to evaluate the strength, direction, and significance of the relationship between regular school inspection (independent variable) and educational outcomes (dependent variable).

Qualitative data from QASO interviews were analyzed using thematic analysis, where transcripts were coded and categorized to extract explanatory themes. Triangulation of quantitative statistical trends with qualitative insights was performed to achieve a holistic synthesis. The analytical framework mapping the specific objective of this paper is outlined in Table 2.

Table 2: Summary of Data Analysis Plan for Target Objective

Objective	Independent Variable	Dependent Variable	Analytic Approach
To examine the influence of classroom observation practices by QASOs on educational outcomes	Classroom observation practice	Educational outcomes	Descriptive statistics, Pearson correlation, regression

Note: Source: Field Data (2026)

RESULTS AND DISCUSSION

The present study investigated the Influence of Quality Assurance and Standards Officers' Classroom Observation Practices on Educational Outcomes in

Public Secondary Schools in Meru County, Kenya

Response Rate and Demographic Characteristics

From table 3, a total of 385 questionnaires were

Table 3: Response Rate

Category	Response Frequency	Response Percentage (%)	Non-Response Frequency	Non-Response Percentage (%)
QASOs	9	90.0	1	10.0
Principals	11	73.33	4	26.67
HODs	71	96.93	3	3.07
Classroom teachers	281	98.25	5	1.75
Total	372	96.62	13	3.38

administered, and 372 were completed and returned, representing an overall response rate of 96.62%. Specifically, the response rates were 98.25% for classroom

teachers (n = 281), 96.93% for Heads of Department (HODs; n = 71), 90.00% for QASOs (n = 9), and 73.33% for school principals (n = 11).

Table 4: Demographic Characteristics of Respondents by Category

Variable	Category	Classroom Teachers f (%)	HODs f (%)	Principals f (%)
Gender	Male	130 (46.4)*	37 (52.1)*	7 (63.6)*
	Female	150 (53.6)	34 (47.8)	4 (36.4)
Highest Academic Qualification	Diploma	20 (7.4)	6 (8.5)	1 (9.1)
	Bachelor's Degree	191 (70.2)	56 (78.9)	6 (54.5)
	Master's Degree	60 (22.1)	6 (8.5)	2 (18.2)
	PhD	1 (0.4)	3 (4.2)	2 (18.2)
Teaching/Administrative Experience	Less than 1 year	1 (0.4)	-	-
	0–5 years	95 (34.2)	16 (22.5)	-
	6–10 years	63 (22.7)	21 (29.6)	2 (18.2)
	11–15 years	72 (25.9)	11 (15.5)	-

	16–20 years	28 (10.1)	17 (23.9)	5 (45.5)
	21 years and above	19 (6.8)	6 (8.5)	4 (36.4)
School Category	National	-	-	1 (9.1)
	Extra-County	4 (1.5)	6 (8.5)	2 (18.2)
	County	45 (16.7)	31 (43.7)	4 (36.4)
	Sub-County	220 (81.8)	34 (47.9)	4 (36.4)

Note: Male gender row values implied from composite totals.

Information presented in Table 4 reveals the demographic characteristics of classroom teachers, Heads of Departments (HODs), and principals who participated in the study. Female respondents formed the majority among classroom teachers (53.6%), whereas males comprised the majority among HODs (52.1%) and principals (63.6%). A majority across all categories held a Bachelor's degree (70.2% of teachers, 78.9% of HODs, and 54.5% of principals). Postgraduate qualifications were held by 22.5% of teachers, 12.7% of HODs, and 36.4% of principals. Classroom teachers were relatively new

to the profession (34.2% had 0–5 years of experience), HODs were evenly distributed (29.6% had 6–10 years), and principals were highly experienced (81.9% had over 16 years of administrative experience). The majority of teachers (81.8%) were drawn from Sub-County schools, while HODs and principals represented Sub-County, County, Extra-County, and National institutions.

Evaluation of Diagnostic Tests

Kolmogorov–Smirnov D = 0.058, $p = .200$) and Shapiro–Wilk tests $W = 0.996$, $p = .361$) yielded non-significant

Table 5: Normality Test Results for Composite Study Variables

Construct	Kolmogorov–Smirnov Statistic	df	Sig.	Shapiro–Wilk Statistic	df	Sig.	Decision
Classroom Observation Practices	0.058	385	.200	0.996	385	.361	Normally distributed

results $p > .05$) for the composite construct, confirming multivariate normality.

Tolerance value was 0.291 and Variance Inflation Factor (VIF) was 3.440 (below the cutoff threshold of

Table 6: Results of the Multicollinearity Test

Predictor Variable	Tolerance	VIF
Classroom Observation Practices	0.291	3.440

5), confirming the absence of severe multicollinearity. Condition Index values remained below 24.77.

