



Influence of Teachers' Professional Development Support on Students' Academic Performance in Public Secondary Schools in Gatanga Sub-County, Murang'a County, Kenya

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Abstract: Teacher professional development support by principals played a key role in ensuring improved academic performance in schools. However, in Gatanga Sub-county, many public secondary schools register low academic grades in KCSE. Thus, this study examined the influence of teacher professional development support on students' academic performance in public secondary schools in Gatanga Sub-county. The study was guided by professional development theory and academic achievement theory. The study adopted a mixed methodology and, thus, applied a concurrent triangulation research design. The target population was 597 respondents, which comprised 35 principals, 560 teachers, and 2 Sub-county Directors of Education (TSC & MoE), from which a sample of 242 respondents was determined using Yamane's Formula. This included 15 principals, 225 teachers, and 2 Sub-county Directors of Education (TSC & MoE). Qualitative data were analyzed thematically based on the objectives and presented in narrative form. Quantitative data were analyzed descriptively using frequencies and percentages and inferentially using Pearson's Product Moment Correlation Analysis using the Statistical Package for Social Sciences (SPSS Version 25) and presented using tables. The study found that students' academic performance in KCSE in public secondary schools has been low for the last five years (2020-2024). This has been partly attributed to the fact that principals rarely provide adequate support for teachers' professional development, a situation that has significantly contributed to low academic performance among students. Thus, the Ministry of Education should allocate resources to enable principals organize regular retraining and mentorship as well as coaching programmes for teachers.

Keywords: Public, secondary schools, teacher professional development support, students' academic performance, principals.

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1. Introduction

Teachers are at the heart of the learning process and strongly influence both the quality of education that children receive at school and eventually their learning outcomes. To realize this noble initiative, principals

ought to support their professional development. In the words of Watson (2024), teacher professional development (PD) is crucial in enhancing teaching quality and student outcomes. Principals play a pivotal role in supporting teachers' growth by fostering a culture of continuous learning within schools. Their involvement in PD ensures that teachers have access to relevant resources, training, and collaborative

opportunities that align with both school goals and educators' professional needs. Watson (2024) further asserts that principals can support PD by identifying teachers' strengths and areas for growth through regular assessments and feedback. They can then tailor professional development programs to address these needs, offering workshops, seminars, and peer learning communities. Additionally, principals should encourage ongoing reflection and a growth mindset among teachers, creating a supportive environment where educators feel comfortable experimenting with new strategies and sharing best practices. In India, Gupta (2023) posits that principals act as role models by engaging in their own professional development and fostering a climate of shared responsibility. This leadership helps create a school-wide emphasis on improvement and lifelong learning. Gupta (2023) also indicates that, through effective support of PD, principals empower teachers to refine their skills, stay updated with educational innovations, and ultimately provide better learning experiences for students. This implies that, by prioritizing teacher development, principals contribute to a thriving educational community and improved academic outcomes. However, the extent to which principals' support for teacher professional development contributes to academic performance in public secondary schools is yet to be fully explored.

According to Reusen (2023), academic performance entails achievement of students in internal and national examinations. In Yemeni, Agran (2022) posits that any learner in any school who scores a mean grade of 75% and above is considered to manifest excellent academic performance. Despite these postulations, many students still register low grades in their internal and national examinations. In Austria, for instance, a report authored by Cotton (2023) shows that students' academic performance in national examinations stands at 56.9% against an expectation of 85.0% in 2022. Cotton (2023) indicates that many Austrian Secondary schools sometimes register performance as low as 37.9%. The same scenario is replicated in Haiti where Gedro, Hartman and Suárez (2021) posit that academic performance in many secondary schools range between 24.8% to 44.8%. In Chile, Contreras and Gallardo (2022) indicate that academic performance of students in internal, joint and national examinations is still low at 36.1% despite a myriad of mitigations introduced by school management.

In Finland, Sahlberg (2021) posits that school leadership is centered around collaborative leadership models, where school heads play an essential role in teacher development. According to Sahlberg (2021), school leaders are often given access to regular professional development opportunities that enhance their instructional leadership and pedagogical knowledge. These leaders are expected to engage in hands-on supervision of teachers, provide ongoing feedback, and foster an environment of continuous learning. This

approach ensures that teachers are well-prepared to meet the diverse needs of their students, leading to improved student outcomes (Sahlberg, 2021). Similarly, in New Zealand, effective school leadership has been identified as a key factor in driving school improvement. School heads who undergo continuous professional development and take an active role in motivating teachers tend to see higher student performance (MacBeath, 2023).

