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The Extent To Which Principals' Classroom Observation Strategy Influences Students' Academic Achievement In Public Secondary Schools In Gatanga Sub-County, Muranga County, Kenya

By

^{1*} Adhiambo Jackline Awino, ² Rose Wambui Njihia & ³ Violet Barasa

¹Master's Student, Tangaza University, Nairobi, Kenya ² Lecturer, School of Education, Tangaza University, Nairobi, Kenya ³Lecturer, School of Education, Tangaza University, Nairobi, Kenya *E-mail of the Corresponding Author: jackieprovidence@gmail.com

Abstract

This purpose of this study was to investigate the extent to which principals' classroom observation strategy influences students' academic achievement in public secondary schools in Gatanga Sub-County, Muranga County, Kenya. The study was guided by Total Quality Management Theory (TQM), developed in the 1920s by Deming. This study employed a convergent parallel mixed-methods research design. The target population was 48 public secondary schools, 48 principals, 380 teachers, and one Sub-County Director of Education. Criterion purposive sampling was used to include the sub county director of education and 10 out of 48 principals. The study used stratified and simple random sampling to select 260 out of 380 teachers to participate in the study. Questionnaires were used to collect quantitative data from teachers, and interview guides were used to collect qualitative data from sub county directors of education and principals. Cronbach's alpha was used to test the reliability of Likert scale tools, and the coefficient of 0.83 was realized. Descriptive statistics with the help of SPSS version 25 was used to analyze quantitative data, which was presented in frequencies, percentages, graphs, and tables. Qualitative data was analyzed using a thematic approach and presented in the form of narratives and direct quotations. The study revealed that principals' instructional supervision strategies including classroom observation affect students' academic achievement in public secondary schools. Feedback from principals' classroom observations was found not to be effective in improving teachers' lesson presentations and management. Principals do not effectively observe teachers' mastery of content, syllabus coverage, and lesson notes to enhance student performance. The study recommended that principals should provide more detailed, actionable feedback targeting specific areas for improvement in teaching methods, lesson presentations, and class management. The government should implement policies mandating comprehensive training programs for principals, focusing on effective classroom observation and feedback techniques. These programs should emphasize developing skills for providing constructive feedback and assessing teachers' mastery of content.

Key words: Kenya, Muranga, classroom observation, strategy, academic achievement

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1. Introduction

Instructional supervision including classromm observation is one of the indispensable functions for the effective operation of a good school system. It is an aspect of school administration that primarily focuses on ensuring the achievement of the expectations of the education system, including the effective performance of learners (Peretomode, 2021). Instructional supervision is defined by Kumari (2022) as activities designed to improve instruction at all levels of the school enterprise (Kumari, 2022). Balimuttajjo (2023) described instructional supervision as an ongoing, periodic, formative practice conducted with the intention of enhancing teachers' instructional methods and student performance.

According to the definitions provided, principals' instructional supervision entails the school principal observing and evaluating teachers' instructional methods to improve the quality of teaching and learning. This process encompasses classroom observations, providing support materials, and collaborating with teachers to enhance their instructional techniques, ultimately leading to more effective learning and improved learner performance.

In a study conducted by Glanz (2018), it was argued that contemporary supervisory strategies drew inspiration from an earlier American educational system in which teachers were subject to the oversight of local governments. According to Glanz's research, this historical supervision was the shared responsibility of the church, school administration, trustees, local elected officials, and citizen groups.

The goal of supervision, according to Okumber (1998), was to achieve curriculum requirements and was referred to as inspection. Over time, as Peretomode (2021) noted, the field of education has undergone numerous reforms, leading to different strategies of teacher supervision such as classroom observation, teacher visitation, and demonstration. Ngui (2018) mentioned that in colonial England, supervision of instruction was done by local citizens who were appointed to inspect what the teachers were doing. This role of supervision, as noted by the author, was later delegated to school principals. In today's educational landscape, instructional supervision focuses on enhancing classroom instruction for the mutual benefit of teachers and students, leading to improved academic performance (Mette & Range, 2017).

Instructional supervision has garnered significant attention from scholars worldwide. For instance, Range (2013) conducted a study with the objective of exploring teachers' perceptions of supervision and evaluation by principals in eight high-performing elementary schools in West Virginia, United States. The study findings indicated that teachers placed trust in the feedback and regular observations conducted by their principals, leading to a sense of shared instructional leadership. Consequently, this trust and collaboration improved both teacher performance and student outcomes. In a related study conducted by Annunziata in 1997 in Papua New Guinea, it

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was established that instructional supervision has a positive impact on teaching and learning. However, Annunziata (1997) only focused on the supervision that takes place in the classroom, a gap that the current study sought to fill.

In another study conducted in the USA on instructional supervision in the administration of secondary education, Archibong (2012) argued that a principal serves as an instructional leader, responsible for enhancing the quality of teachers' instruction to facilitate the successful attainment of educational objectives. From the cited author, it can be said that the principals play a crucial role in supervising classroom instruction, closely observing teachers, and critically assessing teaching and learning processes. They collaborate with teachers to establish educational goals, engage in discussions, and develop plans for students' success. Principals also actively provide guidance and oversee the implementation of instructional resources, contributing to the continuous improvement of the educational process and school development. This point is supported by Ekpoh and Eze (2015), who contend that the principals also provide and monitor the implementation of instructional resources.

