

ISO 9001 QMS Conformity in Face-to-Face University Instruction in Kenya: Evidence from Audit Findings

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Cite this article in APA

Kanjogu, M. W., Ngala, F. B. J. A., & Mango'ka, A. S. (2026). ISO 9001 QMS conformity in face-to-face university instruction in Kenya: Evidence from audit findings. *Journal of education and learning*, 5(1), 145–156.
<https://doi.org/10.51317/xzsokc77>



A publication of Editon
Consortium Publishing (online)

Article history

Received: 2026-07-17

Accepted: 2026-08-24

Published: 2026-09-30

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Abstract

This study examined ISO 9001 Quality Management System (QMS) conformity in face-to-face university instruction in Kenya using documentary evidence from audit findings. This documentary research design analysed audit evidence from five ISO 9001-certified chartered universities in Kenya's Rift Valley Region, covering 2020–2025. During data collection, the audit team systematically extracted and coded internal and external audit findings by source and then combined them into a single dataset for analysis. The team classified 2,939 audit findings related to academic planning and scheduling; teaching, assessment, and student supervision; curriculum management; and experiential learning and student engagement according to the outcome categories recorded in the audit documentation: positive findings, areas requiring improvement, minor nonconformities, and major nonconformities. The analysis identified 2,425 positive findings (82.5%), 289 areas requiring improvement (9.8%), 191 minor nonconformities (6.5%) and 34 major nonconformities (1.2%). Teaching, assessment and student supervision demonstrated statistically significant institutional differences across all four audit outcomes. In contrast, academic planning and scheduling showed significant institutional differences in positive findings and areas requiring improvement. The study found no statistically significant institutional differences in curriculum management, experiential learning, or student engagement. The findings demonstrate substantial documented conformity alongside identifiable improvement needs and nonconformities across instructional processes. The study recommends that universities should strengthen process-level monitoring, corrective-action follow-up and continual improvement to sustain QMS conformity. The study demonstrates the value of audit evidence for examining process-specific QMS conformity beyond certification status.

Key terms: Audit findings, conformity, ISO 9001, quality management systems, university instruction.

INTRODUCTION

This study examined ISO 9001 Quality Management System (QMS) conformity in face-to-face university instruction in Kenya using documentary evidence from audit findings. Higher education institutions are increasingly required to demonstrate accountability for the quality, consistency and effectiveness of teaching and learning. This expectation extends beyond the existence of institutional policies and quality assurance structures to evidence that academic processes are consistently implemented, monitored and improved. Systematic quality management gives universities mechanisms to plan, control, evaluate, and improve institutional processes. ISO 9001 provides a generic quality management framework that emphasises process control, monitoring, evaluation, corrective action and continual improvement (International Organisation for Standardisation [ISO], 2015).

Despite the widespread adoption and certification of ISO 9001 quality management systems in universities, certification alone does not demonstrate that individual instructional processes consistently conform to established requirements. Limited documentary evidence is available on where conformity, areas requiring improvement and nonconformities occur within face-to-face university instruction in ISO 9001-certified Kenyan universities. This creates a gap between evidence of certification and evidence of operational conformity at the process level.

ISO 9001 provides a generic quality management framework rather than an education-specific quality standard. Nevertheless, its Process Approach applies to universities because teaching and learning involve interconnected activities that require planning, implementation, monitoring, evaluation, and improvement (ISO, 2015). These activities include academic planning, resource allocation, teaching delivery, assessment, student supervision, curriculum management, record management and experiential learning. ISO 19011 guides systematic, evidence-based auditing of management systems and supports using audit evidence to assess conformity against established audit criteria (ISO, 2018). Audit findings therefore provide an important documentary basis for examining whether documented QMS requirements are reflected in actual institutional practice.

The distinction between certification and operational conformity is particularly important in higher education. A university may maintain policies, procedures and certification while still experiencing process-level weaknesses. Certification indicates that a management system has been assessed against specified requirements, but it does not imply that all processes will show the same level of conformity at all times. Examining audit evidence can therefore more directly indicate where instructional processes demonstrate conformity and where corrective or improvement action may be required.

