

**INFLUENCE OF PRINCIPALS' INSTRUCTIONAL LEADERSHIP ON
ACADEMIC PERFORMANCE AMONG PUBLIC SECONDARY SCHOOLS IN
ATHI RIVER SUB-COUNTY IN MACHAKOS COUNTY, KENYA**

JAMES MAVINDU

**A THESIS SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE AWARD OF MASTER
OF EDUCATION DEGREE IN ADMINISTRATION,
LEADERSHIP AND MANAGEMENT OF
MOUNT KENYA UNIVERSITY**

APRIL, 2025

DECLARATION AND APPROVAL

Declaration

This thesis is my original work and has never been presented for any academic award in any institution.

Name: JAMES MAVINDU

Reg. No. MED/2018/40640

Signature: [Signature] Date: 11/04/2025

Approval

This thesis/project is being submitted for examination with our approval as university supervisors

Name: DR. GILBERT NYAKUNDI, PH.D.

Institutional Affiliation: MRUNT KEWYA UNIVERSITY

Signature: [Signature] Date: 12/04/2025

Name: PROF. JOSHUA ODHIAMBO OUAL

Institutional Affiliation: BARATON UNIVERSITY

Signature: [Signature] Date: 17/4/2025

DECLARATION AND APPROVAL

DEDICATION

This research is dedicated to all Principals and educators of Athi River Sub-County, together with my family, for their collaboration and support.



ACKNOWLEDGEMENT

I cannot adequately articulate my thanks to my outstanding supervisors, Prof. Joshua Ogal and Dr. Gilbert Nyakundi, for their crucial leadership and support during my academic journey. Consequently, I am profoundly grateful to the Almighty for granting me the capacity to achieve this advanced level of education, which would otherwise have been unattainable.

I express deep gratitude to those who participated in the debates and collaboration that led to the creation of this exceptional idea. Their thoughts have significantly influenced the trajectory of my career. In closing, I wish to convey my deep appreciation and gratitude to my supervisors at Mount Kenya University, Professor Joshua Ogal and Dr. Gilbert Nyakundi.



ABSTRACT

Improving and supervising academic success is essential for promoting leadership in education. Notwithstanding the introduction of numerous measures aimed at enhancing examination results, public secondary schools in Athi River Sub-County, Machakos County, continue to demonstrate inadequate performance in the Kenya Certificate of Secondary Education (KCSE). This study examines the influence of principals' instructional leadership on students' academic performance in these schools. The study sought to accomplish four objectives: (i) to evaluate the effect of improving teachers' professional development on students' academic performance, (ii) to examine the influence of promoting collaborative practices on students' academic performance, (iii) to ascertain the impact of defining school goals on students' academic performance, and (iv) to analyze the effect of teaching supervision on students' academic performance. The study was founded on the Theory of Academic Performance and the Contingency Theory. A mixed-methods approach with a concurrent triangulation design was utilized. The study comprised a sample of 247 individuals, including 224 instructors and 23 school administrators. Utilizing fundamental random and stratified sampling techniques, 87 educators and 9 administrators were selected. Data were collected using standardized questionnaires, interview techniques, and document analysis. The instruments' validity and reliability were established through pilot testing and test-retest methodologies. Quantitative data were analyzed using descriptive statistics (means and percentages) and inferential statistics, specifically Pearson's Product-Moment Correlation Coefficient, at a significance level of 0.05. The investigation employed SPSS Version 23, presenting results via bar graphs and frequency distribution tables. The study demonstrated that principals significantly influence students' academic performance through instructional leadership. The correlation coefficients for critical leadership activities were: support for teachers' professional development ($r = .59$), promotion of collaborative practices ($r = .817$), communication of school goals ($r = .968$), and supervision of teaching ($r = .721$). The findings indicate that most principals in public secondary schools in Athi River Sub-County actively support policies and initiatives aimed at enhancing professional development, fostering collaboration, and strengthening instructional leadership. The research recommends that principals continue to invest in professional development and instructional leadership initiatives to improve students' academic achievement. Improving these leadership practices is crucial for reversing the persistent decline in KCSE performance in Athi River Sub-County, Machakos County, Kenya.

TABLE OF CONTENTS

DECLARATION AND APPROVAL	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS AND ACRONYMS	xii
CHAPTER ONE	1
INTRODUCTION	1
1.0 Introduction.....	1
1.1 Background to the Study.....	1
1.2 Statement of the Problem.....	7
1.3 Study’s Purpose.....	8
1.4 Study’s Objectives.....	8
1.5 Research Hypotheses.....	9
1.6 Assumptions of the Study.....	9
1.7 Significance of the Study.....	10
1.8 Scope of the Study.....	11
1.9 Limitations of the Study.....	11
1.10 Delimitations of the Study.....	12
1.11 Operational Definitions of Key Terms.....	13
CHAPTER TWO	15
LITERATURE REVIEW	15
2.0 Introduction.....	15
2.1 Empirical Literature Review.....	15
2.1.1 The Concept of Academic Performance.....	15
2.1.2 The Concept of Principals’ Instructional Leadership.....	17
2.1.3 Promotion of Teachers Professional Development and Students’ academic performance.....	19
2.1.4 Promotion of collaborative practices and Students’ Academic Performance.....	22
2.1.5 Communication of School Goals and Students’ Academic Performance.....	23

2.1.6 Supervision of Teaching and Students' Academic Performance in Public Secondary Schools.....	25
2.2 Theoretical Framework.....	27
2.2.1 Contingency Theory of Leadership (Fiedler 1967)	28
2.2.2 The Academic Performance Theory (Walberg 2012).....	30
2.3 The Conceptual Framework of the study.....	32
2.4 Research Gaps.....	33
2.5 Summary of Literature Review.....	34
CHAPTER THREE.....	36
RESEARCH METHODOLOGY AND DESIGN.....	36
3.0 Introduction.....	36
3.1 Research Methodology	36
3.2 Research Design.....	36
3.3 Location of Study.....	37
3.4 Target Population.....	37
3.5 Sampling Procedures and Sample Size.....	38
3.6 Research Instruments	39
3.6.1 Questionnaire for Teachers	39
3.6.2 Questionnaire for Principals	40
3.6.3 Document Analysis.....	40
3.7 Piloting of Research Instruments.....	40
3.7.1 Validity of the Research Instruments.....	41
3.7.2 Reliability of the Research Instruments.....	41
3.7.3 Credibility of Instruments.....	42
3.7.4 Dependability of Instruments.....	42
3.8 Data Collection Procedures.....	42
3.9 Data Analysis Procedures	43
3.10 Ethical Considerations	44
3.10.1 Confidentiality and Privacy	45
3.10.2 Anonymity	45
3.10.3 Informed Consent.....	45
3.10.4 Access to the site.....	45
3.10.5 Mien and decorum	46
3.10.6 Storage of Data Collected	46

CHAPTER FOUR.....	47
RESEARCH FINDINGS AND DISCUSSIONS	47
4.0 Introduction.....	47
4.1 Instruments Return Rates	48
4.2 Social Demographic Characteristics of the Respondents	48
4.2.1 Teachers’ Demographic Characteristics	49
4.2.2 Principals and Teachers’ Gender Distribution.....	49
4.2.3 Distribution of Teachers and Principals by Age	50
4.2.4 Distribution of Principals and Teachers by Professional Academic Qualifications	51
4.2.5 Distribution of principals and teachers by Teaching and leadership experiences	53
4.2.6 Distribution of Teachers by Length of Stay in the same School	54
4.2.7 KCSE Results for Public Secondary Schools in Athi-River Sub-county.	56
4.3 Promotion of Staff Professional Development and Academic Performance.....	58
4.4 Promotion of Collaborative Practices and Academic Performance.....	67
4.5 Communication of school goals and students’ academic performance	74
4.6 Supervision of teaching and students’ academic performance	81
CHAPTER FIVE	93
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	93
5.0 Introduction.....	93
5.1 Summary of the Major Findings	93
5.1.1 Promotion of Staff Professional Development and Academic Performance.....	93
5.1.2 Promotion of Collaborative Practices and Students’ Overall Performance.....	94
5.1.3 Principal Communication of School Goal and Academic Performance.....	94
5.1.4 Supervision of Teaching and Students’ Academic Performance.....	95
5.2 Conclusions of the Study	96
5.3 Recommendations of the Study	98
5.3.1 Policy Recommendations:	98
5.3.2 Practice Recommendations:.....	99
5.4 Suggestions for Further Research	99
REFERENCES.....	101
APPENDICES.....	119
Appendix I: Letter of Introduction.....	119
Appendix II: Informed Consent Form	120
Appendix III: Questionnaire for Secondary School Teachers	122

Appendix IV: Questionnaire for Principals	127
Appendix V: Map of Mavoko Constituency Showing Athi River Sub-County	132
Appendix VI: Ethical Approval Letter	133
Appendix VII: NACOSTI Research License.....	134
Appendix VIII: Ministry of education, state department of early learning and basic education research authorization	136
Appendix IX: Similarity Index	139



LIST OF TABLES

Table 3.1: Target Population of the Study	38
Table 3.2: Sampling Grid.....	39
Table 3.3: Data Analysis Procedures	44
Table 4.1: Questionnaires Return Rates.....	48
Table 4.2: Principals and Teachers’ Gender Distribution.....	49
Table 4.3: Distribution of Principals and Teachers by Age.....	50
Table 4.4: Principals and Teachers by Professional Academic Qualifications	52
Table 4.5: Principals and Teachers by Teaching and Leadership Experiences	53
Table 4.6: Principals and Teachers by Length of Stay in the Same School	55
Table 4.7: Athi River Sub-County KCSE Performance (2017-2022) in Public Schools	56
Table 4.8: Principals on Staff Professional Development and academic Performance.....	59
Table 4.9: Teachers Responses on Staff Professional Development.....	62
Table 4.10: Principals’ and Teachers’ Responses on Staff Professional Development	63
Table 4.11: Promotion of Staff Professional Development and Academic Performance.....	66
Table 4.12: Principal Responses on the Promotion of Collaborative Practices.....	67
Table 4.13: Teachers’ Responses on the Promotion of Collaborative Practices	69
Table 4.14: Responses on the Promotion of Collaborative Practices	71
Table 4.15: Pearson Correlation Results for Principals’ Promotion of Collaborative Practices and students’ Academic Performance.....	73
Table 4.16: Principals’ Responses on the communication of school goals and Academic Performance	74
Table 4.17: Teachers Response on Principal’s communication of school Goals	76
Table 4.18: Principals’ and Teachers’ Responses on the communication of school goals...78	
Table 4.19: Principals’ communication of school Goals and Academic Performance.....	80
Table 4. 20: Principals’ Supervision of teaching and academic Performance.....	82
Table 4.21: Teachers Responses on Principals’ Instructional leadership of Teaching.....	84
Table 4.22: Principals’ and Teachers Responses on supervision of teaching.....	86
Table 4.23: Simple Regression Model Summary of the Influence of Principal Supervision of Teaching on Students’ Academic Performance.....	89
Table 4.24: Regression Coefficients	91

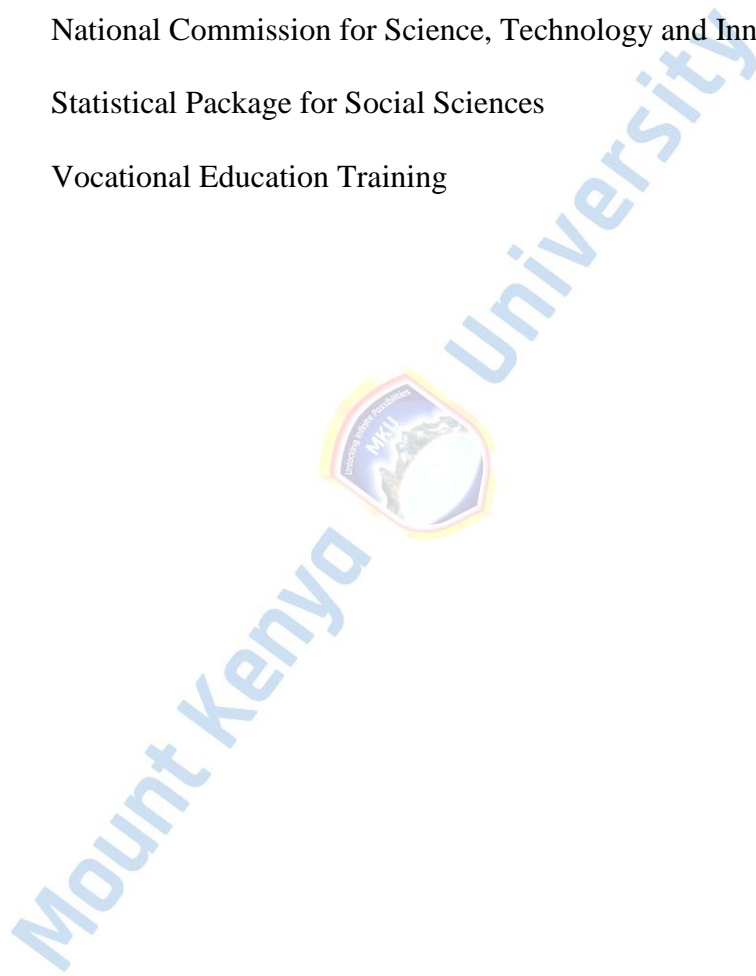
LIST OF FIGURES

Figure 2.1: The conceptual structure of the present research	33
Figure 4.1: Extent to which staff professional development influences student performance	58
Figure 4.2: Supervision of Teaching on Academic Performance	82



LIST OF ABBREVIATIONS AND ACRONYMS

APEL	Assessment of Prior Experiential Learning
IEBC	Independent Electoral and Boundaries Commission
KCSE	Kenya Certificate of Secondary Education
KNBS	Kenya National Bureau of Statistics
MoE	Ministry of Education
NACOSTI	National Commission for Science, Technology and Innovation
SPSS	Statistical Package for Social Sciences
VET	Vocational Education Training



CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter delineates the study's background, problem statement, research objectives, research questions, hypotheses, assumptions, significance, scope, and operational definitions of terms. This study examined the influence of principals' instructional leadership on students' academic performance in public secondary schools in Athi River Sub-County, Machakos County, Kenya.

1.1 Background to the Study

Education is regarded as a means of enhancing societal and political consciousness and sustaining workforce capacity, making it indispensable for the advancement of any civilisation (Weuffen et al., 2023). Education possesses transformative value and, among its other functions, enhances productivity and elevates individuals' quality of life (Lacka et al., 2021). Principals are essential in delivering a quality education to pupils, particularly in secondary schools. Olmo-Extremera et al. (2022) assert that principals bear the substantial burden of overseeing instructors and other school resources. The majority of educational professionals regard principals as the primary influence on students' organisational development and academic achievement (Sahlberg, 2021).