A study conducted by Huang and Xiaohong in 2014 in China demonstrated that instructional supervision in educational institutions plays a crucial role in enhancing both teacher professional development and students' academic achievements. The researchers found that instructional supervision is typically performed by designated administrators, including principals and vice principals. These individuals are responsible for conducting regular classroom observations and offering feedback to teachers, which, in turn, enhances the quality of instruction and the performance of students.

Nasreen and Shah (2019) discovered that in Pakistan, instructional supervision comprises monitoring students' progress, supplying instructional materials, and conducting informal classroom visits. These activities are consistently carried out by secondary school principals and are believed to be beneficial for enhancing the performance of both teachers and students. This study, however, was conducted in Pakistan, a country whose educational policies and background are different from those of Kenya, particularly in Gatanga Sub-County and Muranga County, hence the need for the current study to fill the gap.

In Namibia, McKinne (2018) established that principals are responsible for overseeing the provision and supervision of instructional materials as well as teaching. However, the majority of schools lack adequate instructional materials, leading to a negative impact on learning. McKinne (2018) further argued that access to high-quality and up-to-date instructional materials is essential for effective teaching and learning processes. Consequently, there is a pressing need for the government to address the issue of limited instructional materials in schools.

A study conducted by Garba and Abdullahi (2022) in public secondary schools in Bauchi State, Nigeria, revealed that continuous supervision of teachers' professional documents, such as schemes of work and lesson plans, enhances teachers' performance, subsequently benefiting the learners' academic outcomes. This research highlights the significance of instructional supervision in school leadership, as it directly influences academic performance. When head teachers actively engage in instructional supervision, they ensure that teaching practices adhere to established standards and best practices, ultimately fostering higher instructional quality and improved student academic performance.

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In Egypt, Elassy (2022) discovered that to enhance teachers' classroom management and improve learners' performance, supervision plays a crucial role. The author suggested that conducting regular classroom supervision and offering resources and support are some of the strategies that can be implemented to improve the academic performance of learners. The study by Elassy (2022), however, made no mention of how the principals were involved in the implementation of the strategies meant to improve learners' performance, hence the need for the current study to fill in the gaps.

The urge to improve the quality of education in the 21st century has made it imperative for countries, including Tanzania, to continually pursue educational reforms. Decentralizing education is one of the major reforms in Tanzania, and it places school leadership in the spotlight as responsible for enhancing education quality by empowering teachers through school-based instructional supervision practices.

In a study conducted by Awino in 2022, the aim was to explore teachers' perspectives on school-based instructional supervision practices for enhancing teaching skills among pre-primary teachers. The study revealed that head teachers' instructional supervision practices were ineffective, as they lacked appropriate supervision skills for pre-primary classes. In contrast, pre-primary teachers expressed a desire for supervisors to conduct both pre- and post-instructional supervision discussions. Additionally, there were no formal arrangements for teachers to acquire new teaching strategies. The study suggests that instructional supervision should be carried out collaboratively on a regular basis. This can be achieved through mentoring, coaching, teamwork, and clinical supervision, ultimately leading to improved academic performance among students.

Mulunda and Musaazi (2016) conducted a study to investigate the impact of instructional supervision by school authorities on the teaching practices of teachers in public secondary school teachers in Uganda. Their research revealed that a significant number of secondary school teachers in Uganda do not adequately prepare schemes of work and lesson plans, nor do they sufficiently engage in practical lessons or allocate time for remedial classes for academically struggling students. These pedagogical practices have been identified as contributing to the underperformance of numerous students in national examinations, reflecting ineffective supervisory strategies implemented by school authorities. This study conducted by Mulunda and Musaazi (2016) served as the foundation for the current study, which aimed to examine how the supervisory strategies employed by school principals impact the academic performance of students in public secondary schools.

A study conducted in Rwanda by Ntezimana and Imaniriho in 2023 investigated the impact of teaching aids on biology subject performance among O-level secondary school students in Kayonza District. The findings indicated that students who utilized teaching aids outperformed those who didn't have access to such resources. The study identified several factors contributing to improved performance in O-level biology secondary schools in Kayonza District, including the provision of instructional materials in schools, teacher workshops on instructional material usage, the creation of simple teaching aids for student practice, and effective supervision of instructional materials with effective teaching methods and supervisory strategies to achieve the highest academic performance.

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In Kenya, the supervision of instruction by school administrators is regarded as a crucial managerial duty that affects both the quality of instruction and students' exam results. As a result, the Ministry of Education makes efforts to ensure efficient instructional monitoring in schools (Gitonga, 2019). Kiviyo and Nduku (2022) mentioned that the interactions that a school principal has with the teachers and students through the checking of teachers' professional records, classroom observation, and induction of new teachers have been found to affect the teaching and learning process. The authors contended that the principals, whose one of the major roles is to supervise teachers, especially in the areas of their weaknesses, do not take their supervisory duties seriously and spend most of their time attending to visitors and development projects at the expense of conducting instructional supervision, which has affected academic performance in schools. According to Ndirangu (2015), ineffective supervision of both teachers' professional records and students' learning documents results in haphazard implementation of the curriculum and unprofessional behavior among teachers, such as absenteeism, leading to low student performance.