These assertions point to the fact that the role of school heads in fostering a supportive and effective learning environment has become an integral factor in students' success. In other words, strong school leadership, involving ongoing professional development plays a critical role in improving student performance across these countries. In many countries in Sub-Saharan Africa, teacher management is at the core of realization of improved academic performance in secondary schools. However, Adewuyi and Ogunwuyi (2022) report that governments have faced increasing challenges in recent years while managing their teaching staff. For example, in Nigeria, Bukola and Subair (2023) assert that Ministry of Education has responded to an increasing demand for teachers while at the same time trying to ensure that the same level of quality of education is maintained by undertaking a myriad of activities to realize the same, which include professional development. In Rwanda, Ngoga (2023) asserts that providing professional development opportunities, setting clear performance expectations, and ensuring a supportive work environment significantly contribute to improved student academic achievement. According to Ngoga (2023), principals who regularly engage in mentoring teachers have been found to enhance instructional practices, which ultimately leads to better academic outcomes.

In Kenya, Akala and Maithya (2022) assert that school heads oversee teacher professional development activities as a way of improving pedagogy and students' academic performance. In the words of Wanjala, Wamocha and Nasongo (2022), principals engage in a myriad of teacher management activities such as provision of opportunities for professional development and capacity building of teachers. These assertions underscore the necessity for principals to adopt comprehensive and effective support system for teacher professional development to foster an environment conducive to improved student learning outcomes. However, this has not been the case since many students still register low grades in both internal and national examinations such as Kenya Certificate of Secondary Education (KCSE). In Gatanga Sub-county, for instance, students' academic performance has been relatively low and on a downward trend with minimal improvements for the last five years (2020-2024). A report authored by the Ministry of Education (2025) shows that public secondary schools in Gatanga Sub-county registered a mean score of 4.012 meanpoints in 2019, in 2020, they

recorded 3.841 meanpoints, in 2021, the secondary schools registered 3.621 meanpoints, 3.701 in 2022, 3.750 in 2023 and 3.786 in 2024. These results lead to a

decreasing trend in academic performance in KCSE as shown in Table 1:

Table 1: Students' Academic Performance in Public Secondary Schools in KCSE in Murang'a County (2019-2024)

Year of Examination	2019	2020	2021	2022	2023	2024
Kahuro	4.312	4.421	4.531	4.783	5.006	4.946
Murang'a East	3.904	4.124	4.323	4.368	4.615	4.847
Kangema	3.569	4.096	3.950	4.134	4.612	4.659
Kigumo	4.236	4.428	4.531	4.544	4.653	4.620
Mathioya	3.865	4.077	4.472	4.519	4.845	4.590
Kandara	3.876	3.905	3.967	3.900	4.154	4.057
Murang'a South	3.874	4.034	3.702	3.781	3.978	3.991
Gatanga	4.012	3.841	3.621	3.701	3.750	3.786
Ithanga/K	2.913	2.637	2.954	3.103	3.136	3.285

Source: MoE (2026)

Table 1 shows that public secondary schools in Gatanga Sub-county registered low mean grades compared to the neighbouring sub-counties which registered meanpoints ranging between 4 and 5 meanpoints. Despite this state of affairs, few empirical studies had interrogated the extent to which teacher professional development support by principals influence students' academic performance, hence the study.

1.1 Research Objectives

The study sought to address the following objectives:

1. To assess the status of students' academic performance in public secondary schools in Gatanga Sub-county.
2. To examine the influence of teacher professional development support on students' academic performance in public secondary schools in Gatanga Sub-county.

2. Literature Review

Professional development function of school heads is credited with helping teachers advance in their careers. As stated by Linder and Eyal (2020), school heads are expected to play a role in planning professional development of the teachers through planning and managing the learning and development process. According to Linder and Eyal (2020), the plan should be based on the teacher's preferences and professional requirements at each stage of their professional careers. Based on these ideas, school leaders are given the responsibility of accomplishing, supporting, and encouraging teachers' professional growth at their work stations. By supporting experiments, results, and the allocation of resources to promote teachers' learning, as well as by boosting the implementations of new learning, school heads are expected by policy to create a learning environment at their institutions (Awodiji & Charity, 2020).

Professional development truly involves incorporating a variety of tasks that must be completed to meet predetermined goals and outcomes. However, poor professional development techniques might be to blame for instructors' lack of professionalism, which emphasizes the significance of more effective professional development. In other words, Vanblaere and Devos (2020) posit that competent professional development from school administrators is necessary for effective and efficient teaching. In a study carried out in the United States of America, Heaton (2021) found that school administrators help instructors develop the skills necessary for more effective instruction of children. According to Heaton (2021), professional development in education has seen a period of sustained growth over the last decade. In the same token, van Nieuwerburgh (2022) carried out a study in Australia and New Zealand which revealed that schools, colleges and universities have been introducing professional development interventions to get better results for learners. For instance, a study carried out by Hattie (2022) found that leadership practices that include setting clear goals, providing regular feedback, and promoting a culture of collaboration significantly enhance academic performance among students.