To do this, however, principals must employ a variety of instructional leadership styles. According to Mirkamali (2011), leadership practice is the style and strategy of offering direction, executing goals, and encouraging others. It therefore includes a whole pattern of explicit and implicit behaviors undertaken by the leader to promote sustainable instructional leadership. Even if the principal leaves, the notion of sustainable instructional leadership takes into consideration the institution's strengths and long-term objectives (Yokuş, 2022). Effective school leaders engage in succession planning by spending time preparing replacements

encouraging career development among potential teachers and dispersing leadership duties across the teaching team (Martins *et al.*, 2023). Principals who exercise instructional leadership are also distinguished by their participation in professional development geared to improve student performance (Cieminski, 2023). Additionally, the only way for principals to meet particular tasks and functions is via professional development (Cieminski, 2023).

Teacher professional development can take place in diverse circumstances. Professional development activities for teaching staff are more likely to succeed when the leader engages as a learner rather than merely as an observer (Pasternak *et al.*, 2023). When a leader merely tolerates or launches a staff development initiative and subsequently disengages, subordinates perceive a deficiency of excitement, resulting in no accomplishments (Pasternak *et al.*, 2023). Principals ought to engage in professional development relevant to their specific subjects (Slapac *et al.*, 2023). This will result in a uniform KCSE performance, as all teaching staff members possess equal access to professional development opportunities.

Additionally, to offer an instructional foundation, the principal must have the support of all education sector stakeholders (Rahman, 2021). They must all work together to improve the performance of students and attain educational objectives. Cooperation emerges when entities realize they cannot flourish without one another (Brush *et al.*, 2020). Trust, norms of reciprocity, shared obligations, consensus building, and conflict resolution processes characterize the parties' relationship. Collaboration requires the sharing of authority, knowledge, and decision-making systems (Wang *et al.*, 2020).

According to Rivas (2023), collaborative leadership in schools is shown by purposeful attempts to enhance teacher instruction. Successful leadership builds solid connections with all stakeholders by acknowledging both self-efficacy and collective efficacy to enhance the act of learning together. Teacher instructional leadership is believed to have a significant influence on

student performance (Zhan & Cao, 2023). Research on education reform and school development indicates that regular collaboration among teams of teachers is crucial for achieving improved student performance (Nerlino, 2020). Effective schools distinguish themselves by scheduling time for teacher collaboration, observation, and dialogue (Louis et al., 2021).

Collaborative leaders assume personal responsibility for good communication and intentionally use targeted, purposeful discussion to accomplish their objectives. Research demonstrates that energetic, dynamic, and fervently captivating forms of charisma generate good attitudes among employees (Zhao et al., 2021). A positive attitude reduces emotional instances of job burnout and stress. The creation of a collaborative school culture necessitates the promotion of favourable working conditions (Liu et al., 2021). Effective instructional leaders are proactive and look for assistance to promote team leadership and an atmosphere that is conducive to learning and professional development (Lee, 2023). Cooperation with teachers will improve performance because instructors will have ownership over the process and rewards of improved performance (Han, 2022).

The formation of a school's vision, the promotion of specific goals, objectives, and priorities, and the maintenance of high standards are just a few examples of the kinds of instructions that must be created and communicated in a learning environment (Leithwood, 2021). These techniques make up the majority of the efforts required to inspire school workers. Identification and dissemination of the school's goals to stakeholders are the two duties connected to the component of defining the school's purpose, according to Irungu (2020). Successful educational institutions have precise, measurable, and time-bound academic goals for their students (Fernandez, 2023). To accomplish this goal and create the school's mission, these institutions put a heavy emphasis on the principal's position as a partner with both teaching and non-teaching employees. The management must also ensure that the school community is

aware of the objectives and is on board with them. This is possible via good goal communication (Fernandez, 2023).

In addition, teachers, like any other staff member, can only remain successful in their crucial profession if they are supported and closely overseen (Owan, et al., 2023). Generally, however, teachers' supervisors, the administrators, shift from being good teachers to positions of administration and supervision with minimal training in the skills necessary for teacher supervision (Suyatno et al., 2023). Even with this constraint in overseeing and assessing instruction, the administrator is responsible for ensuring that their subordinate teachers are putting school objectives into effect during classroom teaching and learning (Kasneji et al., 2023).

This says that the principal should have the authority to supervise the educational process and evaluation to provide teachers constructive criticism on their strengths and weaknesses, or by regularly evaluating student work and keeping an eye on their overall performance. The administrator must be able to keep the allotted time for teaching by cutting down on meetings and speeches that are not necessary (Singh, et al., 2022). Also, the administration may make efforts to prevent students from discussing administrative topics during class time. All of these measures are intended to improve academic performance in schools (Fatimah & Syahrani, 2022).

A study conducted by Sarah (2020) in the UK examined the barriers of conducting classroom research and discovered that emphasizing learning and teacher engagement through structured cooperation and information mobilization across schools, including research, has facilitated the advancement of classroom activities. Nonetheless, Sarah (2020) emphasized the immediate difficulties in implementing lessons learnt, particularly on leadership for managing change. Özdemir's (2020) study in Turkey revealed that the use of lesson observation since 2021 has

augmented teachers' professional competence through active engagement, continuous monitoring of instructional methods, and enhanced collaboration and communication. Özdemir observed that inadequate leadership support hinders the proper execution of lesson study, a concern examined in this study within the Kenyan context.

Zainab's 2021 study in Nigeria identified lesson study as a crucial professional development tool for educators, augmenting their pedagogical competencies and resulting in notable advancements in student performance. Nakai's (2021) research in Zambia demonstrated that the implementation of lesson study in 2005 as a two-year pilot program under the SMASE initiative improved teacher performance. This accomplishment mostly stemmed from robust educational leadership at the school level, with administrators managing and organizing instructional activities and resource allocation. In South Africa, educators taught through lesson study programs emphasized the enhancement of teaching skills, attributing their success to effective classroom management. Conversely, Fitina's 2020 study in Tanzania highlighted that the lack of precise directives and leadership in classroom instruction resulted in insufficient program implementation, a concern also noted in Kenya and examined in the current study.

In Kenya, the extent to which instructional leadership impacts academic performance in secondary schools is uncertain. The academic success of secondary school pupils is contingent upon the instructional leadership chosen by the school administrator (Musungu & Nasongo, 2014). Hassan (2011) asserts that it is crucial to assess the administrative efficacy and success of a school based on the leader's performance. This performance is attributable to the principal's effective management, employing diverse instructional leadership strategies. Although students in Athi-River Sub County possess equivalent access to education as their counterparts in adjacent sub-counties, numerous public secondary schools have documented and persist in exhibiting low national examination outcomes (Appendix IX): The findings demonstrate a deterioration in academic performance within publicly sponsored secondary

schools. This transpires notwithstanding the existence of a leadership plan that advocates for prudent management as a solution to inadequate academic achievement. This troubling performance persists despite the fact that most institutions in the sub-county are believed to possess an adequate number of qualified professors and appropriate infrastructure. In response to public pressure on school administrators to improve academic performance on national examinations, schools have used several performance improvement measures to guarantee success. However, there are instances when certain strategies employed by schools to improve academic achievement lack empirical validation. Measures such as requiring students to retake courses and imposing supplementary fees have been demonstrated to be ineffective (Getange & Obar, 2016; Irungu, 2020).

Over the past five years, secondary schools in Athi River Sub-County, Machakos County, have exhibited erratic academic performance in the Kenya Certificate of Secondary Education (KCSE) examinations. In 2019, Machakos County recorded 24,375 KCSE candidates, consisting of 11,999 males and 12,376 females. In 2020, the total increased to 26,200 candidates, comprising 12,788 males and 13,412 females. In 2023, Kathiani Girls High School emerged as the foremost institution in the county, achieving a mean score of 9.1235 (B), surpassing all other schools (KNEC, 2023). Despite these achievements, numerous schools in Athi River Sub-County have reported inconsistent performance, with average scores below the county standard. Factors contributing to these inequities may encompass differences in instructional leadership, teacher professional development, and resource distribution. A comparative examination reveals that although several schools have made notable advancements, others persist in encountering obstacles to attaining academic success. Resolving these difficulties is essential for improving overall student achievements in the sub-county.

Maruf et al. (2022) and Kumari (2023) have demonstrated that instructional leadership is among the most efficacious ways for enhancing and advancing student performance in educational institutions. However, it remains unclear if school administrators have used instructional management tactics, despite the critical role of instructional leadership in supporting teachers' pedagogical practices and enhancing student learning and performance. Moreover, there is uncertainty regarding the degree to which administrators employ instructional leadership strategies and the effect of these methods on fostering outstanding learning environments and improving overall school performance. This research investigates the instructional leadership of principals and its effect on students' academic performance in public secondary schools in Athi River Sub-County, Machakos County, fulfilling an identified gap in the literature.

1.2 Statement of the Problem

Irrespective of the educational access for pupils in Athi-River Sub County compared to those in adjacent sub-counties, national test scores have persistently indicated stagnant learning outcomes. The Education Ministry's statement (2019) said that Athi River Sub-County recorded KCSE mean scores of 2.18 in 2014, 2.32 in 2015, 2.47 in 2016, 2.07 in 2017, and 3.40 in 2018. Although most schools in the sub-county are deemed to possess an adequate number of qualified instructors and appropriate facilities, this subpar performance has continued. In response to public pressure on school administrators to improve educational outcomes on national assessments, schools have employed several performance enhancement strategies to ensure success. There have been instances where certain strategies employed by schools to enhance academic achievement lack empirical validity. Measures like mandating students to retake courses and imposing additional fees have been demonstrated to be unsuccessful.

It remains unclear if administrators have executed instructional techniques at their institutions, despite the essential role of instructional leadership in improving teachers' practices and fostering student learning and success. Secondly, it remains ambiguous whether administrators utilize instructional leadership strategies, and thirdly, the degree to which these methods impact the promotion of exceptional learning and, thus, the improvement of school performance is unclear. This study aimed to investigate the influence of instructional leadership styles on academic performance in Athi River Sub-County, Kenya, thereby addressing a gap in the existing literature.

1.3 Study's Purpose

The purpose of this study was to explore the influence of principals' instructional leadership on student academic performance in public secondary schools in Athi River Sub-County, Machakos County, Kenya.

1.4 Study's Objectives

The following were the objectives of the study;

- i) To determine the influence of promotion of teachers' professional development on students' academic performance among public secondary schools in Athi River Sub-County;
- ii) To examine how the promotion of collaborative practices influences students' academic performance among public secondary schools in Athi River Sub-County;
- iii) To establish the influence of communication of school goals on students' academic performance among public secondary schools in Athi River Sub-County;
- iv) To evaluate the influence of supervision of teaching on students' academic performance among public secondary schools in Athi River Sub-County.

1.5 Research Hypotheses

Hypotheses allow for specific predictions about the relationships between variables. They make clear statements about the expected outcomes of the study, enabling researchers to conduct statistical tests to confirm or refute these predictions. Hypotheses contribute to theory-building by providing empirical support for theoretical propositions. They help researchers validate or refine existing theories by testing their predictions in real-world contexts.

The study tested the following hypotheses:

H₀₁: The enhancement of teachers' professional development does not substantially influence students' academic performance in public secondary schools in the Athi River Sub-County.

H₀₂: The implementation of collaborative practices did not substantially influence students' academic performance in public secondary schools in the Athi River Sub-County.

H₀₃: The communication of school objectives does not substantially influence students' academic performance in public secondary schools in the Athi River Sub-County.

H₀₄: The supervision of instruction does not substantially affect students' academic performance in public secondary schools in Athi River Sub-County.

1.6 Assumptions of the Study

The researcher made the following assumptions:

1. The metrics employed to evaluate teachers' professional development, collaborative practices, communication of school objectives, and oversight of instruction are valid and trustworthy indicators of the variable principle instructional leadership.
2. Teachers and school principals provided accurate and honest responses to surveys, interviews, or other data collection methods used in the study, without deliberate bias or misinformation.

1.7 Significance of the Study

This study is significant for its ability to provide vital insights and practical implications for various stakeholders in the educational system, such as policymakers, school administrators, educators, and researchers.

The study's findings can guide the formulation of policies and activities aimed at improving instructional leadership practices in secondary schools. By identifying the determinants of academic success, policymakers can formulate targeted measures to enhance teaching and learning outcomes at both institutional and systemic levels.

Schools strategies improvement: Outcomes gained from the research can be useful to school administrators as it offers insight on effective instructional leadership practices that positively affect students' academic performance. This they can use by implementing partnering strategies that have been established in researches as effective for teacher development, enhancing collaboration, relaying the goals of the school as well promoting supervision of teaching.

Development of teachers: It makes them aware of the need to embark on professional development and how important it is for teachers to work in teams for the improved performance of students. This is because by knowing how instructional leadership influences students' performance, teachers are in a position to learn areas of their practice that they need to develop, hence engage in capacity building to effective practice.

Enhance Parent Engagement: Parents and guardians are crucial to help educate their children as stated below. In terms of implication at parent level, parents might stand to gain by getting acquainted with the factors that make up secondary school academic performance. This awareness needs to be increased and developed to increase parental involvement in things

happening in school as well as the decision making process to favor improved students performance

This study advances the existing literature on instructional leadership and its effects on performance enhancement, presenting data pertinent to junior secondary education in Athi River Sub-County and Machakos County, Kenya. These findings allow scholars to advance their research and perhaps explore more dimensions of instructional leadership and its effects on student learning outcomes.

1.8 Scope of the Study

This study sought to determine the influence of principals' instructional leadership on student academic performance in public secondary schools in Athi River Sub-County, Machakos County, Kenya. The objective was to determine the influence of instructional leadership practices—support for collaborative efforts, articulation of school objectives, provision of professional development for educators, and oversight of teaching—on student performance. This study utilized a concurrent triangulation design alongside a mixed-methods strategy. The amalgamation of quantitative and qualitative research data collection and analysis enabled a comprehensive methodological understanding of the topic being studied.

Consequently, the study engaged school administrators to get their insights on instructional leadership practices, employing a predefined set of questions for the interviews. Additionally, surveys were employed to gather views from educators concerning the observation of instructional leadership and its impact on student achievement. The research was carried out from June 2022 to August 2023.