While schools work hard to improve the performance of students, the performance of schools in Gatanga Sub-County, Murang'a County continues to experience a decline in performance in KCSE. Gathumbi (2017) did a study about teacher empowerment strategies and students' academic performance in Kenya's certificate of secondary education (KCSE) in public secondary schools in Gatanga sub-county, Kenya. The study associated the decline in the academic performance of students with ineffective school leadership. Different from this study by Gathumbi, which related principal-teacher empowerment strategies with students' academic performance, this study looked at principal-teacher classroom observation in relation to students' academic performance in terms of KCSE mean scores in Gatanga Sub-County, Muranga County.

2. Statement of the Problem

School principals play a crucial role in ensuring that students receive quality education and that the educational system adapts to the evolving demands of society through the effective implementation of instructional supervision strategies. A strong recognition of the impact of effective leadership in schools has led the government to invest in the professional development of school leaders to enhance student achievement and supervision. This initiative, as emphasized by Githiari (2017) and Ndung'u (2021), aims to equip principals with the necessary skills to improve academic performance.

Despite well-intentioned efforts by the government, the students' performance in public secondary schools, particularly in Gatanga sub-county, in the Certificate of Secondary Education (KCSE), has consistently been poor (Gathumbi, 2015). This situation has raised concerns among parents and the community, especially in schools where performance has persistently declined.

The concern has been that continued higher failure rates could contribute to an increase in student dropout rates. This is a critical issue, as failing to meet educational standards can limit students' opportunities for higher education or future employment. Consequently, this could perpetuate a cycle of poverty and hinder socio-economic development in the county and the country at large.

Amid the challenge of declining student performance, there has been limited literature that explains how the supervisory strategies including classroom observation employed by the

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principals in public secondary schools influence the academic performance of students. Therefore, there is a pressing need for a study of this kind that investigated the extent to which principals' classroom observation strategy influences students' academic achievement in public secondary schools in Gatanga Sub-County, Muranga County, Kenya.

2.1 **Objective of the Study**

I. To determine the extent to which principals' classroom observation strategy influences students' academic achievement in public secondary schools in Gatanga Sub-County, Muranga County, Kenya.

2.2 Research Question

I. To what extent does principals' classroom observation influence students' academic achievement in public secondary schools in Gatanga Sub-County, Muranga County, Kenya?

3.0.Theoretical Framework

Total Quality Management Theory (TQM) was developed in the 1920s by Deming. The theory is based on seven principles, which include: improved customer satisfaction and loyalty; enhanced product and service quality; increased efficiency and productivity; reduced waste and costs; better decision-making; employee empowerment and satisfaction; and competitive advantage in the market.

This theory underscores the importance of ongoing improvement and recognizes that change is a result of mutual influence. It argues that when employers and employees collaborate, it enhances organizational performance. In a school setting, it is crucial for principals and teachers to cooperate to maximize students' academic success. As the school leader, the principal should oversee classroom observations, provide necessary teaching resources, and maintain a conducive environment, ultimately leading to improved student performance.

According to the theory, leadership plays a pivotal role in ensuring the success of quality management by setting a clear vision for continuous improvement in the organization. In the context of a school, the principal should establish precise standards for what constitutes high-quality teaching performance. These standards are achieved through methods such as classroom observation and by providing teachers with the necessary support and resources for their teaching practice. Offering clear performance standards is essential for promoting consistent and effective teaching practices. Classroom observations are a valuable tool for evaluating teachers' performance and offering constructive feedback. The theory, as emphasized by Deming (1920), advocates for employee participation and collaboration to achieve organizational goals, which, in an educational setting, translates to the academic achievement of students.

The theory of total quality management has been shaped by the contributions of several researchers. Shewhart (1920) is considered the father of statistical quality control. Shewhart introduced statistical process control (SPC) techniques to monitor and control the quality of industrial processes. His work laid the foundation for the concept of using statistical data to understand and improve quality. Deming (1940) is often credited as the person who took Shewhart's ideas and developed them further. He emphasized the importance of a systematic approach to quality management, focusing on reducing variation and improving processes.

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Deming introduced his famous 14 Points for Management, which emphasized the role of leadership, employee collaboration and involvement, and continuous improvement in achieving quality (students' performance). Juran (1950) contributed significantly to the field of quality management by introducing the concept of the "Quality Trilogy." He emphasized that quality improvement involves three key processes: quality planning, quality control, and quality improvement. Juran also introduced the concept of "fitness for use," which emphasized meeting customer needs and expectations. Feigenbaum (1950) introduced the concept of Total Quality Control (TQC). He emphasized that quality should be a comprehensive effort involving all members of an organization, from top management (principals) to frontline employees (teachers). Hence, in a school, the cooperation of teachers and their principals becomes important for the achievement of the academic goals of the learners.

Following the cited authors, it is clear that over the years, numerous researchers and practitioners have further refined and implemented TQM principles. TQM has become a widely recognized and adopted approach to quality management, promoting a culture of continuous improvement, customer focus, and employee involvement in organizations worldwide.

Total Quality Management (TQM) was first utilized in Japan in 1940, with its initial focus on improving the quality of products. Over time, this approach evolved to encompass all aspects of organizational excellence, including the quality of learning outcomes among students in schools (Blankestein, 2019). In the United States of America, TQM found application in the Navy, where it was employed to supervise the work of quality consultants (Farooq & Akhtar, 2007). More recently, Omolo (2016) observed a growing interest among institutions in Kenya, such as schools, in adopting TQM principles. They see it as a valuable tool for enhancing the quality of services, particularly in terms of improving learner performance.