Moreover, Robinson, Lloyd and Rowe (2020) argue that leadership that focuses on instructional practices has a more significant impact on student achievement than other forms of leadership. Effective professional development strategies include goal setting, reflective practice, and collaborative problem-solving. A study conducted by Kraft, Blazar and Hogan (2023) indicates that professional development programs that incorporate these elements lead to significant improvements in teaching practices and student outcomes. This implies that use of data-driven decision-making and continuous feedback loops are crucial components of effective professional development for teachers. In support of these assertions, a case study carried out in Kenya by Orodho, Waweru, Ndichu and Thinguri (2023) established how principals' involvement in professional learning communities (PLCs) and their active

professional development support led to improved students' academic performance. In Gatanga Sub-county, a study conducted by Adhiambo, Njihia and Barasa (2024) highlights the importance of professional development support for teachers and building a supportive school culture that embraces change and innovation. According to Adhiambo et al (2024), effective professional development support, characterized by collaborative, reflective and data-driven approaches, are essential for improving quality of education offered to students and performance thereof. However, much still needed to be done since Adhiambo et al (2024) as well as other reviewed studies have not interrogated how specific professional development support provided by principals influence students' academic performance in public secondary schools.

Theoretical Framework

The study was guided by professional development theory grounded in andragogy, originally proposed by Malcolm Knowles in 1970 and later articulated in updated form by Knowles, Holton, and Swanson (2012). This theory emphasizes that adult learners are self-directed, goal-oriented, and motivated by the immediate relevance of learning to their professional practice. Knowles' ideas underpin modern conceptions of teacher professional development by highlighting the importance of autonomy, collaboration, and problem-centered learning. This theory rests on several core principles that guide effective teacher learning. First, professional development should be continuous and sustained, rather than limited to isolated workshops. Teachers require ongoing opportunities to refine skills, integrate new pedagogical approaches, and respond to evolving curriculum demands. Second, professional development must be relevant and context-specific. Learning activities are most effective when they address real classroom challenges and align with school goals. This principle underscores the importance of principals in ensuring that professional development initiatives reflect both teachers' needs and students' learning priorities. Third, the theory emphasizes collaborative learning. Teachers benefit from engaging in peer discussions, mentoring, and professional learning communities that encourage reflection and shared problem-solving. Collaboration strengthens instructional coherence across classrooms, which has a cumulative positive effect on students' academic performance. Finally, professional development should be supported by leadership. Principals play a critical role by allocating resources, creating supportive school cultures, and modeling commitment to learning. Leadership support legitimizes professional development and motivates teachers to apply new knowledge in their instructional practices.

In this study, this theory was applicable since it underscores the fact that principals who actively support professional development, through funding, scheduling

time for collaboration, providing instructional feedback, and encouraging innovation, create conditions that enhance teacher competence and confidence. When teachers engage in effective professional development, they are more likely to adopt evidence-based teaching strategies, differentiate instruction, and assess student learning more accurately. These improvements in classroom practice contribute directly to higher levels of student engagement, understanding, and academic achievement. Moreover, the theory highlights the indirect but powerful role of principals. While principals may not teach students directly, their support for teacher learning acts as a catalyst for instructional improvement across the school. Thus, professional development theory helps explain how leadership actions translate into measurable academic gains. In other words, by investing in and prioritizing professional development, principals play a pivotal role in shaping effective learning environments and improving educational outcomes in schools. The study was also guided by Walberg's achievement theory. This theory posits that the psychological characteristics of individual teachers and their immediate psychological environments influence educational outcomes, that is, cognitive, behavioral and attitudinal. Walberg (2012) identified nine key variables that influence educational outcomes such as: teachers' prior achievement, motivation, developmental level, quantity of instruction, quality of instruction, classroom climate, stakeholders' involvement, home environment, group dynamics and exposure to mass media outside the school. Walberg (2012) further asserts that psychosocial characteristics such as self-concept, attitudes, behaviors, intrinsic motivation, and overall learner engagement in learning are useful in curriculum evaluation studies and can provide teachers with useful information to arrange more optimally functioning classrooms. In this study, to improve teacher performance, educational process goals as well as achievement goals must be considered. Thus, the relevance of this theory is that performance is interpreted to include teacher perceptions of the social environment, creativity, self-concept, participation in extra-curricular activities, and interest in the subject matter. In other words, ignoring these perceptions and experiences in favor of traditional goals measured by test scores would decrease motivation and ultimately lower educational achievement.