1.9 Limitations of the Study

Several primary limitations were discovered that could influence the overall focus or discourse of the findings within the constraints of this research. The implementation of self-report

measures, including questionnaires and interviews, introduced response biases and socially desired answers, so compromising the validity and reliability of the collected data. The current study's possible shortcomings stemmed from its longitudinal design: participant attrition, data loss, and temporal interference impacted the findings. Finally, the tests, aligned with available resources such as time and finances, determined the extent and depth of data gathering and analysis in the research, so limiting the study's adaptability.

1.10 Delimitations of the Study

Methodological constraints were established to avert scope creep and maintain the simplicity of the research. These constraints were advantageous as they defined the bounds of the investigation in multiple aspects. The research was limited to public secondary schools in Athi River Sub-County, Machakos County, Kenya. Private schools and other educational tiers, including primary and tertiary institutions, were excluded to focus on the intended audience. Secondly, while the research aimed to clarify the relationship between instructional leadership and student performance, it overlooked other factors that could affect students' abilities, such as socio-economic status and individual learner traits.

The study emphasized quantitative surveys rather than qualitative interviews to examine attitudes and experiences connected to instructional leadership practice using mixed methodologies. The research was conducted from June 2022 to August 2023, during which data was collected at a specific point in time. This cross-sectional design limited the study to a single observation of instructional leadership and its effect on student performance, without tracking changes over an extended period.

1.11 Operational Definitions of Key Terms

Academic Performance: Academic performance pertains to the quantitative evaluation of students' learning and achievement across various subjects, encompassing test scores and assessments that reflect mastery of the established curriculum, as well as personal and social developmental outcomes. The study include academic reports and assessments, including termly, semiannual, or annual reports, examination results, and educators' judgements of students' performance.

Instructional Leadership: Instructional leadership involves a proactive approach to school leadership, wherein a principal collaborates closely with teachers to establish and maintain effective instructional practices. In the study, it is used to imply frequency of teacher-principal collaboration, feedback from teachers on leadership effectiveness, and perception surveys on leadership practices.

Communication of School Goals: Effective communication of educational objectives necessitates the clear and continuous transmission of the institution's mission, vision, and academic aims to all stakeholders, including educators, personnel, students, and parents. This study pertains to the presence of documented purpose and vision statements, the regularity of communication via newsletters, meetings, and parent-teacher conferences, as well as surveys evaluating stakeholders' awareness of school objectives.

Public Secondary Schools: Public secondary schools are educational establishments overseen, sustained, and financed by the government. In this context, it pertains to

institutions that deliver secondary education to students within a defined geographical region, usually within a particular jurisdiction such as a district, sub-county, or constituency.

Collaborative Practices: Collaborative practices entail working together across various agencies, departments, or service providers to improve the quality and effectiveness of support services provided to individuals, families, or communities. In the context of this study, collaborative practices involve teachers, administrators, support staff, and other stakeholders working collaboratively to address educational challenges, share resources, and promote student success.

Teachers' Professional Development: Teachers' professional development denotes continuous learning and growth opportunities aimed at augmenting educators' knowledge, abilities, and efficacy in the classroom. This study encompasses workshops, seminars, conferences, mentoring programs, and more activities designed to enhance teaching practices, curriculum implementation, assessment methodologies, and student participation.

Sub-County Public Secondary Schools: Sub-county public secondary schools are educational establishments that enrol pupils from a designated geographic region inside a broader administrative division, such as a sub-county. This study examines schools that address the educational requirements of students living within sub-county limits, generally functioning under the supervision and financial support of the government education department at the sub-county level.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter provides a comprehensive analysis of the relevant academic material in the subsequent section. Additionally, it examines various perspectives from previous research on the subject, emphasising the concepts of academic performance, principal-led instructional leadership, and the effects of fostering teacher professionalism, implementing development programs, encouraging collaboration to achieve school objectives, and overseeing classroom instruction on student performance. This also includes philosophical and theoretical considerations, a literature synopsis, and a compilation of the principal research criteria in the field.

2.1 Empirical Literature Review

An empirical literature review was conducted, concentrating on students' academic performance in public secondary schools, the instructional leadership of principals, and the influence of teachers' professional development, collaboration, communication of school objectives, and principal oversight of instruction on students' academic outcomes.

2.1.1 The Concept of Academic Performance

The focus on secondary school students' academic performance in conferences and official documents has underscored the importance of their educational achievements. This stands in stark contrast to their comparatively low recognition and infrequent practical implementation, as observed by Nicolopoulou and Smith (2022). In numerous nations, comprehensive understanding of academic performance is confined to a limited number of individuals at the national and institutional tiers.

Academic performance is essential for the transparency of higher education institutions and the authentication of credentials (Kukkar et al., 2023). Its fundamental importance resides in its contribution to curriculum development, pedagogical approaches, assessment procedures, and the preservation of educational quality, alongside outcome-oriented tactics in the 21st century (Al-Kuwari et al., 2021). Academic achievement is an essential instrument for conveying learning outcomes to secondary school students, citizens, employers, and educators, especially during a period of critical evaluation of the nature and purpose of education.

Reforms in early childhood education have prioritized academic achievement in curriculum design and development, transitioning from a traditional teacher-centered approach to a learner-centered model. Katsarou and Chatzipanagiotou (2021) characterize learner-centered learning as the interplay of teaching, learning, and assessment, along with the essential connections among learning design, execution, and evaluation. Sewagegn (2020) emphasized the necessity for quantifiable and observable results, together with the discovery and evaluation of learning. In response, educational authorities in European countries formulated academic performance plans for secondary school pupils.

Over time, the focus on academic success grew to embrace all subject areas, shifting from vocational to higher education. Academic performance statements explain what a student should know, comprehend, and be able to accomplish following a learning experience. (Austin et al., 2023). These statements about learning outcomes are clear and encompass a mix of knowledge, skills, abilities, attitudes, and understanding gained through various higher education experiences (Unger & Sann, 2023). The academic performance approach marks a shift toward effective and meaningful learning. Many secondary school students, for various valid reasons, perceive education as irrelevant and unenriching (Tomaszek, 2020). To make education more meaningful for these students, it must be seen as equipping them for a richer and more independent life rather than merely serving the needs of others.

Over the past five years, secondary schools in Athi River Sub-County, Machakos County, have exhibited variable academic performance in the Kenya Certificate of Secondary Education (KCSE) examinations. In 2019, Machakos County recorded 24,375 KCSE candidates, consisting of 11,999 males and 12,376 females. In 2020, the number rose to 26,200 candidates, consisting of 12,788 males and 13,412 females. In 2023, Kathiani Girls High School distinguished itself as the leading institution in the county, attaining a mean score of 9.1235 (B), above other prominent schools (KNEC, 2023). Despite these achievements, certain schools in Athi River Sub-County have reported inconsistent performance, with mean scores below the county average. Factors contributing to these disparities may include variations in instructional leadership, teacher professional development, and resource allocation. Comparative analysis indicates that while some schools have made commendable progress, others continue to face challenges in achieving academic excellence.

2.1.2 The Concept of Principals' Instructional Leadership

Qadach et al. (2020) defined instructional leadership as the involvement of educators in various aspects, including intellectual, moral, political, social, or emotional engagement with their peers. It emphasizes both professional and social/emotional participation in the workplace. Collaboration, on the other hand, is a subset of instructional leadership that primarily relates to professional partnerships and teamwork toward common goals (Admiraal et al., 2021).

Teacher instructional leadership is believed to have a significant influence on student performance (Zhan & Cao, 2023). Research on education reform and school development indicates that regular collaboration among teams of teachers is crucial for achieving improved student performance (Nerlino, 2020). Effective schools distinguish themselves by scheduling time for teacher collaboration, observation, and dialogue (Louis et al., 2021). However, increased collaboration, communication among teachers, encouragement of best practices

sharing, and the development of teacher relationships do not always guarantee improved teaching and student performance.

Development partnerships, as described by Ayo and Fraser (2008), involve long-term, substantial progress where individuals work together toward mutually agreed-upon objectives. These partnerships emphasize a two-way process that fosters learning and increased self-awareness. Educational institutions are increasingly shaped by groups advocating for collaboration and partnership as the norm rather than the exception, including Maori and women (Irene et al., 2020).

Organizational commitment plays a pivotal role in determining and shaping organizational outcomes. It is considered essential for a business's success, quality, and productivity. The size of decision-making committees within a collegial management approach must allow for effective communication (Fossheim, 2022). Collegial models assume consensus decision-making, driven by shared values and objectives, which promotes the resolution of conflicts through agreement. This may prolong the decision-making process but is viewed as a reasonable price for upholding common beliefs and values. Ethical considerations in instructional leadership support consensus-based decision-making, as forcing decisions on employees is seen as unethical and contrary to the principle of consent (Bush, 2020).

Members of an educational institution must recognize and regularly renegotiate shared resources to promote learning, reflection, and improvement (Ayo & Fraser, 2008). As educational institutions increasingly identify as professional learning communities, culture changes are necessary to facilitate meaningful dialogues about learning and the evaluation of organizational responsibilities that promote continuous professional development (Mcgee & Martin, 2011; Gore & Rosser, 2022). Exceptional professional conversations are a powerful tool for gaining a better understanding of one's practice (Hope et al., 2022). These

conversations should be an integral part of an institution's planned and organized strategy for professional dialogue and growth.

2.1.3 Promotion of Teachers professional development and Students' academic performance

Professional growth is a continuous process in which instructors gradually gain confidence, acquire new perspectives, expand their knowledge, discover new techniques, and take on additional responsibilities (Martin et al., 2021). In contrast, Cirocki and Farrell (2019) define professional development as a strategy employed by schools and school districts to ensure the ongoing growth of teachers' practices throughout their careers. Effective professional development encourages teacher teams to focus on the needs of their students, promoting cooperation, research, and collaborative problem-solving to ensure the success of all students.

While professional growth can manifest in various forms and is sometimes viewed as a systemic shift (Imants & Van der Wal, 2020), there is a consensus among professionals and decision-makers that the primary objective of professional development is to enhance student performance (McKeown et al., 2023). Yoon et al. (2007) identified three outcomes of professional development on student success: it enhances teachers' knowledge and skills, which subsequently improves classroom practices, ultimately leading to increased student performance.

Teachers' quality of teaching is recognized as a pivotal factor influencing student performance (Cornet et al., 2006), it is logical to assume that supporting teachers' continuous professional development would yield long-term improvements in student performance. Shen et al. (2020) further establish a positive relationship between teacher collaboration, idea sharing, viewpoint comparison, and student performance. Engaging in various types of professional development can inspire instructors to apply what they have learned, potentially leading to improved academic success.

In the educational field, “developing teachers” involves providing students with individualized support, stimulating their intellectual curiosity, and promoting positive professional behaviours and values (Cirocki & Farrell, 2019). Nurturing professional growth is considered the most critical leadership behaviour that positively influences classroom instruction, as indicated by Mahoney et al.’s research (2021). Consequently, school administrators bear the responsibility of providing teachers with excellent professional development opportunities (Brauckmann et al., 2023).

To facilitate teachers’ professional development, school administrators must inform them about available opportunities and encourage their participation, often by granting time off to attend conferences, workshops, and seminars or providing financial assistance. The authors of the study by Brauckmann et al. (2023) propose further that extension has the optimal influence when it is incorporated into the instructors’ professional day, and when it engages all instructors in learning, not the voluntarily interested. This could include all teaching interactions during any point in the day that the academic teaching takes place, and the professional development activities which may be conducted before or after the classes may also be useful. Teacher involvement occurs in this process in the sense that principals inform them of professional development activities and arrange in-service education activities with special aim of enhancing particular teaching goals.

Administrators can further encourage teachers’ professional development by providing time away from their regular duties for independent study, such as participation in part-time and school-based courses. Additionally, they can hire experts in specific fields to guide teachers and students through the grading procedures for national exams. Professional development focused on a particular instructional method, as demonstrated by Yigletu et al. (2023), can enhance teachers’ utilization of higher-order teaching approaches, potentially leading to improved academic performance.

For schools to provide a high-quality education, they must hire highly trained instructors and support them in expanding their abilities, staying current in their disciplines, and adopting new teaching techniques. When administrators actively support teachers' professional development, it results in more reflective and informed behaviours, such as generating new ideas and taking risks in the classroom (Murphy & Levinson, 2023). Effective professional development is crucial for teachers to acquire and enhance the knowledge and skills necessary to address their students' learning challenges (Haug & Mork, 2021).

Ensuring that professional development aligns with educators' learning goals, requires rigorous planning, thorough implementation, and feedback mechanisms. Teachers who participate in professional development must then apply the new knowledge and abilities they acquire, as professional development is ineffective unless it translates into improved instruction, administration, or school leadership (Karakose et al., 2021). Given that teacher effectiveness significantly influences student performance (Roorda et al., 2021), governments should invest in teachers' professional development. This investment is crucial in a knowledge-based global economy, where education is considered a critical component of maintaining global competitiveness (Wirba, 2021). Consequently, schools are increasingly emphasizing student-directed learning to equip students with lifelong learning skills (Roorda et al., 2021).

Gitau's research (2010) reveals that transformational principals value the original ideas of their staff and students, fostering a collaborative environment. This positive approach is not unique to the Kandara Division of the Murang'a District but is also observed in the Athi River Sub-county, where Nzuve (2011) illustrates the favourable influence of transformational leadership on students' overall performance and staff motivation to work with principals to achieve educational goals. However, Ngina and Kalai (2016) and other empirical studies have not fully explored the influence of transformational principals' varied qualities on academic performance, productivity, and creativity among staff and students. Furthermore, these studies

have not addressed how instructional leadership qualities influence academic performance specifically, leaving certain aspects unexplained.

2.1.4 Promotion of collaborative practices and Students' Academic Performance

Collaborative leadership, as defined by Brownfield (2022), is a deliberate approach where leaders actively promote teacher preparation, build trust with all stakeholders by recognizing their unique qualities, and foster team cohesion to enhance collective learning. Unlike traditional top-down control methods, collaborative leadership, as described by Sepuru et al. (2021), harnesses collective intelligence across organizational boundaries. It is based on the premise that one can construct something more elaborate and complex when working in the company of others as compared to working individually, especially when addressing some of the most pressing issues organizations encounter in the course of their operations.

Therefore, the main goal of this advertising strategy is to use the community's obsession with children's results to make everyone dependent on these outcomes. Teachers themselves also have a responsibility for recognizing the fact that they depend upon other individuals and organizations. It is in the synergic working relationships between these stakeholders to improve children performance, as indicated (Sepuru et al. 2021). This is based on the reality that any entity cannot exist in a vacuum, and each has specific expertise to contribute to the partnership. This is has features in co-decision making, problem solving mechanisms, co-accountability, principles of reciprocity, and procedures for sharing of information and decision-making (Vlachopoulos 2019).