4.0.Principals' Classroom Observation Strategy and Students' Academic Achievement

The principal's classroom observation is a crucial process in which the school principal or an administrator visits a teacher's classroom to observe their teaching practices and interactions with students. This observation serves as a vital component of the teacher evaluation process. During the classroom observation, the principal closely examines how the teacher delivers lessons, manages the classroom, engages students, and utilizes instructional strategies. These strategies are designed to enhance the learners' educational experiences and, consequently, their academic performance.

In Turkey, a study conducted by Bellibaş (2023) aimed to investigate the impact of classroom observations on teachers' self-efficacy and instructional practices. Additionally, the study aimed to explore the relationship between the feedback provided by principals and its effects on both teachers and students' performance. To examine these relationships, Confirmatory Factor Analysis and Structural Equation Modeling were employed, using data from the Teaching and Learning International Survey. The study's findings revealed a significant direct correlation between the feedback given by principals and teachers' instructional practices. Furthermore, there was an indirect relationship mediated by teacher self-efficacy in instructional practices. The study also highlighted that classroom observations by principals create an environment where learners actively engage in their learning, ultimately enhancing their performance. This study underscores the critical role of principals in shaping the performance of

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both teachers and students. However, it lacks a discussion on various aspects of principal supervision, including classroom observations, the provision of instructional materials, and collaborative planning between principals and teachers. These aspects were investigated in this study in the in the context of how they influence students' academic performance in public secondary schools in Gatanga Sub-County, Murang'a County, Kenya.

Classroom observation holds significant importance in teacher appraisal and improvement systems, serving as a crucial formative anchor for professional development. Martinez (2016) conducted a study to evaluate and enhance teaching through classroom observation. The research examined sixteen purposively selected observation systems in six countries, including high-performing Singapore and Japan, regional exemplar Chile, the three largest school districts in the United States, and other examples in Australia, Germany, and the United States to ensure diversity in the sample.

The study provided an analytical framework to comprehend various aspects of classroom observation systems, such as conceptual, methodological, and policy factors that shape them. The research revealed that the sixteen observation systems shared consistent overall purposes, but they differed in how they operationalized good teaching, the level of standardization in the observation process, emphasis on validation, and information utilization. However, the study did not explore the impact of classroom observation on learners, leaving a gap that the present study aims to address. This study sought to determine the extent to which principals' classroom observation strategies influence students' academic achievement in public secondary schools in Gatanga Sub-County. By doing so, it aims to shed light on how students are affected by classroom observation practices, bridging an important gap in the existing research.

A related study by Venessa and Huong (2023) was conducted on the role of classroom observation in the development and assessment of school teachers in Vietnam. They conducted a narrative review of current policy and relevant research literature. The review had two primary objectives. Firstly, it aimed to contribute to the growing body of Vietnam-based studies to enhance the understanding of recent policy reforms on teachers' professional development in Vietnam. Secondly, it sought to increase access to published work on the topic in Vietnamese for English-speaking scholars who might not have easy access to it. The study found that there is a long-standing tradition of using observation as a tool for teacher performance evaluation in Vietnam. However, there have been policy reforms and research studies that have repositioned observation as a means for teacher learning and development.

Despite these efforts, the implementation of these reforms has been inconsistent across Vietnam, partly due to resistance from a culture of compliance in schools. The study highlighted that classroom observation is an effective tool for teacher learning and development. It involves systematically observing a teacher's instructional practices and interactions with students in the classroom. This process provides teachers with valuable feedback from administrators, peers, or instructional coaches, enabling them to reflect on their teaching strategies, identify strengths, and address areas for improvement. Consequently, teachers can identify their professional development needs and set specific goals for improvement, leading to continuous learning and improved teaching practices over time. Furthermore, the study argues that observations should be tailored to individual teachers' needs, providing personalized support based on specific challenges and strengths. This personalized approach facilitates more targeted and impactful

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professional development. Although the study thoroughly explores the impact of classroom observation on teachers' professional growth, it does not address the performance of learners, creating a gap that this study aimed to fill.

A study by Leaovani and Guimaraes (2020) explored the characteristics of a global set of Classroom Observation Protocols with a focus on their design goals and the value they offer to Engineering Education in active learning environments. The researchers utilized a Systematic Literature Review method, which involves a comprehensive search process across 23 global databases from January 2000 to December 2020. After conducting a rigorous screening and quality assessment, they selected 109 literature sources for an in-depth analysis. The study findings highlight the existence of 111 classroom observation applications and 68 distinct protocols. Notably, there was a noticeable upward trend in the creation of new protocols and applications over the last 6 years, leading to a significant information overload for practitioners in the field. To address this challenge, the authors analyzed the 68 protocols, aiming to characterize them and identify their strengths within the context of Engineering Education. They adopted a systematic 4-category and 5-dimension framework to compare these protocols effectively.

Moreover, the research employed bibliometric data to understand how observation strategies in active learning environments have incorporated Engineering disciplines in various applications over time. The findings indicate that 82% of the total observed protocols have integrated Engineering disciplines in their design and implementation. In essence, this study sheds light on the diverse classroom observation protocols available globally, assesses their relevance to Engineering Education, and proposes a systematic framework to help educators and practitioners navigate through the vast amount of information in the field. This research aimed to support the improvement and implementation of effective teaching strategies in active learning environments for Engineering Education across the globe. But this study aimed to find out how principals' classroom observation strategy influences students' academic achievement in public secondary schools in Gatanga Sub-County, Muranga County, Kenya.