Breusch–Pagan test statistic for Classroom Observation Practices was non-significant $\chi^2 = 0.964$, $p = .326$), and

Table 7: Homoscedasticity Test

Construct	Breusch–Pagan Statistic	Sig.
Classroom Observation Practices	0.964	.326

the overall regression model was non-significant $\chi^2 = 7.483$, $p = .187$), indicating constant residual variance.

Durbin–Watson value for Classroom Observation Practices was 1.987, falling within the acceptable range

Table 8: Results of the Durbin–Watson Test

Construct	Durbin–Watson Test
Classroom Observation Practices	1.987

of 1.5 to 2.5 and confirming independence of errors. Kaiser-Meyer-Olkin (KMO) measure was .911 $p < .001$

for Bartlett's Test of Sphericity), establishing excellent sampling adequacy for factor analysis.

Table 9: Results of KMO and Bartlett's Test of Sphericity

Construct	KMO Test	Bartlett's Test (Approx. χ^2)	df	Sig.
Classroom Observation Practices-	.911	1847.536	78	.001

Descriptive Analysis of Educational Outcomes

Educational outcomes served as the primary dependent variable (DV). Perceptions of outcomes were gathered across stakeholder categories and evaluated using 5-point Likert scales (1 = Never to 5 = Always). Table 10 summarizes the mean scores and standard deviations

for educational outcomes as reported by teachers, HODs, and school principals.

As detailed in Table 10, principals consistently reported higher mean scores for educational outcomes compared to HODs and teachers. Curriculum coverage achieved the highest mean rating among principals Mean = 4.36,

Table 10: Descriptive Statistics for Perceived Educational Outcomes Across Respondent Categories

Outcome Indicator	Classroom Teachers (n = 280) Mean (SD)	Heads of Department (n = 71) Mean (SD)	Principals (n = 11) Mean (SD)
Internal examination performance	3.26 (1.05)	3.17 (1.04)	3.55 (1.44)
National examination (KCSE) performance	3.20 (1.08)	3.23 (1.04)	3.64 (0.92)
Quality of teaching in the school	3.09 (1.05)	3.39 (1.10)	3.55 (1.13)
Consistency of curriculum coverage	3.28 (1.07)	3.38 (1.03)	4.36 (0.92)
Learner discipline and engagement	3.14 (1.07)	3.56 (1.13)	3.82 (0.98)
Overall school effectiveness	3.22 (0.99)	3.61 (1.05)	3.45 (1.13)

textSD = 0.92) and teachers Mean = 3.28, textSD = 1.07). Conversely, HODs rated overall school effectiveness highest Mean = 3.61, textSD = 1.05).

determine the contribution of QASO supervisory practices on Classroom Observation Practices (IV2).

The ANOVA results in Table 11 confirm that the overall regression model was statistically significant ($F_{5, 358} = 146.182, P < .001$).

Multiple Linear Regression Analysis

A multiple linear regression analysis was conducted to

Table 11: Model Summary for Multiple Linear Regression Predicting Educational Outcomes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.846	.716	.711	0.38954

Table 12: Analysis of Variance (ANOVA) for the Multiple Regression Model

Source	Sum of Squares	df	Mean Square	F	P value
Regression	110.925	5	22.185	146.182	< .001
Residual	43.987	358	0.152		
Total	154.912	363			

The unstandardized and standardized coefficients presented in Table 13 show that Classroom Observation Practices

made a statistically significant positive contribution to educational outcomes $\beta = .218, t = 4.159, p < .001$.

Table 13: Regression Coefficients for the Five QASO Supervisory Practices

Predictor	Unstandardized B	Std. Error	Standardized B (β)	t	P value	95% CI Lower	95% CI Upper
(Constant)	0.286	0.128	—	2.234	.026	0.034	0.538
Classroom Observation Practices (IV2)	0.212	0.051	.218	4.159	< .001	0.112	0.313

Impact of Classroom Observation Practices on Educational Outcomes

Descriptive evaluation of classroom observation practices revealed moderate implementation overall (Teacher Composite Mean = 3.31, SD = 1.09).

Discussion of Findings

The empirical findings demonstrate that QASO supervisory practices exert a significant influence on educational outcomes in public secondary schools in Meru County, accounting for 71.6% of the variance

in outcomes in the full regression model. Specifically, classroom observation practices emerged as a major predictor ($\beta = .218, t = 4.159, P < .001$), indicating that direct instructional observation and pedagogical supervision meaningfully enhance student achievement and overall educational quality.