Suliman et al.'s findings (2023) highlight the positive influence of charismatic presentations that evoke passion and excitement, reducing the emotional effects of work burnout and stress. Creating a supportive working environment is essential for fostering a cooperative school culture, where teachers are motivated and committed, as suggested by this categorization.

According to Pan (2023), the extent to which targeted instruction is implemented often depends on the leadership of school administrators.

In the Athi River Sub-county, the administration of public secondary schools has adopted participatory leadership as a strategy, even though it has not gained widespread acceptance (Kibue, 2013). This leadership approach involves all team members taking responsibility for identifying key objectives and developing plans to achieve them, with the leader serving as a facilitator rather than a dictator. Effective participatory leadership maximizes the talents and potential of team members, particularly when making decisions to enhance students' academic performance. However, Kibue (2013) does not delve into the transactional concepts that school administrators must follow to improve the student's academic performance.

2.1.5 Communication of School Goals and Students' Academic Performance

Leithwood and Jantzi (2008) present a comprehensive model of transformational leadership in education, which encompasses four key criteria. At the core of this model is the concept of "providing direction." This includes the development of a school's vision, the establishment of specific goals, objectives, and priorities, as well as the maintenance of high standards. Leithwood and Jantzi emphasize that these actions are instrumental in motivating and guiding school staff. It underscores the significance of having a shared objective as the primary driver of accountability. Robinson and other researchers (2008) support this viewpoint, asserting that administrators can significantly enhance student learning through their vision and goals.

The realization of instructional leadership can be achieved through three interrelated approaches, as proposed by Bass and Avolio (2000). First, leaders increase awareness and understanding of the value and significance of specific goals and strategies. Second, they persuade team members to prioritize the collective needs of the group and the organization above personal self-interest. Third, leaders can achieve this by either reducing their own needs

on Maslow's scale or expanding their portfolio of needs and desires. Effective communication of school objectives and goals is instrumental in achieving these outcomes.

Instructional leadership, according to Fauzi et al. (2021), focuses around creating major changes in followers' attitudes, beliefs, and values so that they absorb the leader's vision resulting in above-average performance. This shift entails a change in focus from individual self-interest to the overall benefit of the organization. Central to this concept is the effective communication of the leader's vision to align the goals of leaders and followers, ultimately converging on a shared vision.

Leaders who embody instructional leadership appeal to morally upright ideals and exhibit four key elements: charisma or idealized influence, motivating inspiration, stimulating the mind, and providing individualized care. They lead by example, earning the admiration and respect of their followers. Within the educational context, transformational leaders are held in high regard by teachers who aspire to emulate their remarkable skills, dedication, and ethical approach. The principals on the right side of educational reform responsibilities have to take into account many features of the school environment, put down problems and challenges, state goals and objectives, use multiple approaches to reach the learners.

On the other hand, authoritarian leadership, as noted in the Athi River Sub-county may positively affect the organizational performance as well as negates the process of innovation. This is especially true when working with autocratic bosses because they most often than not underestimate their employees and do not consider them a valuable source of skills and knowledge in their organisation. Although a higher level of control within the workplace helps in decision making especially when dealing with emergent issues, the ideas from all the employees may not be effectively tapped.

Therefore, ideas pointed out to transformational leadership have a profound meaning for education, as it allows people to ideologically and emotionally unite, creating a vision of the school, and its immersion in the process of becoming the best, that will directly contribute to the academic performances of students.

2.1.6 Supervision of Teaching and Students' Academic Performance in Public Secondary Schools

Leadership of instruction is another important duty that mainly falls under the responsibilities of the school head. Refers to the processes that follow guidelines whereby educational and teaching activities as well as learning methods are the key determining factor to the environment created for learning by students. Dissimilar to other climate types, academic climate fosters increased productivity performance for the staff, boosts morale of teaching and non-teaching staff, and in extension raises total student results (Tus, 2020).

According to the educational research conducted by Oder & Eisenschmidt (2018), school atmosphere was found to have an influence on performance, thus strengthening the argument for effective education to be supported by a favorable environment. They said it would prove very difficult, if not almost mission impossible, to attain high standards of academic performance in concerted functioning, happy and peaceful school environment.

The administration of the instructional program places a strong emphasis on the coordination and management of teaching and curriculum. Hallinger & Hosseingholizadeh (2020) delineate three key leadership or management responsibilities within this domain: overseeing and assessing instruction, planning the curriculum, and monitoring students' academic progress. This component requires active participation by principals, assistant principals, and department directors (HODs) in promoting, overseeing, and assessing teaching and learning activities in their particular schools.

To fulfil these responsibilities effectively, principals must possess expertise in teaching and learning while demonstrating unwavering dedication to the school's growth (Irungu et al., 2019). However, the level of autonomy granted to subordinates also plays a crucial role in this process. Subordinates are expected to take initiative and exercise independent decision-making based on their knowledge and skills. This laissez-faire leadership style empowers school staff to make decisions and complete tasks independently, assuming they are well-informed and committed to their objectives (Kimacia, 2012).

Strong education leadership is characterized by adaptability and the capacity to switch between different practices when the situation demands it (Kibue, 2013). Principals often delegate decision-making authority to their subordinates, granting them freedom in task execution and decision-making. This approach encourages employees to take ownership of their responsibilities and make decisions autonomously. While laissez-faire leadership can be effective, its success hinges on the dedication and competence of those to whom leadership is delegated (Nzuve, 2011). However, Nzuve (2011) does not elaborate on the potential consequences if subordinates are not fully committed to their roles and the desired goals are not achieved.

Sushila and Bakhda (2004) emphasize the pivotal role of the principal in overseeing academic progress, underscoring the importance of clearly communicating aims and objectives to both instructors and students. Classroom teaching must align with organizational goals, and teachers should link their course objectives to broader institutional objectives. The principal's supervisory responsibilities include providing instructional assistance to teachers and evaluating classroom instruction through formal and informal visits (Robinson et al., 2008). Principals are expected to collaborate with teaching staff to implement the educational program effectively, which includes curriculum coordination, supervision and evaluation of teaching, and monitoring student progress (Ozdemir, 2019). Principals must also set

assignments for students, develop school regulations and procedures to safeguard teaching time, and ensure curriculum alignment with state and district standards, assessments, and curricula. Furthermore, they monitor student development, utilizing test results to set goals, analyze the curriculum, evaluate teachers, and track progress toward school objectives.

As a result of the study, it was found that the following instructional leadership activities are carried out by principals for the promotion of quality education: • Unplanned Classroom Visits • Organizing Conferences for Teachers • Assessing the Teaching/Learning Process in their respective Schools (Ozdemir, 2019). These are especially vital in determining the overall tasks for students, setting school's policies, standards and procedures to safeguard teaching time, and incorporating school objectives to state and district requirements.

However, problems of inefficiency may occur within the school context especially if school-based teacher administration and monitoring is inadequate, hence lowers school performance (Owan et al. , 2023). Another recommendation is that proper training and proper coaching and development for administrators and supervisors must be provided to ensure that they have all the necessary skills and competencies in order to enable them to meet instructional leadership roles and responsibilities to the best of their abilities. Unfortunately, as proclaimed by Hallinger (2018), the pedagogy-centered leading practices benefiting students' performance are not very prominent on the Tanzanian schools' agenda, as the school administrators may not invest their time into these procedures as daily tasks.

2.2 Theoretical Framework

This research was guided by the contingency theory of leadership and the Academic Performance Theory.

2.2.1 Contingency Theory of Leadership (Fiedler 1967)

Fiedler's (1967) contingency theory of leadership effectiveness provided the theoretical underpinning for this study. Furthermore, Fiedler's theory has been utilized to evaluate the methods and performance of school principals in Kenya (Okumbe, 2001) and other nations (Hoy & Miskel, 1982). Fiedler's theory synthesizes aspects of both trait and situational theories, rendering it a suitable selection. A leader is defined as the individual accountable for guiding and arranging task-related activities or executing these responsibilities in the leader's absence.

According to Fiedler (1967), a leader's performance is influenced by both favourable aspects of the situation and the leader's traits. The underlying principles that guide a leader's leadership style significantly influence their effectiveness. The leader's choice of optimal practices is contingent on the relationship between internal and external forces within the organization. Fiedler posited two primary leadership styles: task-oriented leadership and relationship-oriented leadership, based on leader characteristics. Task-oriented leaders prioritize ensuring that employees can handle emergencies and challenging situations while maintaining high performance.

On the other hand, relationship-focused (democratic) leaders aim to build strong bonds with their team members and seek their approval, emphasizing robust interpersonal relationships within the organization. Fiedler identified three situational factors that influence a leader's effectiveness: leader-member relations, task structure, and positional power. The strength of the leader's relationship with team members significantly influences their ability to achieve organizational objectives. Task structure relates to the clarity of job requirements, outlining what needs to be done. Positional power is determined by the leader's legitimate authority and coercive power within the organization, influencing their effectiveness.

Successful leadership, according to Fiedler, occurs when a leader possesses clear scope, substantial positional authority, and positive leader-follower relationships. Leadership effectiveness is also determined by the leader's ability to use their authority judiciously and charismatically, particularly in areas such as hiring, firing, discipline, promotions, and salary increases. Therefore, an ideal environment includes well-defined roles, high positional authority, and favourable leader-follower relationships, as per Fiedler's theory. Effective leaders must understand the situational characteristics of their school community and adapt their leadership style accordingly to achieve academic success.

Consequently, leadership effectiveness is contingent on both the leader and the organization. Given the government's adoption of appropriate regulations for school administration and quality assurance, the effectiveness of secondary school administrators in Kenya will significantly influence their students' academic success. It is worth noting that Fiedler's theory is often applied by executives to ensure the performance of business objectives, further highlighting its applicability in educational leadership contexts.

This theory combines elements of both trait and situational theories, asserting that effective leadership depends on a leader's ability to influence others based on teamwork, the surrounding circumstances, and the alignment of the leader's perception with that of the team (Sybil, 2000). It emphasizes the methods used to exercise effective leadership, achieve organizational goals, and ultimately attain those goals. In the context of this research, goal attainment is defined as superior academic performance assessed through secondary school KCSE examinations administered by KNEC. The reason why this theory has been chosen is due to its applicability to the fundamental areas like, instructional leadership, leadership output, goals to organizational performance or efficiency. The Contingency Theory of Leadership supports the idea that the effectiveness of a principal's instructional leadership depends on contextual

factors such as teacher experience, school environment, and available resources. This explains why different leadership approaches may be required to improve academic performance.

2.2.2 The Academic Performance Theory (Walberg 2012)

This study will also be influenced by another conception of academic performance postulated by Walberg (2012). This theory posits that the context of learning modifies learning outcomes via the psychological characteristics of learners and their learning environments (Huang, et al., 2020). Walberg (2012) categorized attitudes as nine aspects which affect learners' performance. Such facets include; students' capability or past scores, incentives, and age/developmental level, quantity and quality of teaching, classroom condition and learning environment, parents' involvement, home context, peer groups, other media encountered within the outside of class. In the context of the existing debate, Tindle et al. (2021) outlined the role of the psychosocial characteristics of learning environments within classrooms in explaining the performance of learners.

If the educational productivity and efficiency is to be the focus then it is an absolute necessity for reformist to convey attention to the objectives of the educational process as well as the success goals (Bakia et al., 2012). S elseif this theory is valid because it defines educational process goals as having to do with students' views of the social world, imagination, concept self, hobbies and interest in subjects (Karari et al. , 2022). That is, students' academic outcomes and aspirations would be lower If these emotions and processes are excluded from academic success in favor of mainstream goals and outcomes specified by most assessment instruments.

One of these inputs is teaching quality which, as stated by Walberg, determines the academic performance levels of learners. Leadership by the principals to ensure instructional development and to support teachers will improve the quality of teaching. This includes; offering the teachers right training opportunities that enhance their professionalism, keep

changing, and adopt best practice teaching approaches. A rise in teaching quality, as stated by Walberg, is potentially capable of enhancing students' performance in classes. Teachers and other educators such as principals take part in most learning processes in the educational system especially in the provision of a good learning environment as postulated by Walberg. An affirmative response to the question would entail principals who encourage collegiality because they provide a setting in which teachers can exchange information on exemplary performances, discuss how to approach instruction, and embark on endeavours to enhance students' performances in school. This formula improves both the teaching-learning process and the climate/classroom atmosphere by providing the teacher with an assistant needed for instruction and giving the students a companion who will help them stay on task to increase performance, key components of Walberg's model.

In accordance with these findings, it can be proposed that Walberg's theory which puts thus focuses on the necessity for high levels of clarity of goals and expectations in educational environments. Minh Ha On the part of the principals who communicate school goals, it means that they give direction to the teachers and students which is essential for motivation and common purpose. This means that when principals effectively communicate school goals, they provide guidance and clarity to both teachers and students.

Walberg positively affects academic performance. From the above discussion based on Walberg's model, supervision of teaching entails offering feedback, encouragement, and directions to the tutors embracing best practice. Another critical purpose of instructional supervision is to maintain high and uniform teaching standards within classrooms, therefore, principals that undertake this process effectively do so to assure this factor. This supervision acts to pinpoint areas of growth in teachers, offers chances for professional development that speaks to the demands of the teacher, and improves the learning of the students. The Academic Performance Theory asserts that student achievement is influenced by multiple factors,

including instructional leadership. The study variables—promotion of professional development, collaborative practices, communication of school goals, and supervision of teaching—are aligned with these theories, as they emphasize the role of leadership and instructional quality in shaping student learning outcomes.

2.3 The Conceptual Framework of the study

This study will focus on instructional leadership, encompassing the enhancement of teachers' professional development, the promotion of collaborative practices, the effective communication of school objectives, and the comprehensive supervision of teaching by principals. The elements are viewed as independent variables, whilst the academic performance of secondary school students is deemed the dependent variable.



Mount Kenya University

As depicted in Figure 1, the intervening factors will encompass government policies and the influence of stakeholders.