A research by Dwikoranto (2023) was conducted at Foster Vocational Schools in Bojonegoro Regency, Indonesia. The subjects in this study were six rincipals of vocational schools: Taruna Mandiri Ngasem, Vocational School Association of Teachers of the Republic of Indonesia (located in Bojonegoro), Al Kyai Sukosewu, Wali Songo Sugihawaras, six Kedungadem, and Miftahul Huda Baureno. The results of the study showed that the managerial supervision of the collaborative approach can improve principals' performance abilities in carrying out academic supervision. With the increased performance of school principals in academic supervision, all supervised teachers experience direct positive benefits from academic supervision, including observation of classroom instruction, which also enhances learners' performance. The study clearly shows that principals' supervision of the classrooms, emphasizing and identifying teachers' areas of improvement, and ensuring that the collaborative approach is being implemented effectively lead to effective academic achievement for learners. While this study was focused on vocational schools, this study concentrated on public secondary schools to examine how principals' classroom observations influence students' performance in terms of KCSE mean scores.

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A study by Barbara and Cunha (2018) was conducted to evaluate a program in Brazil that aimed to improve secondary schools by providing classroom observation feedback and expert coaching. The coaching content was based on Teach like a Champion by Douglas Lemov, which offers practical strategies to enhance teachers' effectiveness by maximizing instructional time and student engagement. The program targeted pedagogical coordinators responsible for supporting teachers in improving their instruction. The results from treatment schools showed that the program increased the skills of pedagogical coordinators, increased teachers' instructional time, raised student engagement, and led to statistically significant student learning gains.

In particular, the program schools performed 0.05–0.09 standard deviations higher in 10th-grade math and Portuguese on a state test and 0.06 standard deviations higher in Portuguese on a national high school leaving test (12th grade). The use of high-quality coaching delivered via Skype helped keep costs at \$2.40 per student, making the program a cost-effective and promising strategy for improving teachers' classroom effectiveness in schools. While the study demonstrated the importance of teachers' classroom practice, as measured through classroom observations, for student learning and socio-emotional skill development, it should be noted that the study was conducted in Brazil, which has a different school setup compared to Kenya. Therefore, this study focused on Kenya, specifically in Gatanga Sub-County, Muranga County, to investigate how principals' classroom observation strategies influence students' academic achievement.

School leadership is highly conspired to be at the core of running effective schools in Pakistan. Rafael (2023) conducted a study aimed at exploring the factors inhibiting instructional leadership practices in the developing world, taking Pakistan as a case study. The research used a qualitative approach and a case study method, concentrating on the phenomenon of instructional leadership in a semi-government school in the context of Northern Sindh, Pakistan. Considering the area under investigation, the school manager and principal were purposefully selected as the research participants. Ten teachers were also consulted to enrich and triangulate the data. The school leaders (manager and principal) were interviewed individually using semi-structured interviews, whereas the teachers were interviewed in groups. The emerging data was analyzed using thematic analysis.

The results showed that the school leaders' instructional leadership practices were mainly inhibited by their partial understanding of their responsibilities, limited exposure to capacitybuilding opportunities, teachers' attitudes, and a communication gap between the school and the upper management responsible for overseeing the academic activities of the school. The study argued that unless these influential factors are considered by policymakers and educational leaders, it is highly unlikely for school leaders to exercise instructional leadership. This study revealed that instructional leadership, which often involves classroom observations, was not effectively practiced by the school leaders. Yet, observation is important as it can help identify students' learning needs, challenges, and strengths, enabling instructional leaders to recommend appropriate instructional strategies and interventions that can enhance students' performance. This study sought to find out whether school principals in Gatanga Sub-County experience the same challenge. The study by Rafael used interview guides to collect data from teachers, but this

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study used questionnaires to collect data from teachers, hence the feeling of a methodological gap.

A related study was conducted in Nigeria by Ossai and Kingsley (2023). The study looked at principal instructional supervision and its impact on the academic performance of public secondary school students. The study adopted a descriptive research design. Two research questions and two hypotheses guided the study. The instrument used for the study was a self-structured 10-item questionnaire. The reliability of the instrument was determined using the test-retest method. The mean and standard deviation were used to answer the research questions, and the criterion level was 2.50, while the Z-test was used to test the hypotheses at a significance level of 0.05.

Findings revealed that principals' classroom visitation and curriculum implementation strategies have an impact on public secondary school students' academic performance in Oshimili North of Delta State. The study recommended that there should be regular training for principals on classroom visitation, curriculum implementation, and other instructional supervision techniques. It was clear from the study that principals' classroom visitation fosters a supportive learning environment and ensures that the schools provide the best possible education to their students. However, this study was general in terms of its discussion of students' performance. Different from the study by Ossai and Kingsley, This study sought to find out the extent to which principals' classroom observation strategy influences students' academic achievement in public secondary schools in Gatanga Sub-County, Murang'a County, with a specific focus on students' performance in terms of KCSE mean scores.