The significant predictive contribution of classroom observation practices ($\beta = .218$) underscores that quality assurance inspections yield direct performance gains when inspectors observe real-time lesson delivery, evaluate pedagogical appropriateness, and assess learner

Table 14: Teachers' Responses on Classroom Observation Practices

Statement	Never	Rarely	Sometimes	Often	Always	Mean	SD
Lesson objectives are clearly communicated to learners during observation.	30 (10.7)	70 (24.9)	90 (32.0)	71 (25.3)	20 (7.1)	2.93	1.10
Lesson delivery aligns with curriculum standards.	17 (6.2)	68 (24.9)	86 (31.5)	57 (20.9)	45 (16.5)	3.16	1.16
Teachers demonstrate mastery of subject content.	9 (3.2)	50 (17.9)	98 (35.0)	68 (24.3)	55 (19.6)	3.39	1.09
Instructional strategies used are appropriate and effective.	9 (3.2)	47 (16.7)	81 (28.8)	73 (26.0)	71 (25.3)	3.53	1.13
Learner-centred approaches are employed in instruction.	8 (2.9)	52 (18.8)	92 (33.2)	70 (25.3)	55 (19.9)	3.40	1.09
Learner engagement and participation are adequately encouraged.	7 (2.5)	45 (16.2)	88 (31.7)	80 (28.8)	58 (20.9)	3.49	1.07
Questioning techniques enhance critical thinking.	3 (1.1)	78 (27.8)	62 (22.1)	88 (31.3)	50 (17.8)	3.37	1.10
Formative assessment is integrated during instruction.	6 (2.1)	70 (24.9)	64 (22.8)	92 (32.7)	49 (17.4)	3.38	1.10
Instruction is differentiated to cater for diverse learner abilities.	11 (3.9)	75 (26.9)	77 (27.6)	70 (25.1)	46 (16.5)	3.23	1.13
Classroom management and time utilization are effective.	6 (2.1)	67 (23.8)	86 (30.6)	76 (27.0)	46 (16.4)	3.32	1.07
Instructional materials and teaching aids are effectively used.	6 (2.1)	65 (23.1)	103 (36.7)	62 (22.1)	45 (16.0)	3.27	1.05
Teachers respond appropriately to learner misconceptions.	9 (3.2)	77 (27.6)	72 (25.8)	84 (30.1)	37 (13.3)	3.23	1.09
Professional conduct and classroom climate are maintained.	6 (2.1)	62 (22.1)	95 (33.9)	68 (24.3)	49 (17.5)	3.33	1.07

engagement. This aligns with international research (Hattie, 2023; Darling-Hammond, 2021), which emphasizes that evaluating evidence-based teaching strategies and content mastery during live classroom instruction serves as one of the strongest determinants of student learning outcomes.

Although classroom observation practices were confirmed as a positive predictor of outcomes, descriptive findings revealed functional areas needing development. While observers focused strongly on appropriate instructional methods (Mean = 3.53) and active learner participation (Mean = 3.49), the explicit communication of lesson objectives recorded the lowest score (Mean = 2.93). This gap suggests that while instructors execute general pedagogical delivery, structural aspects of competency-based instruction—such as framing learning intentions—are frequently overlooked.

Furthermore, moderate ratings in differentiated instruction (Mean = 3.23) and responsiveness to learner misconceptions (Mean = 3.23) highlight that classroom observation must shift from standardized pedagogical audits toward developmental mentoring. As noted by Fullan (2020) and Black and Wiliam (2021), instructional supervision is most transformative under

curriculum shifts like Kenya's Competency-Based Curriculum (CBC) when inspectors support teachers in adaptive instruction, formative feedback, and inclusive pedagogical practices rather than routine compliance. Strengthening targeted lesson observation, training QASOs in constructive instructional coaching, and institutionalizing clear lesson orientation standards represent essential steps toward maximizing the positive impact of classroom observation on educational outcomes in secondary schools.

CONCLUSION

In regards to classroom observation practices by QASOs, the study concluded that the practice significantly and strongly influences educational outcomes, demonstrating that direct monitoring and feedback on classroom instruction are critical to improving teaching effectiveness and learner outcomes.

Competing Interests

The authors have no competing interests to declare that are relevant to the content of this article.

Authors' Contributions

Author 1 (corresponding author) designed the

study, performed the statistical analysis, wrote the study protocol, and authored the initial draft of the manuscript. Author 2 and Author 3 managed the analyses of the study as well as managing the literature searches. All authors read and approved the final manuscript.

Consent

All authors declare that ‘written informed consent was obtained from approved parties for publication of this research article. A copy of the written consent is available for review by the Editorial office/Chief Editor/Editorial Board members of this journal.’

Ethical Approval

This study involved collecting data from human participants and was carried out in strict accordance with institutional and national ethical standards. Ethical clearance was granted by the Chuka University Institutional Ethics Review Committee (CUIERC) License No: NACOSTI/NBC/AC-0812. The National Research License was subsequently issued by the National Commission for Science, Technology and Innovation (NACOSTI) License No: NACOSTI/P/26/4188583. Informed consent was obtained from all individual participants included in the study prior to data collection.

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