The international literature demonstrates the relevance of ISO-based quality management to educational organisations but also indicates variation in implementation. Rodríguez-Mantilla et al. (2024) examined 83 educational organisations in Spain using assessments from teachers and management team members. Their study identified differentiated organisational profiles associated with ISO 9001 implementation. The study demonstrates that QMS implementation does not necessarily produce identical organisational outcomes. However, it relied on perceptions of teachers and management teams and examined broad organisational dimensions rather than documentary audit evidence of conformity in particular instructional processes. The present study addresses this limitation by using audit findings as documentary evidence and focusing specifically on face-to-face university instructional processes.

The distinction between perceived implementation and documented conformity matters because ISO 9001 requires organisations to demonstrate controlled processes, monitoring, evaluation, and improvement (ISO, 2015). ISO 19011 (2018) similarly emphasises systematic auditing and evidence-based assessment. Audit findings therefore provide a different form of evidence from questionnaire responses because they record observations against defined audit criteria. The present study consequently extends the literature by examining documentary audit evidence rather than relying primarily on staff or management perceptions. At the African level, quality assurance has become increasingly important as higher education institutions respond to demands for accountability, relevance and continuous improvement. The African Standards and Guidelines for Quality Assurance in Higher Education

provide a regional framework for internal quality assurance, self-assessment, external review, accountability and quality enhancement (HAQAA Initiative, 2018). Mireku and Bervell (2024) conducted a systematic review of quality assurance research in sub-Saharan Africa and analysed 143 studies published between 2012 and 2022. Their review demonstrates the development of internal and external quality assurance mechanisms across African higher education. However, as a literature review, it synthesises existing research rather than directly examining documentary audit findings from university QMS processes. It therefore establishes the broader quality assurance context but does not show where specific ISO 9001 instructional processes demonstrate conformity or nonconformity.

Nabaho and Nabukenya (2024) identified a range of internal quality assurance methodologies used or expected to be used by African universities, including student evaluation of teaching, pedagogical training, peer observation, examination moderation, external examination and self-assessment. These approaches demonstrate the breadth of quality assurance mechanisms available to universities. However, they do not necessarily provide the same type of evidence as ISO 9001 audit findings. The present study complements this literature by examining evidence generated through systematic QMS audits and identifying patterns across specific instructional processes.

The African literature therefore demonstrates the importance of institutionalised quality assurance but also highlights the distinction between the existence of quality assurance mechanisms and evidence of consistent implementation. This distinction provides a basis for examining documentary audit evidence at the process level. Quality assurance challenges are also evident in East African higher education. Katusiimeh et al. (2024) examined the implementation of quality assurance systems in East African public universities and reported continuing institutional challenges despite the establishment of quality assurance offices and policy frameworks. Their findings indicate that formal quality assurance structures do not automatically guarantee consistent implementation of academic processes.

This evidence is relevant to the present study because face-to-face university instruction comprises multiple interconnected processes, including academic planning, teaching, assessment, curriculum management, student supervision and experiential learning. However, Katusiimeh et al. (2024) did not specifically analyse ISO 9001 audit findings or classify documented findings by positive conformity, areas for improvement, and levels of nonconformity. The present study therefore extends the East African literature by examining documentary audit evidence at the level of specific instructional processes.

Kenyan universities have increasingly incorporated quality assurance and ISO-based quality management into institutional governance. Wangai et al. (2021) examined the influence of ISO 9001 standards on the quality of academic programmes using the Bachelor of Education programme at the University of Nairobi. The study used a descriptive survey of heads of academic units, lecturers, and alums and found that adopting ISO 9001 standards significantly influenced academic programme quality. The study establishes the relevance of ISO 9001 to academic quality in Kenya, but its participant-based approach does not show how actual audit findings are distributed across instructional processes.

Onditi and Onunga (2024) examined university review models for improving higher education quality assurance in Kenya and highlighted the importance of systematic quality assurance approaches. Their work contributes to understanding institutional review mechanisms but does not provide a detailed analysis of ISO 9001 audit findings relating to routine face-to-face instruction. The Kenyan literature therefore establishes the importance of quality assurance and ISO 9001 in higher education. Still, it provides limited documentary evidence on how audit findings are distributed across face-to-face instructional processes.

The literature reviewed demonstrates that quality assurance and ISO 9001 implementation have been examined from organisational, perceptual, policy and institutional-review perspectives. However, evidence remains limited on how ISO 9001 audit findings are distributed across specific face-to-face university instructional processes in Kenya. In particular, documentary evidence is limited on the extent to

which audit records identify positive conformity, areas for improvement, minor nonconformities, and major nonconformities across instructional processes.