3. Methodology

The study adopted a mixed methodology and, thus, applied a concurrent triangulation research design. The target population was 597 respondents, which comprised 35 principals, 560 teachers, and 2 Sub-county Directors of Education (TSC & MoE), from which a sample of 242 respondents was determined using Yamane's Formula. Stratified sampling was used to create three (3) different strata based on the number of zones in Gatanga Sub-county. From each zone, five (5) principals were sampled using purposive sampling. All the Sub-county Directors of Education were purposively considered for the study.

However, from each zone, 75 teachers were selected using simple random sampling. This sampling procedure enabled the researcher to obtain a sample size of 15 principals, 225 teachers, and 2 Sub-county Directors of Education (TSC & MoE). Questionnaires were used to collect quantitative data from teachers, whereas interview guides were used to collect qualitative data from principals and Sub-county Directors of Education (TSC & MoE). Data analysis began by identifying common themes. Qualitative data were analyzed thematically along the study objectives and presented in narrative forms. Quantitative data were analyzed using descriptive statistics such as frequencies and percentages and inferentially using Pearson's Product Moment Correlation Analysis in Statistical Packages for Social Science (SPSS 25), and were presented using tables.

In this study, an ethical clearance certificate was obtained from Mount Kenya Ethical Review Committee (MKU ERC) before embarking on data collection processes. The researcher undertook to keep private any information given by the respondents that touched on their personal life. The researcher assured the respondents that no private information would be divulged to a third party. The nature and the purpose of the research were explained to the respondents by the

researcher. The researcher explained to the respondents the procedure that would be followed during the data collection so that they could participate willingly. The raw data collected were filed for easy reference. Once the data were analyzed, computer printouts were filed while soft copies were stored in storage devices such as CDs and flash discs.

4. Results and Discussion

In this section, findings of the study as per the objectives of the study are outlined besides highlighting presentation of findings as well as discussions.

4.1 Response Rates

In this study, 225 questionnaires were administered to teachers and, in return, 218 questionnaires were filled and returned. In the same token, the researcher interviewed 12 principals and 2 Sub-county Directors of Education (TSC & MoE). This yielded response rates shown in Table 2;

Table 2: Response Rates

Respondents	Sampled Respondents	Those Who Participated	Achieved Return Rate (%)
Principals	15	12	80.0
Teachers	225	218	96.9
Sub-county Directors of Education (TSC & MoE)	2	2	100.0
Total	242	257	98.1

Source: Field Data (2026)

Table 2 shows that principals registered a response rate of 80.0%, teachers registered 96.9% whereas the Sub-county Directors of Education (TSC & MoE) registered a 100.0% response rate. This yielded an average response rate of 98.1%, which is consistent with the assertions of Creswell (2018) that a response rate above 75.0% is adequate. This information was important since it allowed the researcher to generalize the study outcomes to the target population.

4.2 Status of Students' Academic Performance in Public Secondary Schools

The study sought to assess the status of academic performance in public secondary schools in Gatanga Sub-county. This was measured by taking stock and analyzing KCSE performance for the last five years, that is, between 2020 and 2024. Results are shown in Table 3;

Table 3: Students' Academic Performance in Public Secondary Schools in KCSE in Gatanga Sub-county (2020-2024)

Years of Examination	KCSE Results in Mean Scores	Percentage (%) of Students who Scored C+ and above
2020	3.841	56.2
2021	3.621	53.3
2022	3.701	49.1
2023	3.750	44.9
2024	3.786	40.5

Source: MoE (2026)

Table 3 shows that academic performance of students in KCSE has been on a downward trend for the last five years with minimal improvements. These findings corroborate the findings of a report by MoE (2025) that the performance of students in Gatanga Sub-county in KCSE has been on a downward trend. This indicates that a significant number of learners continue to record low grades, reflecting deep-rooted challenges within schools and the wider society. This scenario has occasioned a decrease in the proportion of students who score C+ and above. This indicates that, when overall performance drops, fewer students are able to meet the minimum university entry grade. In summary, these findings affirm the fact that KCSE performance has been low which has led to a reduced number of students attaining C+ and above.