In Uganda, Lubwama and Kasule (2023) conducted a study to explore the impact of the collaborative school inspection approach on teacher instructional effectiveness in government-aided schools within Nakisunga County, Mukono district. The study focused on various aspects of teacher instructional effectiveness, including reporting on pupil academic achievements, teacher attitudes, effective planning, attendance, and pedagogical approaches. The collaborative school inspection approaches were assessed based on support supervision, classroom observation and feedback, trust, and respect. The research employed a cross-sectional survey mixed research design, incorporating both quantitative and qualitative methods. The sample consisted of 178 participants, including teachers, head teachers, school inspectors, and education officers. Quantitative data was gathered through self-administered survey questionnaires, while qualitative data was obtained through interviews and focus group discussions.

The results indicated that all sub-variables of the collaborative school inspection approach, including classroom observation by school heads, significantly influenced teacher instructional effectiveness. Particularly, classroom observation by school heads emerged as a valuable tool for enhancing the overall quality of education and fostering professional growth among teachers. By identifying teachers' strengths and areas for improvement and providing constructive feedback and support, school heads can assist teachers in developing their teaching skills and implementing effective instructional strategies. Despite the positive findings, it is essential to note that the previous study lacked a discussion on the performance of learners. This highlights the significance of conducting the current study, which aims to explore the impact of principals' classroom observation strategies on students' academic achievement in public

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secondary schools in Gatanga Sub-County, Murang'a County, Kenya. This research endeavored to help bridge the existing gap and provide valuable insights into the subject matter.

Heads of schools play a crucial role in the education system, as they have a significant influence on teachers' commitment to improving school performance and attaining quality education. A study conducted by Mwesiga and Okedo (2018) in Tngania aimed to investigate the effectiveness of heads of schools in supervising teachers' teaching activities in secondary schools in the Kagera region. The study was guided by the transformational theory, and while several studies on school leadership and teachers' commitment as factors for school performance were available in the literature, there was still a need to investigate the effectiveness of school headship in supervising teachers through classroom observation in secondary schools as central variables for effective teaching.

The study employed a convergent parallel design with a mixed research approach. The target population included all heads of schools, academic masters/mistresses, and teachers in public secondary schools in the Kagera region. The sample size comprised 32 schools, 32 heads of schools, 32 academic masters/mistresses, and 310 teachers. Probability and non-probability sampling techniques were used to select participants. Data collection instruments included questionnaires, an interview guide, and a document analysis guide. Quantitative data were analyzed using descriptive statistics, while qualitative data were analyzed using thematic analysis. Hypotheses were tested using Pearson Correlation.

The results suggested a strong and significant relationship between school headship and teachers' teaching commitment. The study further revealed that teacher supervision through classroom observation is essential to enhancing both teachers' and students' academic performance when conducted effectively and collaboratively. Regular class observations allow administrators or mentors to identify areas where teachers may need additional support or professional development. By providing targeted training and resources, teachers can improve their instructional techniques, classroom management skills, and subject knowledge, benefiting students. Through class observation, supervisors can provide constructive feedback to teachers regarding their teaching methods, communication, and classroom strategies. This feedback helps teachers refine their approach, leading to more engaging and effective teaching practices that positively impact students' learning experiences. However, the study by Mwesiga and Okedo lacked clarity on the nature of academic performance. In contrast, this study specifically focused on students' performance in terms of KCSE mean scores, thereby addressing this gap in the research.

Teacher classroom practices have been identified as the primary contributing factor to the low learning outcomes of learners' grades in Kenya. To address this issue, Ngaru and Nyaguthii (2020) conducted a study aimed at establishing the effects of teacher mentoring on the classroom practices of lower-grade primary school teachers in Kwale County, Kenya. Specifically, the study focused on the impact of class supervision as a form of teacher mentoring on improving classroom practices in Kwale County. The research utilized a one-group repeated measures quasi-experimental design, where a cohort of 40 teachers from 22 public primary schools received mentoring for 20 months, spanning from May 2016 to October 2018. During this period, a classroom observation tool was used to collect data, and the tool demonstrated a high level of reliability, with Cronbach's Alpha coefficients of 0.84, 0.81, and 0.79 for the years 2016,

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2017, and 2018, respectively. The collected data was analyzed using Repeated Measures ANOVA, revealing that teacher mentoring had a statistically significant effect on the mean classroom practice score (F = 6.282, df = 2, p = 0.003). Notably, significant mean differences were observed between 2016 and 2017, favoring 2017, and between 2016 and 2018, favoring 2018. However, there was no significant mean difference between 2017 and 2018. In conclusion, the study found that teacher mentoring, specifically through effective class observation while teachers are teaching, was effective in improving teacher practices. It is worth noting that this study was conducted in Kenyan primary schools. However, this study was conducted in secondary schools and used a descriptive design.

A related study conducted by Barrogo (2020) analyzed teachers' perceptions of the standardized classroom observation tool. The author defines a standardized classroom observation tool as a structured instrument used to objectively and consistently assess and evaluate teaching practices and classroom interactions. These tools aim to provide educators and administrators with a systematic approach to gathering data on teaching effectiveness and student engagement during classroom instruction. Barrogo employed a descriptive study design with a survey as the primary data collection instrument, involving 200 public school teachers selected through simple random sampling.

The survey utilized a questionnaire constructed by Wairimu (2016), and the data analysis was carried out using statistical tools such as frequency, mean, percentage, and standard deviation with the aid of Microsoft Excel. The study revealed that eight out of the ten statements regarding the standardized classroom observation tool received an overall "strongly agree" response from the participants. Consequently, the study concluded that the standardized classroom observation tool serves as a valuable guide for teachers to assess their performance and plan for improvement, leading to an enhancement of teachers' preparation and competency.