This study therefore examined ISO 9001 QMS conformity in face-to-face university instruction in Kenya using documentary audit evidence. Specifically, the study examined the distribution of audit outcomes and whether statistically significant institutional differences occurred across four instructional-process areas. The study was guided by the following research question: What patterns of ISO 9001 QMS conformity and institutional variation are evident in audit findings relating to face-to-face university instruction in selected ISO 9001-certified universities in Kenya?

LITERATURE REVIEW

ISO 9001 establishes requirements for a quality management system based on principles including process management, monitoring, evaluation, corrective action and continual improvement (ISO, 2015). Although the standard is generic and is not specifically designed for universities, its Process Approach can be applied to educational organisations because university activities involve interconnected processes that require planning, implementation and monitoring. Rodríguez-Mantilla et al. (2024) found differentiated profiles among educational organisations implementing ISO 9001. Their findings indicate that the effects and characteristics of QMS implementation may vary across educational organisations. However, the evidence was based on assessments by teachers and management teams rather than on documented audit findings. This distinction matters because perceptions of implementation do not necessarily reflect conformity with specific documented procedures.

The present study therefore focuses on audit evidence as documentary evidence of QMS implementation. Audit findings provide evidence generated through systematic assessment of organisational processes and therefore allow the researcher to examine the types and distribution of findings recorded against specific instructional processes. Quality assurance in African higher education has developed through internal and external mechanisms designed to promote accountability, consistency and continual improvement. The African Standards and Guidelines

for Quality Assurance provide an overarching framework for internal and external quality assurance and emphasise institutional responsibility for quality enhancement (HAQAA Initiative, 2018).

Mireku and Bervell (2024) found that quality assurance research in sub-Saharan Africa has addressed a range of internal and external mechanisms. Their review also identified challenges including insufficient funding, inadequate academic staffing, weak policy implementation and insufficient staff training. These findings show that establishing quality assurance mechanisms does not necessarily eliminate implementation challenges. Nabaho and Nabukenya (2024) similarly demonstrate that African universities employ multiple internal quality assurance methodologies. These include student evaluation, peer observation, examination moderation, external examination, pedagogical training and self-assessment. These mechanisms support institutional quality cultures, but the evidence they generate differs from the evidence generated through ISO 9001 audits. The present study therefore offers a complementary perspective by analysing recorded audit findings linked to specific instructional processes.

Katusiimeh et al. (2024) examined quality assurance systems in East African public universities and reported that challenges remain despite the establishment of quality assurance offices and policy frameworks. Their findings highlight the gap between institutional quality-assurance structures and consistent implementation of academic processes. This distinction is particularly relevant to ISO 9001-certified universities. Certification indicates the presence and assessment of a QMS, but the actual operation of individual academic processes may still generate positive findings, improvement observations or nonconformities. Documentary audit analysis can therefore provide evidence concerning operational implementation.

Wangai et al. (2021) found that ISO 9001 standards significantly influence the quality of academic programmes in the Bachelor of Education programme at the University of Nairobi. Their participant-based evidence supports the relevance of ISO 9001 to academic quality in Kenya but does not identify how audit findings are distributed across individual

instructional processes. Onditi and Onunga (2024) emphasised systematic university review models as mechanisms for improving quality assurance in Kenya. Their work demonstrates the importance of institutional review but does not specifically examine the distribution of ISO 9001 audit findings in face-to-face instruction.

This study addresses this documentary gap by analysing audit findings from five ISO 9001-certified chartered universities and examining the distribution of findings across academic planning and scheduling; teaching, assessment, and student supervision; curriculum management; and experiential learning and student engagement.

Theoretical Framework

The study followed the Process Approach to Quality Management, which is central to ISO 9001 (ISO, 2015). The Process Approach conceptualises organisational activities as interconnected processes that should be planned, implemented, monitored, evaluated, and continually improved. This approach suits university instruction because teaching and learning involve interconnected activities. These include course allocation, teaching timetable preparation, examination scheduling, teaching delivery, assessment, curriculum development and review, evaluation of teaching effectiveness, postgraduate supervision, academic trips, and industrial attachment. The effectiveness of one process may influence the effectiveness of subsequent processes.