4.3 Teacher Professional Development Support and Students' Academic Performance in Public Secondary Schools

The study sought to examine the influence of teacher professional development support on students' academic performance in public secondary schools. Descriptive data were collected from teachers and results are presented in Table 4;

Table 4: Teachers' Views on the Influence of Teacher Professional Development Support on Students' Academic Performance in Public Secondary Schools

Test Items	Ratings				
	SA %	A %	U %	D %	SD %
In public secondary schools, principals organize workshops for further training of teachers which has improved academic performance	49.6	5.0	4.3	33.8	7.2
To ensure improved academic performance, principals have often organized mentorship and coaching programmes for teachers to improve academic performance	52.5	12.2	2.9	26.6	5.8
Regular planning of mentorship activities by principals has improved academic performance in public secondary schools	44.6	15.8	4.3	28.8	6.5
In public secondary schools, the kind of professional development support teachers have received from principals has improved academic performance	59.7	7.9	5.8	21.6	5.0
In public secondary schools, principals have rarely created for professional development opportunities for teachers as a way of improving students' academic performance	64.2	9.4	4.7	17.9	3.8

Source: Field Data (2026)

Table 4 shows that 108(49.6%) of the teachers strongly agreed with the view that, in public secondary schools, principals organize workshops for further training of teachers which has improved academic performance whereas 16(7.2%) strongly disagreed. This highlights that principals' organization of workshops for teachers' professional development has significantly contributed to improved academic performance in public secondary schools. According to Kamau and Wambui (2022), principals who facilitate regular in-service training and workshops enable teachers to acquire new pedagogical skills, update their subject knowledge, and adopt innovative teaching methods that enhance student learning outcomes. These professional development programs foster reflective practice and promote effective classroom management. These findings support the

findings of a study carried out by Mensah and Tetteh (2023), which found that teacher workshops organized by principals strengthen collaboration and peer learning among staff, leading to improved instructional quality. The study further revealed that schools where principals actively promote capacity-building sessions record higher student achievement due to improved teacher competence and motivation. Furthermore, Otieno (2023) reported that workshops focusing on assessment methods and learner-centered strategies have resulted in better performance in national examinations.

These findings consistently affirm that principals' commitment to organizing and supporting teacher training workshops plays a crucial role in enhancing instructional effectiveness and improving students'

academic performance in public secondary schools. Slightly more than half, 114(52.5%), of the teachers strongly agreed with the view that, to ensure improved academic performance, principals have often organized mentorship and coaching programmes for teachers to improve academic performance whereas 13(5.8%) strongly disagreed. This indicates that structured mentorship and coaching programmes led or organized by school principals can improve teacher effectiveness and thereby bolster student academic outcomes. These findings, however, disagrees with the findings of research conducted by Chui (2025), which found that, despite the introduction of teacher mentorship and coaching initiatives by the Teachers Service Commission, many principals did not set clear objectives or regularly monitor progress, which limited teacher performance gains and affected student results. Despite these contradictions, these findings imply that, when principals organize mentorship and coaching programmes with clear goals, adequate monitoring, and professional support, they can foster teacher growth which supports better academic performance. Implementation remains a challenge in many settings, and future work should focus on longitudinal effects and direct links to student achievement.

The study revealed that 97(44.6%) of the teachers strongly agreed with the view that regular planning of mentorship activities by principals has improved academic performance in public secondary schools while 14(6.5%) strongly disagreed. This implies that structured and regularly planned mentorship activities organized by school principals have emerged as significant enablers of improved teacher practices and ultimately better student academic performance. This corroborates the findings of a study conducted by Mutwiri and Chui (2024), which showed a significant positive effect on learners' academic performance. Similarly, in Kiambaa Sub-county the investigation found that many principals "rarely organize and plan mentorship activities for teachers" and that this absence contributed to delays in syllabus coverage and weak student outcomes (Njoroge & Chui, 2025). These findings suggest that the frequency and intentional planning of mentorship by principals matter. In another context, although focused on teacher mentorship rather than direct student mentoring, regular principal-organized mentorship and coaching programmes were linked to better teacher performance and hence are likely to influence student achievement indirectly (Chui, 2025). These findings underscore that, when principals schedule, monitor and prioritize mentorship activities, they foster professional growth of teachers, timely curriculum delivery and improve the conditions for academic success.

Slightly more than half, 130(59.7%), of the teachers strongly agreed with the view that, in public secondary schools, the kind of professional development support teachers have received from principals has improved academic performance whereas 11(5.0%) strongly