However, it's worth noting that the study lacks information about the involvement of principals, indicating a gap in the research. The current study aims to address this gap by investigating how principals' classroom observation strategies influence students' academic achievement, particularly in terms of KCSE mean scores, in public secondary schools within Gatanga Sub-County, Kenya. The cited study by Barrogo used Microsoft Excel, but this study study used SPSS to analyze the data.

Instructional leadership is perceived as a controlling function in secondary schools. Consequently, Ndwiga and Nyaga (2023) conducted a study on instructional leadership as a controlling function in secondary schools in Rangwe Sub County, Kenya. All 41 secondary schools in Rangwe Sub County were included in the study, and the targeted respondents were teachers and principals. A purposive sampling method was used to select the respondents from each school. Data collection was done using a principal self-rating questionnaire, a teacher perception questionnaire, and a document analysis checklist. The collected data was analyzed using descriptive statistics, an independent sample T-test, and regression analysis. The study found that school principals involved their deputies, heads of departments, and directors of studies in conducting day-to-day instruction in their schools. It was also revealed that classroom visits and observations of teaching and learning significantly influenced student learning outcomes in secondary schools. The study concluded that involving the expertise of immediate juniors in day-to-day instructions is an effective way of implementing instructional leadership

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roles for school principals in secondary schools. Therefore, the study advocates for the school principal to become the overall instructional supervisor and instructional improvement catalyst. However, the study lacked clarity regarding the nature of performance. This study study aims to fill this gap by examining students' performance in terms of KCSE mean scores.

5. Research Methodology

This study employed a convergent parallel mixed-methods research design. The target population was 48 public secondary schools, 48 principals, 380 teachers, and one Sub-County Director of Education. Criterion purposive sampling was used to include the sub county director of education and 10 out of 48 principals. The study used stratified and simple random sampling to select 260 out of 380 teachers to participate in the study. Questionnaires were used to collect quantitative data from teachers, and interview guides were used to collect qualitative data from sub county directors of education and principals.

Cronbach's alpha was used to test the reliability of Likert scale tools, and the coefficient of 0.83 was realized. Descriptive statistics with the help of SPSS version 25 was used to analyze quantitative data, which was presented in frequencies, percentages, graphs, and tables. Qualitative data was analyzed using a thematic approach and presented in the form of narratives and direct quotations.

6. Research Findings

Principals' Classroom Observation Strategies and Students' Academic Achievement

The first question of this study sought to determine the extent to which principals' classroom observation strategies influence students' academic achievement in public secondary schools in Gatanga Sub-County, Muranga County. The teachers were requested to choose the response that best represented their opinions on a five-point scale. The rating scale was: Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D), and Strongly Disagree (SD). Table 1 presents the findings.

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Achievement (N=257) Statement	SA		Α		UD	UD		D		SD	
	f	%	f	%	f	%	f	%	F	%	
The feedback from principals' classroom observations is constructive and helps me enhance my teaching methods, which helps to improve	66	25.7	2	0.8	3	1.2	90	35.0	96	37.4	
students' performance. I feel my lesson presentations and management have improved as a result of feedback received from classroom observations by the principal.	5	1.9	60	23.3	3	1.2	26	10.1	16 3	63.4	
Classroom observations are a fair reflection of my teaching performance.	135	53.3	00	00	36	14.0	72	28.0	12	4.7	
Our principal observes teachers' mastery of content, syllabus coverage, and lesson notes, which has improved learners' performance.	49	19.1	7	2.7	00	00	19 4	75.5	7	2.7	
The classroom observation process contributes to the overall improvement of students' academic outcomes.	136	52.9	94	36.6	14	5.4	11	4.3	2	0.8	

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Source: Field Data, 2024

Table 1 shows that most teachers (72.4%) disagreed with the notion that feedback from principals' classroom observations is constructive and helps them enhance their teaching methods, which in turn improves student performance. Only 1.2% of the teachers were undecided. These results point to a significant disconnect between principals' instructional supervision strategies and teachers' perceptions of their effectiveness, suggesting concerns about the quality or utility of the feedback provided. This negative perception implies that current

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supervisory practices may not adequately support teachers in improving their skills, potentially hindering student performance due to ineffective feedback that fails to address teaching deficiencies. The minimal undecided percentage (1.2%) highlights the widespread dissatisfaction. These results contradict the findings of one principal who argued that he makes efforts to provide feedback to the teachers every time he observes the teachers

These findings suggest that personalized guidance from principals plays a crucial role in enhancing overall educational quality by improving students' performance. As Martinez (2016) argued, principals' classroom observations provide firsthand insight into instructional dynamics and the classroom environment. Such visits allow principals to assess the effectiveness of teaching methods, student engagement, and classroom management in real-time. By witnessing these aspects directly, principals can offer more specific and actionable feedback, tailor professional development to address observed needs, and support teachers in implementing best practices that enhance student achievement.

The majority of the teachers (63.4%) disagreed that they feel their lesson presentations and management have improved as a result of feedback received from classroom observations by the principal. There were 23.3% of the teachers who agreed and 1.2% who were undecided about the idea. One of the principals had this to say:

As a principal, I have noted that some teachers, despite receiving feedback about their teaching, do not implement it because they lack sufficient resources to address the suggestions and face a heavy workload. These factors further impede their ability to make the recommended changes in their teaching (Principal C, 20/07/2024).