The Process Approach also provides a basis for distinguishing between the existence of formal QMS arrangements and actual conformity. A university may have documented policies, procedures and standard operating procedures, but conformity requires evidence that these requirements are implemented and controlled in practice. The principle of continual improvement also informed the study. ISO 9001 requires organisations to monitor processes, address nonconformities and take action to improve QMS effectiveness (ISO, 2015). Audit findings are consequently important because they provide documentary evidence of conforming practices, improvement opportunities and nonconformities.

The conceptual relationship guiding the study was:

Documented QMS requirements → Implementation of instructional processes → Audit assessment → Audit findings → Corrective action and follow-up → Continual improvement → Sustained QMS conformity

This framework guided the classification and interpretation of audit findings across the four instructional-process areas.

METHODOLOGY

The study adopted a documentary research design involving systematic extraction and analysis of ISO 9001 audit findings. This design was appropriate because the study examined conformity in face-to-face university instruction using documented audit evidence rather than relying primarily on participant perceptions. The documentary analysis involved five main stages. First, the study identified and screened eligible ISO 9001 audit documents covering the study period using predetermined inclusion criteria. Second, findings relating specifically to face-to-face instructional processes were extracted into a structured audit analysis matrix. Third, the extracted findings were classified according to instructional process and audit outcome. Fourth, the source of each finding was recorded, after which internal and external audit findings were combined into a single analytical dataset. Fifth, the combined findings were analysed using descriptive statistics, one-way ANOVA, and thematic analysis of documentary evidence.

The primary unit of analysis was the individual audit finding relating to a face-to-face instructional process. The study covered five ISO 9001-certified chartered universities in Kenya's Rift Valley Region. For confidentiality, the institutions were designated University A, University B, University C, University D and University E. The documentary corpus comprised 63 ISO 9001 audit reports from five ISO 9001-certified chartered universities, covering the period 2020–2025. Purposive selection was used to include audit reports containing findings relevant to face-to-face instructional processes.

The 63 audit reports were distributed as follows:

Table 1: Distribution of Audit Reports by University

University	Audit Reports
University A	17
University B	12
University C	18
University D	10
University E	6
Total	63

The audit evidence covered the period 2020–2025. The documentary corpus comprised internal and external audit reports. Purposive sampling identified audit documents containing evidence relevant to face-to-face university instruction. Documents were included if they:

1. related to ISO 9001 QMS auditing;
2. were generated during the period 2020–2025;
3. concerned one of the five selected universities;
4. contained findings relating to face-to-face instructional processes; and
5. provided sufficient information to classify each finding according to the study's audit-outcome categories.

The final documentary corpus comprised 63 audit reports. We included both internal and external audit reports. During data extraction, we identified internal and external findings separately to preserve information about each finding's source, then combined them into a single dataset for analysis. External audit records included surveillance and recertification audits where applicable. The principal data sources comprised ISO 9001 internal and external audit reports and associated corrective-action records available within the documentary corpus. The audit evidence covered the following face-to-face instructional processes:

1. course allocation;
2. preparation of teaching timetables;
3. preparation of examination timetables;
4. teaching lessons;
5. academic trips;
6. examinations;

7. curriculum development;
8. curriculum review;
9. teaching effectiveness evaluation;
10. postgraduate supervision; and
11. industrial attachment.

Data were collected through systematic documentary extraction. Each eligible audit report was reviewed, and findings relevant to face-to-face instructional processes were entered into a structured audit analysis matrix. Each finding was assigned a unique record and coded according to university, audit year, audit source, audit type, instructional process, audit finding, evidence cited by the auditor, audit outcome, and corrective or improvement action, where available. We excluded findings unrelated to face-to-face instructional processes. Where corrective-action records referred to an existing audit finding, they were linked to the corresponding finding. The extracted records were cross-checked against the original audit reports to enhance completeness, accuracy, and consistency.

The individual audit finding was the primary unit of analysis. Findings were classified into four categories:

1. Positive findings – documented evidence indicating conformity or effective implementation of a QMS requirement;
2. Areas requiring improvement – observations identifying opportunities or areas where improvement was required without being classified as a nonconformity;
3. Minor nonconformities – documented deviations from specified QMS requirements that did not constitute major system failure; and
4. Major nonconformities – significant failures to meet specified QMS requirements or failures

that could substantially affect QMS effectiveness.