disagreed. This demonstrates that professional development support provided by principals has had a positive impact on academic performance in public secondary schools. According to Mwangi and Achieng (2022), principals who actively support teachers through mentoring, coaching, and continuous professional development programs enhance instructional effectiveness, which directly translates to improved student achievement. Teachers who receive regular guidance from their principals are better equipped to implement learner-centered approaches and effective assessment strategies. These findings also lend credence to the findings of research carried out by Mensah and Odoro (2023), which revealed that principals' support in organizing training sessions, peer learning activities, and classroom observations fosters professional growth and motivation among teachers. The study revealed that schools where principals invest in capacity building experience notable improvements in students' examination performance due to enhanced teaching quality and commitment. Additionally, Njeri (2023) reported that professional support from principals, such as providing feedback after lesson supervision and facilitating access to instructional resources, creates a culture of continuous learning that boosts academic outcomes. These findings affirm the fact that the nature and consistency of professional development support offered by principals significantly enhances teacher competence and students' academic performance in public secondary schools. Majority, 140(64.2%), of the teachers strongly agreed with the view that, in public secondary schools, principals have rarely created for professional development opportunities for teachers as a way of improving students' academic performance whereas a paltry 8(3.8%) strongly disagreed. This reveals that principals in many public secondary schools have rarely created adequate professional development opportunities for teachers, which has limited efforts to improve students' academic performance. According to Achieng and Otieno (2022), while principals recognize the value of teacher development, most schools lack structured programs such as workshops, peer mentoring, or in-service training. As a result, teachers continue to rely on outdated instructional methods, negatively affecting student learning outcomes. This is consistent with the findings of a study undertaken by Mensah and Boateng (2023), which found that insufficient funding and limited administrative support have constrained principals' ability to organize continuous professional development (CPD) activities. Their study in Ghanaian public schools showed that only a small proportion of teachers had access to formal training within a three-year period, correlating with stagnant or declining academic results. Nyambura (2023) also reported that principals' focus on administrative duties often overshadows their instructional leadership role, leaving little room for initiatives that build teachers' pedagogical capacity. Furthermore, Muriithi (2024) observed that the absence of sustained professional growth opportunities reduces teacher motivation, innovation, and effectiveness in the

classroom. Consequently, students receive less engaging instruction, resulting in suboptimal academic performance. These findings attest to the fact that the failure of principals to actively create and support professional development opportunities for teachers has significantly hindered academic improvement in public secondary schools.

4.3.1 Inferential Analysis

To verify influence of teacher professional development support by principals on students' academic performance, data were collected from 12 principals of the sampled public secondary schools on how often (Very Often = 5, Often = 4, Sometimes = 3, Rarely = 2 and Never = 1) they support professional development for teachers and students' academic performance in KCSE for the year 2024. The results are shown in Table 5:

Table 5: How Often Principals Supervise Teachers and Students' Academic Performance

How Often Principals Support Teachers' TPD)	2024 KCSE Results
1	5.10
2	3.78
5	4.81
2	3.80
2	3.48
1	5.89
1	4.99
3	6.98
5	7.07
3	4.87
2	5.09
4	6.02

Source: Field Data (2026)

Table 5 shows that the higher the number of times principals support professional development of teachers, the higher the students' academic performance in KCSE. This further indicates that frequent professional development equips teachers with updated pedagogical skills, subject knowledge, and innovative teaching strategies that directly enhance classroom instruction. When principals actively encourage and facilitate workshops, seminars, and in-service training, teachers become more confident and competent in delivering the curriculum. Such support fosters a culture of continuous learning and improvement within the school. Teachers who are regularly trained are better able to address diverse learners' needs, integrate modern teaching methods, and assess students effectively. As a result, students benefit from engaging lessons that promote

deeper understanding and critical thinking. Furthermore, principals who prioritize professional development demonstrate instructional leadership, motivating teachers to commit to their roles and maintain high professional standards. This motivation translates into improved teacher performance, better classroom management, and enhanced student-teacher relationships. Consequently, students are more focused, disciplined, and academically driven. Therefore, the higher the number of times principals support teachers' professional development, the higher the likelihood of improved KCSE performance, as effective teaching remains a key determinant of student success. The data in Table 5 were run through Pearson's Product Moment Correlation Test Analysis. Results are shown in Table 6:

Table 6: Relationship between Frequency of Principals' Support of Teachers' Professional Development and Students' Academic Performance

		Frequency of Principals' Support of Teachers' Professional Development	Frequency of Principals' Supervision of Teachers
Frequency of Principals' Support of Teachers' Professional Development	Pearson Correlation	1	.557*
	Sig. (2-tailed)		.029
	N	12	12
Students' Academic Performance	Pearson Correlation	.557*	1
	Sig. (2-tailed)	.029	
	N	12	12

*. Correlation is significant at the 0.05 level (2-tailed).