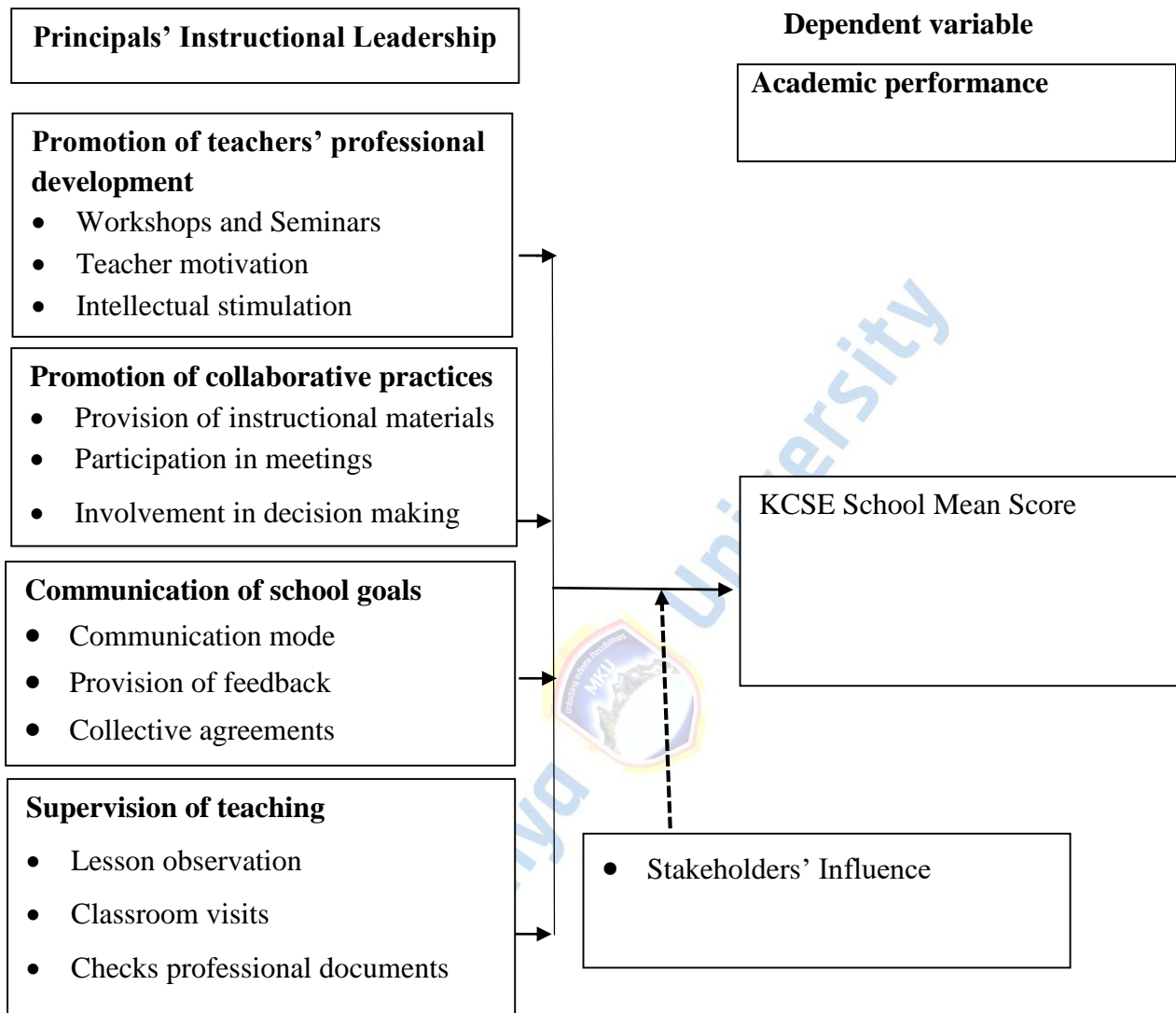


Figure 2.1: The conceptual structure of the present research

Source: Researcher (2023)

2.4 Research Gaps

A comprehensive review of existing research has uncovered several notable research gaps. For instance, in the area of promoting teachers' professional development, a study by Ngina and Kalai (2016) did not elucidate how the quality of school leadership, particularly the transformative leadership of principals, manifests in creating an academic environment that

benefits both staff and students. Furthermore, this research failed to articulate the specific attributes of transformative principals that significantly influence students' academic performance.

Kibue's (2013) study did not adequately address the essential components of the transactional responsibilities that principals must undertake to promote collaborative practices aimed at enhancing student performance. In the area of principals' communication of school goals, Mbutia analysis done in 2020 does not indicate how certain attributes of the autocratic principal lead to raised levels of academic performance among students. Likewise, a critique to a study on laissez-faire leadership styles by Oyugi and Gogo (2019) did not consider the cost implications of managing school administration when employees to whom leadership is delegated are not fully committed in their job and when minimal or unsatisfactory outcomes are realized.

However, as to the implementation of teaching supervision, Nzuve (2011) study failed to establish in detail the aspect of teaching supervision where characteristics of the principals affected the student performance positively. These research gaps open up immense prospects for this study to provide new ideas to this area of research and systematically respond to these issues.

2.5 Summary of Literature Review

The empirical literature review demonstrates that the research hypothesis, positing a relationship between academic achievement and effective instructional leadership, is partially validated. The research assessed the relationship between instructional leadership and student performance by analyzing transformational, transactional, autocratic, and laissez-faire leadership styles.

The study's findings reveal that principal leadership strongly influences student achievement on standardized and national examinations. Nevertheless, the issue can be analyzed by investigating the deficiencies in empirical research concerning the influence of facilitating teachers' professional development, promoting collaborative practices, communicating school goals and objectives, and the principal's supervision of instruction on student performance.

This underscores the importance of pursuing subsequent studies to unravel or describe further the various and combined interactions of these instructional leadership components to their overall relationships with students' performances in academic settings. To this end, future research should add further details and understanding of how these instructional leadership practices can be optimised to improve students' educational performances..



Mount Kenya University

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.0 Introduction

This chapter outlines the study's context, criteria for sample selection, sampling methods, research tools, pilot studies, data gathering procedures, data processing techniques, and crucially, the ethical considerations involved.

3.1 Research Methodology

The study utilised both qualitative and quantitative research methodologies to better comprehension of the investigated topic. This was deemed appropriate given the methodology aims to gather and analyse both qualitative and quantitative data by utilising the efficiencies of both methodologies. Creswell (2014) characterised the quantitative research methodology as a way for analysing a substantial number of respondents through questionnaires to address specific research enquiries, resulting in numerical data. This study utilised questionnaires, and qualitative data were collected through participants' opinions mostly via scheduled interviews, which provided textual data.

3.2 Research Design

This study employed a single-phase concurrent triangulation design, facilitating the simultaneous gathering of quantitative and qualitative data, while assuring equal significance for both data types. The strategy enabled the cross-verification of findings, thus improving the study's dependability. Moreover, convenience sampling was employed to pick individuals according to their accessibility and willingness to engage. This method guaranteed practical viability in participant selection while facilitating a varied array of opinions. The gathered data were subsequently organised, collated, and shown through graphs and charts to illustrate patterns and variations. Moreover, narratives and case descriptions were employed to furnish comprehensive insights into certain cases.

3.3 Location of Study

This research was a case study of Machakos County, more specifically the Athi River Sub-county. It lies to the west, Athi River borders Nairobi County, Muthwani-Lukenya, and Kyumbi to the east side while in the southeastern sector it touches with Machakos City Council. Based on the scores of academic performance for the Athi River Sub-county, Athi River Sub-County had KCSE mean scores of 2.18 in 2014, 2.32 in 2015, 2.47 in 2016, 2.07 in 2017, and 3.40 in 2018. The results indicated a decline in academic performance in public secondary schools, as evidenced by the study conducted by the Ministry of Education referenced in the introduction of this research. Numerous empirical research indicate that this area continues to face challenges in improving the academic performance of pupils in public secondary schools.

According to the data obtained from the Kenya Certificate of Secondary Education (KCSE) results of the candidate, the academic performance in Athi River Sub-county has fluctuated recently. For instance, an examination of the most recent statistics up to 2022 reveals that the AP in the KCSE exam had a mixed impact, encompassing both advantages and disadvantages. The KCSE performance patterns in 2022 for the Athi River Sub-county indicated a drop of 0.09, suggesting a potential rising trend, in contrast to previous years, which exhibited an overall fall. However, the subsequent years in their academic performance were characterized by volatility and unsatisfactory results. The selection of the Athi River Sub-county as the study area was influenced by the emerging difficulties identified by Button Down. This was attributable to developing challenges in improving the quality of education in government secondary schools in this region.

3.4 Target Population

The study's target population, as outlined in section 3.1, consisted of 247 respondents, comprising 23 principals from all public schools in Athi River Sub County and 224 teachers.

Table 3.1: Target Population of the Study

Categories	Target Population
Principals	23
Teachers	224
Total	247

Source: Athi River Sub-County Education Office (2023)

3.5 Sampling Procedures and Sample Size

To obtain a sufficient sample size for principals and teachers, the researcher used Yamane's Formula as follows:

$$N_0 = \frac{N}{1 + N(e^2)}$$

Where, N_0 = Recommended sample size at 95% confidence level

N = Target Population

e = Confidence level of 5% (decimal equivalent is 0.05)

A target sample size of 96 responders was determined utilizing the previously indicated formula. To mitigate bias in the research, the population was classified into two groups according to the number of zones within Athi River Sub-county. The sampling method focused on schools with inadequate performance in KCSE examinations during the past five years, selecting six principals from each zone.

Purposive sampling, as outlined by Creswell (2014), aimed to ensure a comprehensive understanding of the variability in the phenomena of interest within the environment and to evaluate the evolution of shifting attitudes about it. Instructors from each zone were chosen

by simple random sampling to eliminate bias and favoritism. This sampling technique yielded a sample size of 9 principals and 87 instructors, as depicted in Table 3.2.

Table 3.2: Sampling Grid

Categories	Target Population	Procedure	Sample size
Principals	23	23/247*96	9
Teachers	224	224/247*96	87
Total	247		96

Source: Researcher (2022)

3.6 Research Instruments

The tools utilized to collect data from participants consisted of questionnaires and interview guides tailored for both teachers and administrators.

3.6.1 Questionnaire for Teachers

Educators provided quantitative data via a questionnaire containing closed-ended questions. The questionnaire of two sections: the first collected demographic data from participants, and the second featured Likert-scale closed-ended questions relevant to the study aims. Participants were guaranteed confidentiality during the survey procedure. Section A of the questionnaire collected general demographic data, whereas Section B assessed the influence of teacher professional development initiatives on students' academic performance in public secondary schools. Section C examined the influence of principals' encouragement of collaborative practices on students' academic performance, Section D assessed the impact of principals' articulation of school objectives on students' academic performance, and Section E analyzed the effect of principals' oversight of teaching on students' academic performance.

3.6.2 Questionnaire for Principals

A series of inquiries was utilized to collect information from school principals. The questionnaire enabled direct contacts (Kothari, 2004), exploring questions regarding principals' instructional leadership and its impact on students' academic performance in public secondary schools. Furthermore, interviews enabled the researcher to corroborate the data obtained from the questionnaire.

3.6.3 Document Analysis

The method involved collecting information by reviewing relevant school papers. Test analysis files, progress information, instructional plans, work schedules, registrations, records of work performed, and attendance records were among them. Work was done to secure principal positions with instructional leadership at the chosen schools. For this, a document analysis template was utilized.

3.7 Piloting of Research Instruments

The pilot study, comprising 10% of the research population (10% of 96), entailed testing the questionnaire with 10 participants from diverse public secondary schools in Kathiani Sub-County. During the pilot phase, the questionnaire's items were evaluated for relevance, clarity, applicability, and linguistic precision. The research tools were pre-tested utilizing comments from the pilot study to verify their dependability.

The idea behind this procedure was to identify possible difficulties or issues that might be encountered by the respondents, such as the surveys and the organization of the time needed for responding to these surveys. In addition, the interview schedules were pilot-tested to determine the clarity of questions and the openness of responses to observe areas in need of improvement by the researcher. However, with reference to participants mentioned in the pilot research, the writers had failed to involve the same in the actual process of data collection.

3.7.1 Validity of the Research Instruments

Interview data was gathered in an overlapping manner to assess the credibility of the survey questionnaire. It was also used to increase the internal validity of the instruments used in this research. For this study, the interview data were transcribed as soon as possible for analysis and resent to the participants. Peer review was also used to verify the results that were obtained when using the Peer debriefing technique.

This included the scrutiny of the developed questionnaire by professionals in the field of study under investigation and the guidelines for carrying out the interview. These inside-school leaders analysed techniques and interpretations and scrutinised and questioned all techniques as well as interpretations accompanied by the school administration, leadership, and management experts specialised in such fields. The instruments were use in relation to their comments, thoughts, and views to ensure that the questions in the sets were focused on achieving the research's objectives and the variables.

3.7.2 Reliability of the Research Instruments

To improve the reliability of the instruments employed, the investigator examined the validity results to ascertain dependability. Additional effort was devoted to participants' comprehension of the topics to be addressed in the interviews. In order to establish validity for the test items, use was made of the test-retest approach. In this case, one end of the partition was presented with the same questions as the ones given to the other end of the partition.

To assess the internal consistency of the test, that is the inter-score reliability index, the Cronbach Alpha Method was used. This chronological alpha coefficient is typically higher, nearer to 1, when a scale test items have higher inter item reliability. Cronbach Alpha Coefficient value, $r \geq 0$ As defined by the researchers, the Cronbach alpha coefficient value of 75 in the study was seen to have moderate to high internal consistency and was therefore

deemed satisfactory. Similarly, to measure high internal reliability, Cronbach Alpha was employed ranging from zero to one (Kothari, 2005).

3.7.3 Credibility of Instruments

The instruments' credibility was established by triangulating data from several analyses completed by respondents, as only participants/readers could objectively assess the credibility of the outcomes. This method boosted the research's credibility by proving the reliability of its findings and stressing the work's quality above quantity (Kothari 2005). Creswell (2014) asserted that the quality of the material is more important than the volume of data acquired in demonstrating the verifiability of a study's results.

3.7.4 Dependability of Instruments

Each qualitative data collection technique was thoroughly described to confirm the accuracy of the study findings. As per Kothari (2005), dependability improved the durability and reproducibility of study results, and this was evident in the execution, analysis, and presentation of the research. Every method employed in the study was described in sufficient detail for an outside researcher to utilize it to conduct a similar investigation and obtain comparable results. This level of detail also made it possible for researchers to evaluate the efficacy of the methods.