The classifications were based on the terminology and evidence recorded in the respective audit documentation. Descriptive statistics were used to determine the frequency and percentage distribution of the four audit outcomes. Findings were also grouped by university and instructional-process area. One-way analysis of variance (ANOVA) was used to examine whether the mean frequencies of audit findings differed among the five universities across the respective audit outcomes. The study assessed statistical significance at $p < .05$. Documentary thematic analysis also identified recurring patterns in implementation, monitoring, corrective action, and continual improvement. The study analysed internal and external audit findings together as a single dataset, consistent with its focus on overall QMS conformity rather than differences between audit sources.

The study complied with applicable ethical and research requirements. The Kabarak University Institutional Scientific and Ethics Review Committee (ISERC) granted ethical clearance, and the National Commission for Science, Technology and Innovation (NACOSTI) issued a research permit before data collection. The study also obtained appropriate

institutional permissions from the universities whose audit records were included in the documentary corpus. To protect institutional confidentiality, the participating universities were anonymised as Universities A–E. We accessed and used documentary records solely for academic research purposes. We excluded information that could identify individual staff members or reveal confidential institutional operations from reporting. We handled the audit records and associated documentary evidence securely, and reported findings in aggregate to minimise the risk of institutional or individual identification. Academic integrity was maintained through accurate documentation, analysis and citation of documentary sources.

FINDINGS AND DISCUSSION

The documentary analysis generated 2,939 audit findings across Universities A–E from 2020–2025. Internal and external audit findings were combined into a single analytical dataset; therefore, the results reflect the overall pattern of findings across both audit sources. Of the 2,939 findings, 2,425 (82.5%) were classified as positive findings, 289 (9.8%) as areas requiring improvement, 191 (6.5%) as minor nonconformities, and 34 (1.2%) as major nonconformities.

Table 2: Overall Distribution of Audit Findings

Audit outcome	Frequency	Percentage
Positive findings	2,425	82.5
Areas requiring improvement	289	9.8
Minor nonconformities	191	6.5
Major nonconformities	34	1.2
Total	2,939	100.0

Positive findings therefore represented the largest proportion of documentary evidence, while major nonconformities represented the smallest.

Table 3: Distribution of Audit Findings by University

University	Positive	Improvement	Minor NCs	Major NCs	Total
A	1,336	157	119	15	1,627
B	729	42	16	4	791
C	76	10	18	9	113
D	186	24	7	0	217
E	98	56	31	6	191
Total	2,425	289	191	34	2,939

The number of recorded findings varied across Universities A–E, with University A having the highest number and University C the lowest. This variation reflects differences in the number of audit reports available and the extent of audit coverage across the universities. Accordingly, interpret the absolute number of findings in the context of audit coverage, and do not treat it as a direct measure of institutional quality.

Academic Planning and Scheduling

Academic planning and scheduling comprised course allocation, preparation of teaching timetables and preparation of examination timetables. The ANOVA showed statistically significant institutional differences in positive findings, $F(4,10) = 7.351$, $p = .005$, and areas requiring improvement, $F(4,10) = 5.489$, $p = .013$. Differences in minor nonconformities were not statistically significant, $F(4,10) = 1.682$, $p = .230$, and differences in major nonconformities were also not statistically significant, $F(4,10) = 2.125$, $p = .152$.

Teaching, Assessment and Student Supervision

Teaching, assessment and student supervision demonstrated statistically significant institutional differences across all four audit outcomes. Positive findings differed significantly among the universities, $F(4,10) = 22.733$, $p < .001$. Areas requiring improvement

also differed significantly, $F(4,15) = 5.156$, $p = .008$. Minor nonconformities differed significantly, $F(4,15) = 6.025$, $p = .004$, while major nonconformities also differed significantly, $F(4,10) = 7.167$, $p = .005$.

Curriculum Management

Curriculum management comprised curriculum development and curriculum review. No statistically significant differences were observed in positive findings, $F(4,10) = 3.323$, $p = .056$; areas requiring improvement, $F(4,5) = 1.047$, $p = .467$; minor nonconformities, $F(4,10) = 3.323$, $p = .056$; or major nonconformities, $F(4,10) = 1.347$, $p = .319$. Although the positive-finding result was close to the conventional .05 threshold, $p = .056$ was not statistically significant.