Table 6 shows that there is a strong correlation between principals' support for teachers' professional development and students' academic performance in

public secondary schools. That is, the higher the frequency of principals' support for teachers' professional development, the higher the students'

academic performance in KCSE ($r(12) = 0.557$ at $p = 0.029$ at $\alpha = 0.05$). This implies that principals who consistently prioritize professional growth create an environment where teachers continuously improve their pedagogical skills, subject mastery, and assessment strategies. This ongoing development enables teachers to adopt innovative teaching methods, address diverse learners' needs, and align instruction with curriculum and examination demands. Regular support for professional development, through workshops, seminars, mentoring, and collaborative learning, also boosts teachers' motivation and job satisfaction. When teachers feel valued and supported by school leadership, they are more committed to their work, better prepared for classroom challenges, and more willing to invest extra effort in lesson preparation and learner support. Such commitment translates into more effective teaching and improved learner engagement. Furthermore, principals who frequently support professional development promote a culture of accountability and continuous improvement within schools. Teachers are encouraged to reflect on their practice, use data to inform instruction, and share best practices with colleagues. This collaborative professional culture strengthens instructional quality across departments. In the end, students benefit from well-prepared, motivated, and innovative teachers, leading to improved understanding of content and better examination performance. This indicates that increased frequency of principals' support for teachers' professional development is strongly associated with higher KCSE academic achievement.

4.3.2 Thematic Analysis

During the interviews, however, the principals and the Sub-county Directors of Education (TSC & MoE) disagreed with the view that principals rarely support professional development of teachers. Principal, P1, stated;

In my school, though not frequent due to resource constraints, I always organize workshops for further training of teachers, mentorship and coaching programmes and create opportunities which enable teachers to improve their pedagogical skills. This has often helped improve performance in KCSE.

Similar views were expressed by the Sub-county Directors of Education who noted that quite a number of principals have supported professional development of teachers. They are required to plan such training and mentorship programmes to equip teachers with new teaching approaches. Despite the contradictions, these mixed findings underscore the vitality of principals' support for teachers' professional development in improving students' academic performance. This indicates that, even when such programmes are not frequent, workshops for further training, mentorship, and

coaching are deliberately planned to address emerging instructional needs. These forums expose teachers to new pedagogical approaches, curriculum changes, assessment strategies, and learner-centered methodologies that enhance classroom practice. These findings corroborate the findings of a study carried out in Murang'a County by Mwaniki (2024), which revealed that, through mentorship and coaching programmes, experienced teachers and school leaders guide their colleagues on effective lesson planning, classroom management, and learner assessment. This professional support fosters collaboration, reflective practice, and confidence among teachers, enabling them to refine their instructional skills despite challenging working conditions. Principals also create opportunities such as peer observation, subject-based panels, and external seminars that broaden teachers' professional perspectives.

The cumulative effect of these initiatives is improved teaching effectiveness, which directly influences learner outcomes. Teachers who benefit from continuous professional development are better equipped to address diverse learner needs, motivate students, and deliver content more effectively. Consequently, schools often register improved academic performance in the Kenya Certificate of Secondary Education (KCSE) examinations.

5. Conclusion and Recommendations

5.1 Conclusion

Academic performance in public secondary schools has been low for the last five years (2020-2024) with many students registering low academic performance in KCSE. This has brought into question the effectiveness of principals' support for teacher professional development activities. From the study, principals rarely provide adequate support for teachers' professional development, a situation that has significantly contributed to low academic performance among students.

5.2 Recommendations

As a practice, the Ministry of Education should allocate resources to enable principals organize regular retraining and mentorship as well as coaching programmes for teachers. As a policy, the Ministry of Education should continue enforcing regular training of principals on human management as a key step towards understanding how to improve students' academic performance in public secondary schools.