3.8 Data Collection Procedures

The researcher secured a reference letter from the Faculty of Postgraduate Education at Mount Kenya University, in addition to an endorsed statement and a Research Permit from the National Commission of Science, Technology, and Innovation (NACOSTI). Authorization letters were acquired from the County Commissioner, the County Director of Education in Machakos, and the Director of Education for Athi River Sub-county. Meetings with participants were organized to distribute questionnaires and conduct interviews, allowing the researcher to collect the necessary data for the study. A research assistant, after completing a week-long training on the questionnaire components, enabled the distribution of surveys to

collect quantitative data. Survey responses were collected and securely stored for subsequent data processing. Qualitative data were gathered from participants using interviews and concurrent observation techniques.

3.9 Data Analysis Procedures

The data was analyzed using SPSS (Statistical Package for the Social Sciences, version 23.00) software. Before analysis, the acquired data was purified to identify and rectify any flaws or inconsistencies in the dataset following data coding and entry. This phase was crucial for ensuring the accuracy of the data and results. The data analysis began by detecting the similarities between qualitative and quantitative data. Relevant material was divided into phrases or sentences, each conveying a unique thought. Responses to closed-ended questions were methodically coded and classified.

Frequency counts and percentages of replies were calculated to offer a concise summary of the participants and to highlight the predominant trends in the analyzed subjects. Qualitative data underwent rigorous processing to achieve the research objectives. Following the descriptive study, quantitative data were presented through charts and tables, including frequencies, percentages, averages, and standard deviations. Inferential analysis was performed using Statistical Software for the Social Sciences (SPSS 23). Table 3.3 outlines the characteristics of data analysis methodologies.

Table 3.3: Data Analysis Procedures

Research Objective	Independent Variable	Dependent Variable	Quantitative Data Analysis	Qualitative Analysis
To determine the influence of promoting teachers' professional development on students' academic performance	<ul style="list-style-type: none"> Promotion of teachers' professional development 	<ul style="list-style-type: none"> Academic Performance 	<ul style="list-style-type: none"> Descriptive statistics (frequency, percentage, mean, standard deviation) 	<ul style="list-style-type: none"> Content analysis
To examine how promoting collaborative practices influences students' academic performance	<ul style="list-style-type: none"> Principals' promotion of collaborative practices 	<ul style="list-style-type: none"> Academic Performance 	<ul style="list-style-type: none"> Descriptive statistics (frequency, percentage, mean, standard deviation) 	<ul style="list-style-type: none"> Content analysis
To establish the influence of communicating school goals on students' academic performance	<ul style="list-style-type: none"> Principals' communication of school goals 	<ul style="list-style-type: none"> Academic Performance 	<ul style="list-style-type: none"> Descriptive statistics (frequency, percentage, mean, standard deviation) T-tests 	<ul style="list-style-type: none"> Content analysis
To evaluate the influence of supervision of teaching on students' academic performance	<ul style="list-style-type: none"> Supervision of teaching 	<ul style="list-style-type: none"> Academic Performance 	<ul style="list-style-type: none"> Descriptive statistics (frequency, percentage, mean, standard deviation) Pearson product-moment correlation 	<ul style="list-style-type: none"> Content analysis

3.10 Ethical Considerations

The scope of the study and participant expectations were explained in terms of ethics. In addition to the research permit, each principal of the schools to be visited received a letter

outlining the goal of the study and guaranteeing respondents of their privacy during the research procedure. Additionally, participants were instructed to maintain confidentiality regarding their identities and the schools they are associated with. The research tools were administered only after participants provided informed consent.

3.10.1 Confidentiality and Privacy

Respondents were guaranteed by the investigator that their private details would not be shared with anybody else. The respondent was informed that the provided details would only be utilized for the indicated intentions and would not be disclosed to anyone else. The researcher explained to the respondents how they were selected for research and why their participation was necessary.

3.10.2 Anonymity

In this situation, the researcher comforted the respondent and assured them that their identity would not be revealed. Furthermore, no written or other forms of contact included any identifying information about the individual or organization.

3.10.3 Informed Consent

The investigator explained the study's purpose and aims to the responders. To guarantee that the participants were willing to participate, the investigator outlined the procedure of data collecting.

3.10.4 Access to the site

The researcher obtained written consent from the Department of Educational Management and Curriculum Studies at Mount Kenya University and the National Commission for Science, Technology, and Innovation (NACOSTI). Approval was secured from the County Director of Education and the Machakos County Commissioner to visit the specified schools for data collection. Data collection was subsequently conducted at the chosen schools. Furthermore,

authorization was requested and approved by the sub-county director overseeing schools in the pertinent sub-county. The selected public secondary schools were approached to convey the study's purpose and solicit their participation. A meeting defined the research aims and objectives, and permission for data collection was sought from the school principals.

3.10.5 Mien and decorum

Ethical considerations were observed by the researcher, and he was professional and courteous in his handling of the study participants. He introduced himself and clearly outlined the goal of the study and expectancies from the participants. Formal consent was sought and attained to ensure respondents were knowledgeable on their rights and privacy. Prolific regard to culture was caught, and the researcher ensured that he dressed appropriately and also behaved appropriately when interacting with participants of the study. He also provided structures for constant communication and involvement of principals and stakeholders in the research occasions.

3.10.6 Storage of Data Collected

The unprocessed information obtained was saved in a space where it could be easily accessed in future. Once the analyses were completed the archives of the hard copy were burned on CDs and flash drives while soft copies were filed.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.0 Introduction

This chapter delineates the findings and comments of a study examining the influence of instructional leadership styles utilized by principals on academic performance in public secondary schools within Athi River Sub-County, Machakos County, Kenya. The research was directed by specific objectives: to evaluate the effect of improving teachers' professional development on students' academic performance, to examine the influence of promoting collaborative practices on students' academic performance, to ascertain the impact of defining school goals on students' academic performance, and to analyze the effect of teaching supervision on students' academic performance in public secondary schools in Athi River Sub-County.

The study's findings were conveyed via figures, text, and tables, consistent with the objectives and assumptions. Thematic analysis was conducted on qualitative data, while quantitative data were analyzed using percentages, means, Pearson product-moment correlation coefficient, and p-value approaches. Six segments were derived from the findings detailed in Chapter Four. Section 1 included essential and demographic data. Section two focused on the subject of professional development for educators. Section 3 examined collaborative methodologies. Section Four examined the dissemination of school objectives, Section Five concentrated on classroom oversight, and Section Six presented findings on the mean scores of KCSE performance.

Quantitative data were analyzed using descriptive statistics (means and percentages) and inferential statistics, employing Pearson's Product-Moment Correlation Coefficient, with a

significance threshold established at 0.05. The investigation employed SPSS Version 23, with results presented as bar graphs and frequency distribution tables.

4.1 Instruments Return Rates

The instrument return rate is the percentage of research instruments returned after being distributed to respondents. Participants in this study were administered questionnaires and interview techniques. The response rate for questionnaires distributed to principals was 88.88%, whilst for teachers it was 80.46% (see to Table 4.1).

Table 4.1: Questionnaires Return Rates

Respondents	Numbers of questionnaires Administrated	of The number of questionnaires returned	Return rate %
Principals	9	8	88.88%
Teachers	87	70	80.46%

Source: Field Data (2023)

The research utilized multiple tactics to optimize the response rate of the distributed instruments; yet, certain respondents chose not to participate. The explanations provided for their absence during data collection included illness, meetings, and familial obligations. Nevertheless, the return rate fell within the targeted range of 70-100%, as defined by Mugenda & Mugenda (2003), signifying sufficient levels of engagement.

4.2 Social Demographic Characteristics of the Respondents

The inclusion of social demographic characteristics about the principals and teachers in the target population held substantial significance within this study. The researcher recognized the value of this data in providing insights into the demographic profiles of principals and teachers in the sub-county. These findings were critical in understanding how respondents' social demographic factors interacted with their influence on their academic performance. Gender,

age, academic and professional degrees, teaching experience, and professional work experience were all examined in this study

4.2.1 Teachers' Demographic Characteristics

The teacher's role in the teaching and learning process, particularly at the secondary level and across several educational tiers, is profoundly crucial. Educators are responsible for critical tasks such as lesson planning, organizing instructional materials, employing diverse teaching methods, assessing student understanding, and managing classroom time effectively (Bakhda, 2004). Thus, achieving positive student learning outcomes in the KCSE examinations largely relies on the active involvement of educators. This research examines the attributes of public secondary school teachers in Athi River Sub-County, Machakos District. The evaluated teacher attributes include gender, age, educational qualifications, teaching experience, and tenure at the current school.

4.2.2 Principals and Teachers' Gender Distribution

This study was essential as it provided insights into the gender representation of educators and administrators in public secondary schools in the Athi River Sub-county. Table 4.2 presents the facts through frequencies and percentages.

Table 4.2: Principals and Teachers' Gender Distribution

Gender	Principals	Percentages	Teachers	Percentages
Male	5	62.50%	37	52.86%
Female	3	37.50%	33	47.14%
Total	8	100%	70	100%

Source: Field Data (2023)

According to Table 4.2, there were 2 more male principals in the Athi River sub-county, or 62.50%, than there were female principals, or 37.50%. Likewise, in public secondary schools in the Athi River sub-county, there were more male teachers than female teachers. In particular, 33 (47.14%) and 37 (52.86%) of the teaching staff were women. This suggests that there are

more male educators in the area. The gender disparity may reflect larger systemic inequalities in hiring, promotion, and retention of female teachers. Addressing the imbalance could improve gender equity in employment opportunities and enhance diversity in school leadership. This observation satisfies the necessary threshold for leadership positions in Kenyan government offices by adhering to the third gender criterion. Building on findings by Garba (2010), who found that male educators might have a propensity for assertiveness and decisive decision-making, which could influence their career goals and employment outcomes.

4.2.3 Distribution of Teachers and Principals by Age

The researcher sought to analyze the age distribution of instructors at public secondary schools in the Athi River sub-county. This study aimed to ascertain whether disparities in responses regarding principals' management strategies and students' academic achievement existed based on the respondents' age.

Table 4.3: Distribution of Principals and Teachers by Age

Age bracket	Principal frequency	Percentage	Teacher frequency	Percentage
Below 24 years	0	0.00%	1	1.43%
25-30 years	0	0.00%	6	8.57%
31-35 years	1	12.50%	12	17.14%
36-40 years	1	12.50%	12	17.14%
41-45 years	1	12.50%	16	22.86%
46-50 years	2	25.00%	14	20.00%
Above 50 years	3	37.50%	9	12.86%

Source: Field Data (2023)

The results presented in Table 4.3 demonstrate that the percentage of principals rises with advancing age. Specifically, 5 (62.50%) of the principals are aged over 45 years. This trend suggests that taking on the role of a principal in a public secondary school within the Athi River sub-county typically requires considerable teaching experience and, consequently, the expertise needed to effectively manage a school. This finding aligns with Boxall's (2006) research, which suggests that age influences the precision and vigor with which tasks are performed (Kasivu, 2015).

Similarly, the age of teachers emerged as a factor potentially influencing their performance in the current study. The findings indicated a varied distribution of teachers' ages in secondary schools within the sub-county. Specifically, the study revealed that 1 (1.43%) teacher was Below the age of 24, 6 (8.57%) were from 25 and 30 years old, 12 (17.14%) were between 31 and 35 years old, 12 (17.14%) were within 36 and 40 years old, and 16 (22.86%) were between 41 and 45 years old, demonstrating an upward trend. In contrast, 14 (20%) were between the ages of 46 and 50, and 9 (12.86%) aged 51 and older, indicating a declining tendency. With 16 (22.86%) teachers in the 41-45 age range - the largest group - it appears that teaching at Machakos County's public secondary schools demands maturity and experience. Regarding Boxall (2006), changing age, life experiences, and professional development can influence perceptions, thinking patterns, and reasoning processes. This underscores the influence of age on teachers' performance, hinting that other factors beyond age may contribute to variations in students' academic performances.

4.2.4 Distribution of Principals and Teachers by Professional Academic Qualifications

Academic education in this context refers to the highest level of education attained by a teacher, such as a degree in Education, Bachelor of Education, Master of Education, and so on. According to DuFour (2002), education enhances an individual's capacity, application, and conceptualization of skills. Taking this into account, this study aimed to ascertain the

educational qualifications of teachers in public secondary schools in the Athi River sub-county, Kenya.

Table 4.4: Principals and Teachers by Professional Academic Qualifications

Academic qualification	Principals frequency	Percentages	Teachers Frequency	Percentages
PhD	0	0%	0	0%
Master's Degree	5	62.5%	21	30%
Bachelor's degree	3	37.5%	40	57.14%
Diploma in Education	0	0%	9	12.86%
Total	8	100%	70	100%

Source: Field Data (2023)

Table 4.4 indicates that five of the principals (62.5%) have a Master's degree while three(37.5%) have a bachelor's degree. The study established that the principals with bachelor's degrees are going for master's degrees. This indicates adherence to the Teachers' Service Commission of Kenya's (TSC) stipulated requirement of a minimum degree qualification for school leadership. Notably, the research revealed a trend among principals with bachelor's degrees pursuing master's degrees, showcasing alignment with the TSC's Teacher Professional Development Policy.

The majority of teachers, as evidenced by 40 (57.14%) of the participants in this study, hold a Bachelor of Education (B.Ed.) degree. Additionally, nine (12.86%) teachers possess a degree in education, while 21 (30%) have obtained a master's degree (M.Ed.) in education. It was observed that all respondents met the necessary qualifications to teach in public secondary schools, as mandated by the faculty committee, thereby ensuring a reliable assessment of principals' instructional management practices in each school. This underscores the advantage of having teachers with strong academic and professional backgrounds, placing them in a favorable position to enhance students' academic performance.

Furthermore, the majority of teachers possess the fundamental qualification of a bachelor's degree, as stipulated by the Teacher Service Commission for Secondary School Educators. Therefore, it can be inferred that teachers' academic qualifications are unlikely to be the primary factor contributing to any decline in KCSE performance, as all public secondary schools in Athi River sub-county adhere to the required standards.

4.2.5 Distribution of principals and teachers by Teaching and leadership experiences

The researcher also examined the teaching experiences of teachers, which emerged as a crucial factor in this study. The findings regarding this aspect are summarized in Table 4.5.