Experiential Learning and Student Engagement

Experiential learning and student engagement comprised academic trips and industrial attachment. No statistically significant differences were detected for positive findings, $F(4,11) = 1.473$, $p = .275$; areas requiring improvement, $F(4,5) = 1.664$, $p = .293$; minor nonconformities, $F(4,10) = .951$, $p = .474$; or major nonconformities, $F(4,10) = 1.100$, $p = .408$. The results indicate that the available audit evidence did not establish statistically significant institutional differences in the recorded audit outcomes for experiential learning and student engagement.

Summary of ANOVA Results

Table 4: Summary of ANOVA Results for ISO 9001 QMS Audit Outcomes by Instructional Process

Instructional process	Positive findings	Areas requiring improvement	Minor NCs	Major NCs
Academic planning and scheduling	Significant, $F(4,10) = 7.351$, $p = .005$	Significant, $F(4,10) = 5.489$, $p = .013$	Not significant, $F(4,10) = 1.682$, $p = .230$	Not significant, $F(4,10) = 2.125$, $p = .152$
Teaching, assessment and student supervision	Significant, $F(4,10) = 22.733$, $p < .001$	Significant, $F(4,15) = 5.156$, $p = .008$	Significant, $F(4,15) = 6.025$, $p = .004$	Significant, $F(4,10) = 7.167$, $p = .005$
Curriculum management	Not significant, $F(4,10) = 3.323$, $p = .056$	Not significant, $F(4,5) = 1.047$, $p = .467$	Not significant, $F(4,10) = 3.323$, $p = .056$	Not significant, $F(4,10) = 1.347$, $p = .319$
Experiential learning and student engagement	Not significant, $F(4,11) = 1.473$, $p = .275$	Not significant, $F(4,5) = 1.664$, $p = .293$	Not significant, $F(4,10) = .951$, $p = .474$	Not significant, $F(4,10) = 1.100$, $p = .408$

Note. ANOVA = analysis of variance; NC = nonconformity. Statistical significance was assessed at $p < .05$. The analysis combined internal and external audit findings; no statistical comparison between the two audit sources was undertaken.

Discussion

The finding that 82.5 per cent of the recorded audit findings were positive provides substantial documentary evidence of conformity within the instructional processes examined. However, the 9.8 per cent of areas requiring improvement, 6.5 per cent minor nonconformities, and 1.2 per cent major nonconformities show that conformity was not complete across all processes. This pattern supports the Process Approach to quality management, which requires organisations not only to establish processes but also to monitor their effectiveness, identify deviations and undertake improvement action (ISO, 2015).

The results also support the distinction between certification and continuing operational conformity. A certified QMS can include both conforming practices and process-level weaknesses that require corrective or improvement action. The finding complements Rodríguez-Mantilla et al. (2024), who identified differentiated profiles among educational organisations implementing ISO 9001. While their study demonstrates variation based on perceptions of QMS impact, the present study provides documentary

evidence of variation in recorded audit outcomes across specific university instructional processes.

Academic Planning and Scheduling

The statistically significant differences in positive findings and areas requiring improvement indicate variation in the documented implementation of academic planning and scheduling. These processes include course allocation, teaching timetables and examination timetables and provide an important operational foundation for teaching and assessment.

The absence of statistically significant differences in minor and major nonconformities indicates that the available audit evidence did not establish statistically significant institutional differences in more serious deviations. The results should therefore be interpreted as evidence of variation in recorded positive practices and improvement opportunities rather than as evidence that some universities were categorically more or less compliant.

This finding is consistent with the Process Approach because effective teaching depends partly on the controlled interaction between planning processes and teaching and assessment processes. It also

complements the African quality assurance literature, which emphasises systematic monitoring and institutional processes rather than reliance solely on formal quality structures (HAQAA Initiative, 2018; Mireku & Bervell, 2024).

Teaching, Assessment and Student Supervision

Teaching, assessment and student supervision demonstrated statistically significant institutional differences across all four audit outcomes. This was the most extensive pattern of variation in the reported analyses. This result matters because these processes represent direct academic service-delivery activities. Variation across positive findings, improvement areas and both levels of nonconformity indicates that QMS implementation in these processes requires sustained monitoring rather than reliance on certification status alone. This finding aligns with the broader African quality assurance literature, which identifies ongoing challenges related to institutional capacity, staffing, training, and implementation (Mireku & Bervell, 2024). However, this study contributes a different form of evidence by identifying variation directly from documented audit findings.