References

- Achieng, L., & Otieno, P. (2022). Instructional leadership and teacher professional development in public secondary schools in Kenya. *Journal of Educational Leadership and Policy*, 6(2), 45–60.
- Adewuyi, O., & Ogunwuyi, A. (2022). Teacher management practices and academic performance in Sub-Saharan Africa. *International Journal of Educational Management*, 36(4), 521–535.
- Adhiambo, R., Njihia, M., & Barasa, P. (2024). Professional development support and school culture in Kenyan public secondary schools. *African Journal of Education Studies*, 9(1), 88–104.
- Agran, M. (2022). Learner achievement benchmarks and assessment standards in Yemeni secondary schools. *Middle East Journal of Educational Research*, 5(3), 67–81.
- Akala, W., & Maithya, R. (2022). Role of school heads in teacher professional development and student achievement. *Journal of Educational Administration*, 4(1), 23–39.
- Awodiji, O., & Charity, E. (2020). School leadership and teacher learning environments. *Journal of Educational Development in Africa*, 12(2), 91–106.
- Bukola, T., & Subair, K. (2023). Teacher supply, quality assurance and professional development in Nigeria. *Nigerian Journal of Educational Planning*, 15(1), 55–70.
- Chui, M. (2025). Effectiveness of teacher mentorship and coaching programmes in Kenyan public secondary schools. *East African journal of educational studies*, 2(3), 44–54.
- Contreras, D., & Gallardo, A. (2022). Student achievement trends in Chilean secondary education. *Journal of Educational Research*, 14(2), 101–118.
- Cotton, L. (2023). *National examination performance report for Austrian secondary schools*. Austrian Institute of Education Research.
- Creswell, J. (2018). *Research design: qualitative, quantitative and mixed methodology*. Thousand Oaks, California: Sage Publications.
- Gedro, J., Hartman, S., & Suárez, M. (2021). Educational performance disparities in Haitian secondary schools. *Journal of Education*, 43(2), 201–219.
- Gupta, R. (2023). School leadership and teacher professional development in India. *International Journal of Leadership in Education*, 26(3), 389–404.
- Hattie, J. (2022). *Visible learning: The sequel*. Routledge.
- Heaton, R. (2021). Professional development trends in American schools. *Journal of Teacher Education*, 72(4), 459–473.
- Kamau, J., & Wambui, L. (2022). In-service training and pedagogical improvement in Kenyan secondary schools. *East African Journal of Education*, 8(2), 61–76.
- Knowles, M. S. (1970). *The modern practice of adult education: Andragogy versus pedagogy*. Association Press.
- Knowles, M. S., Holton, E. F., III, & Swanson, R. A. (2012). *The adult learner: The definitive classic in adult education and human resource development* (7th ed.). Routledge.
- Kraft, M. A., Blazar, D., & Hogan, D. (2023). The effect of teacher professional development on instruction and achievement. *Educational Researcher*, 52(1), 13–27.
- Linder, R., & Eyal, O. (2020). School leaders as facilitators of teacher professional learning. *Leadership and Policy in Schools*, 19(3), 376–394.
- MacBeath, J. (2023). *Leadership for learning in New Zealand schools*. Springer.
- Mensah, E., & Boateng, K. (2023). Constraints to continuous professional development in Ghanaian public schools. *Journal of African Educational Research*, 10(1), 34–49.
- Mensah, E., & Oduro, A. (2023). Principal support and teacher motivation in secondary schools. *International Journal of Educational Leadership*, 7(2), 90–106.
- Mensah, P., & Tetteh, S. (2023). Teacher workshops and instructional quality in West Africa. *African Journal of Teacher Education*, 12(1), 55–70.
- Ministry of Education (2025). *KCSE performance report for Gatanga Sub-county (2019–2024)*. Government Printer.

- Muriithi, J. (2024). Teacher motivation and professional growth in Kenyan public secondary schools. *Journal of Education and Practice*, 15(3), 112–126.
- Mutwiri, K., & Chui, M. (2024). Mentorship practices and learner achievement in Kenyan secondary schools. *Journal of Educational Research in Africa*, 11(2), 77–92.
- Mwaniki, J. (2024). The impact of mentorship and coaching on teacher development: A case study of Murang'a County. *Journal of Educational Leadership*, 14(3), 45–58.
- Ngoga, J. (2023). Principal mentorship and student achievement in Rwanda. *Journal of Education*, 6(1), 41–58.
- Njeri, D. (2023). Instructional supervision and academic performance in public secondary schools. *Journal of Educational Studies*, 9(2), 63–79.
- Njoroge, P., & Chui, M. (2025). *Instructional leadership and mentorship practices in Kiambaa Sub-county*. Unpublished research report, Kenyatta University.
- Orodho, J. A., Waweru, P. N., Ndichu, M., & Thinguri, R. (2023). Principals' instructional leadership and students' academic performance in Kenya. *International Journal of Education and Research*, 11(5), 1–16.
- Reusen, T. (2023). Understanding academic performance in secondary education. *European Journal of Educational Assessment*, 18(2), 145–160.
- Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2020). The impact of leadership on student outcomes. *Educational Administration Quarterly*, 56(1), 5–38.
- Sahlberg, P. (2021). *Finnish lessons 3.0: What can the world learn from educational change in Finland?* Teachers College Press.
- van Nieuwerburgh, C. (2022). *Coaching in education: Getting better results for learners, educators, and leaders*. SAGE.
- Vanblaere, B., & Devos, G. (2020). Professional development and instructional effectiveness. *School Effectiveness and School Improvement*, 31(2), 254–272.
- Walberg, H. J. (2012). *Educational productivity theory and practice*. McCutchan Publishing.
- Wanjala, G., Wamocha, F., & Nasongo, J. (2022). Teacher management practices and academic achievement in Kenyan secondary schools. *International Journal of Educational Administration*, 14(2), 83–98.
- Watson, L. (2024). Teacher professional development and student outcomes. *Journal of Contemporary Education Research*, 18(1), 22–38.