Table 4.5: Principals and Teachers by Teaching and Leadership Experiences

Academic qualification	Principal' teaching experience frequency	Percent	Principal leadership experience frequency	Percent	Teachers' teaching experience Frequency	Percent
Below year	1 0	0.00%	0	0.00%	2	2.85%
2-5 years	0	0.00%	1	12.50%	8	11.43%
6-10 years	0	0.00%	4	50.00%	17	24.29%
11-15 years	2	25%	2	25.00%	19	27.14%
16-20 years	2	25%	1	12.50%	14	20%
Above years	20 4	50%	0	0.00%	10	14.29%
Total	8	100%	8	100%	70	100%

Source: Field Data (2023)

The study results, as presented in Table 4.5, highlighted that all principals possessed extensive teaching experience, with none having less than 10 years of teaching background. Specifically, 2 principals (25%) had 11 to 15 years of teaching experience, another 2 (25%) had 16 to 20 years, and 4 (50%) had over 20 years of teaching experience, indicating sufficient tenure in the education sector. Regarding their leadership experience as school principals in Athi River sub-

county, 1 (12.5%) had served for 0 to 5 years, 4 (50%) for 6 to 10 years, 2 (25%) for 11 to 15 years, and 1 (12.5%) for 16 to 20 years.

It is important to note that all principals included in the study have worked at the same school for more than 5 years during the study period, assuring their participation to and ownership of KCSE outcomes during the defined timeframe. Furthermore, a sizable majority of principals (87.5%) had more than six years of leadership experience, indicating the necessary degree of teaching experience for obtaining a principal post in public secondary schools in the Athi River subcounty.

Additionally, among the teachers, 19 (27.14%) had 11-15 years of teaching experience, followed by 17 (24.29%) with 6-10 years, 14 (20%) with 16-20 years, 10 (14.29%) with over 20 years, and 8 (11.43%) with 2-5 years. Only 2 (2.85%) teachers had less than a year of teaching experience. These findings indicate a high level of experience among teachers in the county, with 60 (85.71%) having over six years of teaching experience, which is considered adequate for acquiring the necessary skills, knowledge, and attitudes for effective teaching and performance in examinations.

4.2.6 Distribution of Teachers by Length of Stay in the same School

The study also tried to determine how long teachers had been teaching at the secondary school level. Teachers were asked to identify the length of their time at their current school. The data is summarized in Table 4.6. While years of teaching experience provide insights into an educator's overall professional growth, length of stay in the same school is crucial for understanding: Teachers who have served in the same school for an extended period understand the school's culture, policies, student needs, and challenges better than those who have frequently changed institutions. This stability can influence student performance, teacher motivation, and overall school effectiveness. Examining how long teachers stay in the same school helps assess retention and turnover rates within the sub-county. High turnover may

indicate workplace dissatisfaction, poor leadership, or lack of career growth opportunities, which could negatively impact academic performance.

Schools with long-serving teachers may have stronger professional networks, better collaboration, and well-established instructional strategies, leading to improved student outcomes. Conversely, frequent teacher transfers may disrupt continuity in curriculum delivery, mentorship programs, and student-teacher relationships. Experienced teachers who stay in the same school may influence policy implementation, mentorship of younger teachers, and the adoption of new teaching methodologies. Their leadership within subject departments and professional learning communities can contribute to school-wide academic improvement.

Table 4.6: Principals and Teachers by Length of Stay in the Same School

Number of years	Principals frequency	Percent	Teachers Frequency	Percent
1-5 years	5	62.5%	16	22.86%
6-10 years	3	37.7%	23	32.86%
11-15 years	0	0%	13	18.57%
16-20 years	0	0%	11	15.71%
Above 20 years	0	0%	7	10%
Total	8	100%	70	100%

Source: Field Data (2023)

Table 4.6 indicated that the majority of principals, 5 (62.5%), had held administrative positions in their respective schools for a duration of 1-5 years. Three principals (37.7%) possessed an administrative tenure of 6 to 10 years at the same institution.

In public secondary schools within the Athi River sub-county, the predominant number of teachers, 23 (32.86%), had tenure of 6-10 years. Furthermore, 16 instructors (22.86%)

possessed 1-5 years of teaching experience at the same institution, while 13 educators (18.57%) had 11-15 years of experience. Additionally, 11 instructors (15.71%) possessed 16-20 years of teaching experience at the same secondary school, and 7 teachers (10%) had been employed at the institution for over twenty years. The survey revealed that 54 teachers (77.14%) had over five years of tenure at their current school, enabling them to provide genuine and reliable insights regarding their administrators' instructional leadership approaches.

4.2.7 KCSE Results for Public Secondary Schools in Athi-River Sub-county.

The study aimed to analyze the KCSE results of the sub-county throughout many years. The objective was to compare and correlate instructional leadership practices with KCSE outcomes, assessing the extent to which principals' instructional leadership practices impacted the academic achievement of pupils in public secondary schools within the Athi River sub-county. The principals were required to deliver the performance outcomes of the Kenya Certificate of Secondary Education tests performed within the designated timeframe. The material in Table 4.7 is analyzed and explained in detail.

Table 4.7: Athi River Sub-County KCSE Performance (2017-2022) in Public Schools

Year	A.	A-	B+	B.	B-	C+	C.	C-	D+	D.	D-	E	Mean
2022	0	1	2	6	20	51	98	174	223	291	331	49	3.52
2021	0	3	1	7	18	44	80	176	176	262	241	61	3.61
2019	0	1	1	8	20	40	76	150	201	199	234	56	3.78
2018	0	0	1	9	18	24	44	74	112	188	176	33	3.40
2017	0	5	15	39	54	84	108	159	245	372	485	101	2.07
Average	0	2	4	14	26	49	81	147	191	262	293	60	3.28

Source: Field Data (2023)

Table 4. 7 affords a clear percentage conomic analysis of the public schools within Athi River Sub-County, Machakos County in the years, 2017 to 2022 in a bid to establish the KCSE performance. Analyzing the table based on the average score, it was Possible to note a tendency towards the decrease of the Mean Grade, which indicate the schools' ability to deliver a quality education.

In 2017, there are 'Positive Observation as some letters appeared in grades A,B,and C But still F and E grades dominate the column Though the average score registered was 2. 07 for that year. This initial mean has brought out the challenge environment that a learner within the sub-county gravitates into. Moving on into 2018, the proportional distribution of grades of the tested vehicles remained in the same tendency as before the latest variations of A and B grades but already with the ample representation of C, D, and E grades. For 2018 the mean score of the year also rise and reached the figure of 3 as it has been scanned above. 40. Overall, there was a general improvement in the performance of the district sub-county, but it continued to struggle academically in terms of challenges in improving on the district sub-county.

There was a marginal reduction in the rates of grades D and E as reported for the previous year and a concurrent trend in an improvement in grades. The mean score that year is richer and stands on the positive side. Thus, putting aside the issue of progress in the educational realm at all levels, the sub-county faced the challenge of maintaining high academic performance among students. By the year 2021, while pockets of improvement emerged in the form of increased A and A- grades, the distribution of lower grades like D and E remained prominent. The mean score for the year dropped to 3.61. The most recent data, reflecting the year 2022, conveyed a mixed narrative. The increased presence of A, A-, and B+ grades signalled improvement, yet the continued occurrence of D and E grades underscored ongoing challenges. There was however a decrease of the mean score by 0.09 compared to the previous year.

4.3 Promotion of Staff Professional Development and Academic Performance

The major purpose of this study was to assess the influence of improving teachers' professional development on student performance in public secondary schools in the Athi River sub-county of Kenya. Figure 4.1 displays principals' comments about the extent to which staff professional development influences student performance in various schools. Among the principals surveyed, 5 (62.5%) indicated that staff professional development greatly influences academic performance, while 2 (25%) agreed to a moderate extent, and one (12.50%) responded to a lesser extent.

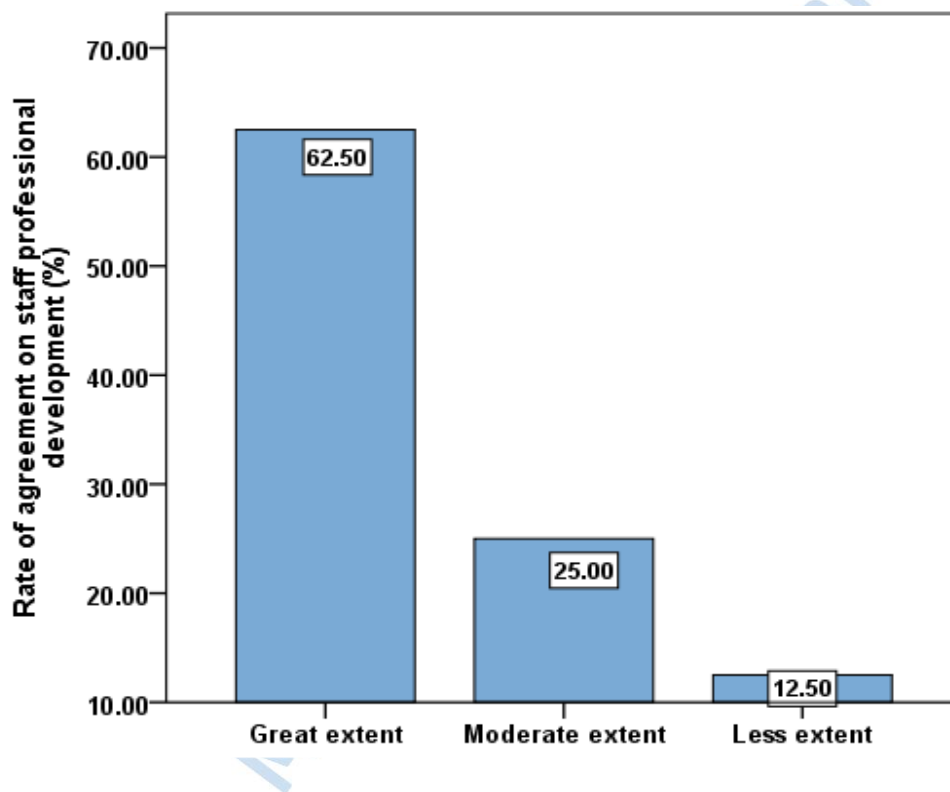


Figure 4.1: Extent to which staff professional development influences student performance

Source: Field Data (2023)

The research distributed comments to both principals and teachers, soliciting feedback on the influence of staff professional development on student performance, as shown in Tables 4.8,

4.9, and 4.10. Respondents were prompted to evaluate their ideas on the following scale: SA = Strongly Agree, A = Agree, D = Disagree, and SD = Strongly Disagree. Table 4.8 summarizes the outcomes for principals.

Table 4.8: Principals on Staff Professional Development and academic Performance

Statement	SD		D		A		SA	
	F	%	F	%	F	%	F	%
I prioritize the inclusion of funds dedicated to staff professional development within the school's annual budget allocation.	0	0	0	0	4	50	4	50
I actively motivate and support teachers in participating in courses to elevate their professional skills	0	0	0	0	2	25	6	75
I strategically organize workshops and internal training sessions, aligning them with teachers' instructional requirements.	0	0	0	0	2	25	6	75
I spearhead school-wide staff development initiatives aimed at enhancing classroom practices.	1	12.5	1	12.5	2	25	4	50
I foster a culture where Heads of Departments (HODs) regularly engage in meetings with teachers, sharing insights and knowledge gained from attended courses to enrich classroom teaching.	0	0	1	12.5	1	12.5	6	75

Source: Field Data (2023)

The first statement focused on whether principals allocate funds for staff professional development in the school's annual budget. Results revealed that 4 (50%) of principals strongly agreed, while the remaining 4 (50%) simply agreed; none of the principals expressed disagreement. Another query pertained to whether principals motivate teachers to partake in courses for their professional growth. A significant majority of 6 (75%) of principals strongly agreed, with 2 (25%) agreeing and none registering disagreement.

In terms of arranging workshops and internal training to cater to teachers' instructional requirements, 6 (75%) of principals strongly agreed, and another 2 (25%) concurred; none of

the principals disagreed. The outcomes presented in Table 4.19 illustrated that 4 of the principals (50%) held a strong agreement regarding the implementation of staff development programs to enhance classroom practices. Additionally, 2 (25%) agreed, 1 (12.5%) disagreed, and a corresponding 1 (12.5%) strongly disagreed with this statement. Regarding the involvement of Heads of Departments (HODs) in sharing course-derived insights with teachers to enhance classroom teaching, 6 (75%) of principals strongly agreed, while 1 (12.5%) agreed and another 1 (12.5%) disagreed with the notion.

The qualitative phase of the study delved into the experiences of educators concerning their involvement in Professional Development (PD) courses within the preceding six years. Out of the pool of respondents, a subset of teachers - three in total - indicated that they had not participated in any PD courses over the stipulated four-year timeframe. Four teachers had undertaken a solitary PD course, signifying a modest effort towards enhancing their pedagogical prowess. A more substantial group of 18 teachers had partaken in two PD courses, reflecting a greater commitment to continuous professional development. Seventeen teachers expressed further dedication by participating in three PD courses, while an even more substantial contingent of 28 teachers had immersed themselves in the deep waters of professional growth, attending four PD courses over the six years.

Moreover, when queried about the tangible influence of the Professional Development program on their instructional methods, teachers' responses echoed a broad spectrum of perceptions. Within this realm, it was discerned that a mere two teachers held the perspective of Strongly Disagree, seemingly indicating a lack of alignment between their experiences and the intended benefits of the PD initiatives. Ten teachers leaned towards disagreeing, showcasing a sentiment that suggested a modest disparity between the content of the PD program and its practical applicability. Conversely, a more significant cohort of 28 teachers signalled their acceptance of the program's efficacy through the Agree category, attesting to the congruence between the

provided PD content and their instructional enhancements. A remarkable 30 teachers, constituting a substantial majority, proclaimed their resolute alignment with the Professional Development program's transformative influence by endorsing the Strongly Agree stance. This profound endorsement indicated a profound synergy between the content of the PD interventions and the tangible improvements in their pedagogical methods.

Furthermore, the study extended its inquiry to encompass teachers' appraisals of students' academic performance within the context of their engagement with professional development opportunities. The teachers' subjective evaluations were categorized into distinct grades of improvement: six teachers conceded that they had observed little to no improvement in students' academic performance, offering a note of caution regarding the transformative potential of the PD initiatives.

A group of 14 teachers recognized a moderate degree of advancement, categorizing it as "Little improvement," which could be interpreted as a cautious optimism about the program's influence on student outcomes. Twenty-two teachers perceived an "Average improvement," indicating a discernible yet balanced enhancement in students' academic performances attributable to their participation in professional development endeavours. Intriguingly, 28 teachers asserted that their investment in professional development had yielded a substantive and noteworthy influence, signifying "High improvement" in students' academic performance - a testament to the perceived potency of the program.

Similarly, while investigating the influence of principals support for staff professional development on student performance, teachers were invited to give their thoughts. They were asked to score their comments on a four-point Likert scale: SA = Strongly Agree, A = Agree, D = Disagree, and SD = Strongly Disagree. Table 4.9 provides details.