The result also extends Wangai et al. (2021). While Wangai et al. established a significant relationship between ISO 9001 standards and academic programme quality using participant-based evidence, the present study identifies specific instructional processes in which audit evidence shows significant institutional variation. The two studies therefore provide complementary forms of evidence.

Curriculum Management

No statistically significant institutional differences were detected across the four audit outcomes for curriculum management. This result indicates that the available audit evidence did not provide sufficient statistical evidence of institutional differences in the recorded audit outcomes for curriculum management. Although the observed pattern may reflect the influence of common regulatory and institutional requirements governing curriculum development and review, the present study did not directly test the factors underlying this pattern. Consequently, interpret the finding as a statistical result based on the available audit observations rather than as evidence

that curriculum processes were identical across institutions.

Experiential Learning and Student Engagement

The analyses revealed no statistically significant institutional differences across the four audit outcomes for experiential learning and student engagement, which encompassed academic trips and industrial attachment. This finding indicates that the available audit evidence did not provide sufficient statistical evidence of institutional variation in the recorded patterns of positive findings, areas requiring improvement, minor nonconformities, or major nonconformities for these processes.

CONCLUSION AND RECOMMENDATIONS

Conclusion: This study examined ISO 9001 QMS conformity in face-to-face university instruction using documentary audit evidence from five ISO 9001-certified chartered universities in Kenya. The documentary corpus comprised 63 audit reports covering 2020–2025 and generated 2,939 audit findings. The study combined internal and external audit findings into a single analytical dataset. Of the 2,939 findings, 2,425 (82.5%) were positive findings, 289 (9.8%) were areas requiring improvement, 191 (6.5%) were minor nonconformities, and 34 (1.2%) were major nonconformities.

The findings provide substantial documentary evidence of conformity but also demonstrate that conformity is not uniform across instructional processes. Teaching, assessment and student supervision showed statistically significant institutional differences across all four-audit outcomes. Academic planning and scheduling showed statistically significant differences in positive findings and areas requiring improvement. Curriculum management, experiential learning, and student engagement showed no statistically significant institutional differences in the reported analyses.

The study demonstrates the value of audit evidence for examining operational QMS conformity at the process level. Rather than treating ISO 9001 certification as evidence of uniform implementation, audit evidence provides a basis for identifying specific areas of conformity, improvement and nonconformity within university instruction. Sustained conformity

therefore requires continuing implementation, monitoring, evaluation, corrective action and continual improvement within individual instructional processes.

Recommendations: Universities should strengthen process-level monitoring of teaching, assessment and student supervision, given that these processes demonstrated statistically significant institutional differences across all four audit outcomes. Quality assurance units should periodically review recurring audit findings in these areas and require responsible academic units to document corrective actions, provide evidence of implementation, and verify their effectiveness.

Academic units should strengthen the monitoring of course allocation, teaching timetables and examination timetables, as academic planning and scheduling showed statistically significant institutional differences in positive findings and areas requiring improvement. Audit evidence relating to these processes should be incorporated into academic planning and management review rather than being used solely to demonstrate continued ISO 9001 certification. Universities should also maintain complete, systematically indexed audit records and linked corrective-action documentation to facilitate effective follow-up of recurring issues across successive audit cycles.

Quality assurance units should identify, document and appropriately disseminate effective practices reflected in positive audit findings. Sharing these practices across academic departments may support institutional learning and strengthen consistency in implementing QMS procedures. Additionally, university management should use audit evidence to inform staff development, academic planning, resource allocation and management review. Particular attention should be given to recurring minor and major nonconformities, as well as improvement areas that persist across successive audit cycles. Follow through on corrective actions to implementation and verify effectiveness, rather than treating them as documentation requirements alone.

Future research should compare internal and external ISO 9001 audit findings to determine whether the two audit sources identify similar or different patterns of QMS conformity. Such comparisons should account for differences in audit scope, timing, sampling, evidence examined and audit criteria. Future studies could also examine institutional factors, including leadership, staff competence, resource availability, workload, organisational culture and corrective-action effectiveness, that may help explain variation in QMS conformity across instructional processes.

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