These findings suggest that principals' supervision and feedback in schools are not helping teachers to enhance teaching and learning. It must be acknowledged that if lesson presentations and classroom management by teachers are not up to standard, students' learning can be significantly compromised. Ineffective lesson presentations may lead to unclear or disorganized instruction, causing confusion and disengagement among students. Poor classroom management can result in a chaotic learning environment where disruptions hinder students' ability to focus and participate. Both issues can negatively impact student understanding and retention of material, reduce motivation, and ultimately lead to lower academic performance. In line with these arguments, literature, particularly a study by Natalie (2023), reveals that a lack of effective teaching and classroom control undermines the learning experience, making it challenging for students to achieve their full potential and succeed academically.

Slightly more than half of the teachers (53.3%) were in agreement that classroom observations are a fair reflection of their teaching performance. Only 14% of the teachers were undecided about the matter. In line with these findings, the sub county director asserted, "Principals in our schools make an effort to supervise and provide realistic feedback to teachers to enhance their performance." It can thus be said that these findings suggest that principals' instructional supervision strategies are perceived as reasonably effective by a majority of teachers. This indicates that the observation process is seen as a credible measure of teaching effectiveness by over half of the teachers. However, the fact that 14% of teachers remain

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undecided suggests some level of uncertainty or skepticism about the fairness or accuracy of these evaluations. In an interview, one of the principals commented, "I ensure that my classroom observations are accompanied by a collaborative dialogue with any teacher I observe. I also make sure that feedback is supportive rather than punitive." These findings align with the argument of the sub county director, who contended that "consistency and fairness of the principals in teacher, along with timely follow-ups to monitor progress, contribute to the effectiveness of classroom observations and enhance teaching and learning." A study by Ahmad (2021) noted that, while supervising teachers, principals should ensure effective classroom observations, which are characterized by several key components, including providing high-quality, realistic feedback that is specific, actionable, and relevant to the teacher's instructional practice.

There was a disagreement from most of the teachers (75.5%) regarding whether their principals observe teachers' mastery of content, syllabus coverage, and lesson notes to improve learners' performance. These findings contradict the findings from one of the principals, who mentioned that teachers are regularly observed during teaching and that students' notes are also checked. These findings suggest that the effectiveness of principals' instructional supervision strategies may be in question. Based on the findings from teachers, it appears that there is a significant gap in the perceived focus and thoroughness of supervisory practices. This disconnect implies that principals might not be fully addressing key elements that influence teaching quality and student outcomes. Consequently, the lack of attention to these crucial areas could undermine the overall effectiveness of instructional supervision and its impact on enhancing students' achievement.

In an interview, the sub county director narrated:

I normally encourage principals to observe teachers regarding mastery of content, syllabus coverage and other aspects of the curriculum to ensure leaners effectively benefit academically. I know if there is no effective supervision, teachers may not receive crucial feedback needed to address gaps in their knowledge or instructional practices, leading to deficiencies in teaching quality (Sub county director, 20/07/2024).

One of the principals also remarked:

Without proper supervision, inconsistencies in syllabus coverage and lesson planning may arise, which may affect students' learning experiences and academic performance. The lack of oversight can also result in missed opportunities for professional development and support, diminishing the effectiveness of teaching and hindering overall student achievement (Principal D, 20/07/2024).

Literature supports these findings regarding the observation of teachers' mastery of content, syllabus coverage, and lesson notes. For example, Kraft (2016) argued that teacher observations should focus on clear criteria aligned with educational goals and provide constructive suggestions for improvement. Additionally, Kraft's study noted that the quality of feedback

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teachers receive through the supervision and evaluation process depends critically on the time and training evaluators have to offer individualized and actionable feedback. Table 4 further shows that slightly more than half of the teachers (52.9%) agreed that classroom observation process contributes to the overall improvement of students' academic outcomes. Only 0.8% of the teachers strongly disagreed with the idea. In an interview, one of the principals supported these findings, stating that:

Through classroom observation, principals identify strengths and areas for development in teachers' instructional methods, content delivery, and engagement strategies. Constructive feedback based on these observations helps teachers refine their approaches, address learning gaps, and adapt their strategies to better meet students' needs. This ongoing process of reflection and adjustment enhances teaching effectiveness, which directly benefits students by fostering a more supportive and effective learning environment (Principal E, 20/07/2024).

These findings indicate that teachers recognize the beneficial impact of supervision and observation on their teaching and learning. Related findings were highlighted in the literature, particularly a study by Laska (2016) which noted that observing teachers while they teach helps them refine their instructional strategies, leading to improved teaching performance. This, in turn, enhances student learning outcomes, as effective teaching practices are directly linked to better student performance.

7. Conclusions and Recommendations

The study revealed that principals' instructional supervision strategies such as classroom observation affect students' academic achievement in public secondary schools. Feedback from principals' classroom observations was found not to be effective in improving teachers' lesson presentations and management. Principals do not effectively observe teachers' mastery of content, syllabus coverage, and lesson notes to enhance student performance.

The study recommends that principals should provide more detailed, actionable feedback targeting specific areas for improvement in teaching methods, lesson presentations, and class management. The government should implement policies mandating comprehensive training programs for principals, focusing on effective classroom observation and feedback techniques. These programs should emphasize developing skills for providing constructive feedback and assessing teachers' mastery of content.

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