Table 4.9: Teachers Responses on Staff Professional Development

Statement	SD		D		A		SA	
	F	%	F	%	F	%	F	%
The principal prioritizes the inclusion of funds dedicated to staff professional development within the school's annual budget allocation.	8	11.43	11	15.72	19	27.14	32	45.71
The principal actively motivates and supports teachers in participating in courses to elevate their professional skills	4	5.71	1	1.43	27	38.57	38	54.29
The principal strategically organizes workshops and internal training sessions, aligning them with teachers' instructional requirements.	2	2.86	5	7.14	25	35.71	38	54.29
The principal spearheads school-wide staff development initiatives aimed at enhancing classroom practices.	0	0	0	0	16	22.86	54	77.14
The principal fosters a culture where Heads of Departments (HODs) regularly engage in meetings with teachers, sharing insights and knowledge gained from attended courses to enrich classroom teaching.	4	5.71	5	7.14	22	31.43	39	55.72

Source: Field Data (2023)

To assess if principals allocate funds for staff professional development in the annual school budget, 32 teachers (45.71%) strongly agreed, 19 (27.14%) agreed, 11 (15.72%) disagreed, and 8 (11.43%) strongly disagreed. A significant proportion of 38 teachers (54.29%) confirmed that principals encourage them to attend courses for enhanced professionalism, with 27 (38.57%) agreeing, 1 (1.43%) disagreeing, and 4 (5.71%) strongly disagreeing.

Regarding principals' organization of workshops and internal training to address teachers' instructional needs, 38 teachers (54.29%) strongly agreed, 25 (35.71%) agreed, 5 (7.14%) disagreed, and 2 (2.86%) strongly disagreed. Table 4.20 indicates that 54 teachers (77.14%) strongly agreed that principals implement staff development programs to enhance classroom practices, while 16 (22.86%) agreed, and none disagreed or strongly disagreed. To determine

whether principals ensure Heads of Departments (HODs) hold meetings to share insights from attended courses for improved classroom teaching, 39 teachers (55.72%) strongly agreed, 22 (31.43%) agreed, 5 (7.14%) disagreed, and 4 (5.71%) strongly disagreed. To assess the overall influence of principals' encouragement of staff professional development on student performance, the researcher averaged responses from both principals and teachers categorized as SA = Strongly Agreed and A = Agree for this purpose.

Table 4.10: Principals' and Teachers' Responses on Staff Professional Development

Statement	Principals				Teachers			
	A		SA		A		SA	
	F	%	F	%	F	%	F	%
The principal prioritizes the inclusion of funds dedicated to staff professional development within the school's annual budget allocation.	4	50	4	50	19	27.14	32	45.71
The principal actively motivates and supports teachers in participating in courses to elevate their professional skills	2	25	6	75	27	38.57	38	54.29
The principal strategically organizes workshops and internal training sessions, aligning them with teachers' instructional requirements.	2	25	6	75	25	35.71	38	54.29
The principal spearheads school-wide staff development initiatives aimed at enhancing classroom practices.	2	25	4	50	16	22.86	54	77.14
The principal fosters a culture where Heads of Departments (HODs) regularly engage in meetings with teachers, sharing insights and knowledge gained from attended courses to enrich classroom teaching.	1	12.5	6	75	22	31.43	39	55.72

Source: Field Data (2023)

The analysis revealed a strong agreement among 4 (50%) principals and 32 (47.71%) teachers regarding this allocation, suggesting a prioritization of staff professional development within Athi River's public secondary schools. This is in line with Yusuf, Muhammed, and Kazeem's (2014) assertion that school leaders should adapt their leadership styles to improve school situations. Principals in the Athi River sub-county have demonstrated their commitment to enhancing staff professional development by allocating budgetary resources accordingly.

Furthermore, the study investigated whether principals encouraged teachers to participate in courses aimed at enhancing their professionalism and competencies. Impressively, 6 (75%) of principals and 38 (54.29%) of teachers strongly endorsed this initiative. This indicates a widespread acceptance of teacher professional development programs within public secondary schools in the Athi River sub-county, with the Teachers Service Commission (TSC) leading some of these initiatives. However, there's resistance from teachers who have to bear the training costs.

By depending on the response of principals whether or not they organized workshops and internal training session in instructional needs of teachers, it elicited nod of agreement from 6 (75%) principals and 38 (54.29%) teachers for this statement. From this, we find that; the principals of public high schools in Athi River organize workshops and training for the purpose of getting teachers equipped with the right skills and strategies required to improve the performance of the learners. This also echoes with the TSC on the aggressive teacher development recommended in its advocacy as well as according to the study done by Melisa and Kaylan that recommended professional development of the teachers in order to have the best out of the learners by SMASSE project report (2007).

Among all pieces of information that were obtained during the interview, Principal A mentioned the following:

“As for the investment of teachers, it is stated that this investment is made through enhancing the teaching quality by the means of improving academic performance in our schools. To ensure we give teachers the opportunity for continuous learning and professional development in their carrier so they can improve on their teaching skills which are integral in helping children improve in academics is essential.”

Additionally, the study assessed the implementation of staff development programs by principals to enhance teacher performance. Notably, 4 (50%) of principals and 54 (77.14%) of teachers strongly agreed with this statement, indicating widespread support for the concept of staff professional development. This is consistent with the views of Marzano, Waters, and McNulty (2005), who view principals as key drivers of staff professional development. The successful implementation of these programs could be attributed to the TSC’s policies guiding curriculum implementation, which identify and address professional gaps.

The study delved into whether principals ensured that Heads of Departments held meetings with teachers to share insights from attended courses for improved classroom teaching. Six (75.0%) principals and 39 (55.72%) of teachers strongly endorsed this approach. This echoes the importance of departmental meetings as highlighted by Wamulla (2013), where teachers collaborate to enhance syllabus coverage and teaching methodologies, aligning with the school’s goals.

In conclusion, the majority of principals in public secondary schools within the Athi River sub-county actively promote staff professional development to enhance academic performance. This finding highlights the crucial role principals play in fostering a culture of continuous improvement.

The null hypothesis (H01) examined in this study was:

H01. There is no statistically significant link between principals’ promotion of staff professional development and students’ academic performance in public secondary schools in the Athi River sub-county of Kenya. To determine whether there was a link between principals’ promotion of staff professional development and students’ academic performance, a simple regression analysis was performed with the average scores reported by both principals and teachers, as well as the average school mean score for the study period. This study yielded a correlation coefficient (r), which represents the strength and direction of the association. The results of this investigation are summarized in Table 4.11.

Table 4.11: Promotion of Staff Professional Development and Academic Performance

Model Residual	Academic Performance.
Principals’ promotion of staff professional development on students’ Academic performance.	Person correlation coefficient(r)=0.59 Person Chi test sig(2-tailed) = 0.01
N	10

Significant at the 0.05%level (2-tailed) df =1

Source: Field Data (2023)

- a) Independent variable: Principals’ promotion of staff professional development.
- b) Dependent variable: academic Performance.

Table 4.11 shows a correlation coefficient (r) of 0.59 for principals who promote staff professional development, demonstrating a significant positive link with academic performance. Principals’ encouragement of staff professional development was highly significant with a P-value of 0.01, which is less than the usual alpha of 0.05. This underscores a substantial influence of principals’ efforts in enhancing students’ academic performance through staff professional development.

Principals were instrumental in organizing workshops, facilitating training sessions, promoting collaborative teaching, and adhering to guidelines established by the TSC. These findings are consistent with studies by scholars such as Melisa and Kailan (2015), Yusuf, Mohamed, and Kazeemi (2014), and Wamulla (2013). However, they contrast with observations from Wahab, Mehidah, Abdulla, and Kanesan (2007), who suggested that instructional leadership practices may vary depending on contextual factors.

4.4 Promotion of Collaborative Practices and Academic Performance

The second goal was to analyze the influence of principals' collaborative practices on student academic performance in public secondary schools. A five-item Likert Scale was used to assess how principals carried out their responsibilities. Respondents were asked to select one response each question from the following options: strongly disagree (1), disagree (2), agree (3), or strongly agree (4). The results of the data analysis are reported in Table 4.12.

Table 4.12: Principal Responses on the Promotion of Collaborative Practices

Statement	SD		D		A		SA	
	F	%	F	%	F	%	F	%
I elevate cooperative strategies within the departments	0	0	1	12.5	3	37.5	4	50
I include teachers in the decision-making procedure	1	12.5	0	0	5	62.5	1	12.5
I foster a shared vision, and efficient teams, and cultivate dedication	0	0	1	12.5	5	62.5	1	12.5
I establish diverse measures to ensure a cohesive working rapport	1	12.5	1	12.5	3	37.5	3	37.5
I facilitate teacher networking and connections to foster cooperation	0	0	2	25	4	50	2	25

Source: Field Data (2023)

In response to the statement on elevating cooperative strategies within departments, none of the principals expressed strong disagreement, indicating a unanimous consensus that they play a role in promoting cooperative strategies within their respective departments. Interestingly,

three (37.5%) principals agreed, recognizing the importance of their efforts in elevating collaboration. One (12.5%) of the principals however disagreed with the statement. The most prominent endorsement comes from an impressive 4 (50%) of principals who strongly agreed, underscoring the pivotal role they perceive in promoting collaborative strategies.

Principals' responses on including teachers in the decision-making process reveal a mix of perspectives regarding their inclusivity in decision-making processes. One (12.5%) principal expressed strong disagreement, indicating some level of divergence in viewpoints. On the other hand, 5(62.5%) of principals agreed that they involve teachers in decision-making, signifying a majority recognition of their efforts. Conversely, one of the principals (12.5%) expressed strong agreement, suggesting that while inclusion is acknowledged, it might not be universally perceived as highly effective.

Principals' perceptions about their role in fostering a shared vision, efficient teams, and dedication are consistent in that none of them strongly disagreed with this notion. Five (62.5%) principals agreed, recognizing their influence in cultivating these qualities within their institutions. Similarly, 1 (12.5%) expressed stronger agreement, indicating a heightened belief in their role. However, it's important to note that 1 (12.5%) of the principals expressed disagreement, suggesting that not all principals view this role as equally influential.

Responses to the statement on establishing diverse measures to ensure a cohesive working rapport reflect some variation in principals' views regarding their efforts to establish cohesion among teachers. One (12.5%) principal strongly disagreed, indicating a degree of discord in perceptions. Another 1 (12.5%) principal agreed, acknowledging the measures taken for cohesive working relationships. Interestingly, 3(37.5%) also agreed, suggesting that these measures are recognized by a substantial portion of principals. An additional 3 (37.5%) expressed stronger agreement, signifying their belief in the effectiveness of these measures.

Principals’ perspectives on facilitating networking and connections among teachers are quite clear in that none of them strongly disagreed with this idea. Four (50%) of the principals agreed, acknowledging their role in fostering cooperation through networking. An additional 2 (25%) felt even more strongly about this role, indicating a significant influence on collaborative practices. Similarly, another 2 (25%) agreed, underscoring the importance of these interactions in their leadership approach.

From the interviewees, Principal B highlighted that; -

“Collaborative practices among teachers foster a culture of teamwork and innovation that directly influences student performance. Through collaborative lesson planning, sharing best practices, and interdisciplinary projects, our educators create engaging learning experiences that inspire our students to excel academically.”

Table 4.13: Teachers’ Responses on the Promotion of Collaborative Practices

Statement	SD		D		A		SA	
	F	%	F	%	F	%	F	%
The principal elevates cooperative strategies within the departments	0	0	5	7.14	8	11.43	57	81.42
The principal includes teachers in the decision-making procedure	0	0	0	0	34	48.57	36	51.42
The principal fosters a shared vision, and efficient teams, and cultivates dedication	0	0	6	8.57	26	37.14	38	54.29
The principal establishes diverse measures to ensure a cohesive working rapport	3	4.29	7	10	23	32.86	37	52.86
The principal facilitates teacher networking and connections to foster cooperation	0	0	9	12.85	21	30	40	57.14

Source: Field Data (2023)

Teachers widely view the principal as a driving force for promoting cooperation across departments. No strong disagreements emerged, showing unanimous agreement on the

principal's role. Five (7.14%) disagreed, while 8 (11.43%) agreed with the statement. Most strikingly, 57 (81.42%) strongly agreed, underscoring the principal's effective commitment to cooperative strategies. Teachers remarkably agree on the principal's excellence in involving them in decision-making. No strong disagreements or mere disagreements occurred, affirming perceived inclusivity. 34 (48.57%) acknowledged inclusion efforts, and 36 (51.42%) strongly agreed that the principal effectively engages educators in shaping decisions.

Teachers recognize the principal's role in cultivating shared vision, efficiency, and dedication. No strong disagreements emerged, with 6 (8.57%) expressing minor dissent. 26 (37.14%) agreed, while a significant 38 (54.29%) strongly believed in the principal's fostering of these qualities. Teachers acknowledge the principal's efforts to create rapport, despite some variations. Three (4.29%) strongly disagreed, 7 (10%) disagreed, and 23 (32.86%) agreed with cohesive measures. Thirty-seven (52.86%) strongly agreed, highlighting the principal's effective role in harmony.

The principal's role in fostering teacher networking and cooperation is acknowledged. No strong disagreements were noted. Nine (12.85%) disagreed, while 21 (30%) agreed with networking. Most notably, 40 (57.14%) strongly agreed, underlining the principal's significant role in promoting collaboration. To assess the overall influence of principals' promotion of collaborative practices on student performance, the researcher collected responses from both principals and teachers and calculated a consolidated average index. This study combines responses classed as SA (Strongly Agreed) and A (Agree).

Table 4.14: Responses on the Promotion of Collaborative Practices

Statement	Principals				Teachers			
	A		SA		A		SA	
	F	%	F	%	F	%	F	%
The principal elevates cooperative strategies within the departments	3	37.5	4	50	8	11.43	57	81.42
The principal includes educators in the decision-making procedure	5	62.5	1	12.5	34	48.57	36	51.42
The principal fosters a shared vision, and efficient teams, and cultivates dedication	5	62.5	1	12.5	26	37.14	38	54.29
The principal establishes diverse measures to ensure a cohesive working rapport	3	37.5	3	37.5	23	32.86	37	52.86
The principal facilitates teacher networking and connections to foster cooperation	4	50	2	25	21	30	40	57.14

Source: Field Data (2023)

The results indicate that a significant proportion of teachers acknowledged the influential role of principals in fostering collaborative practices within their respective schools. In assessing the extent to which principals enhanced collaborative approaches within different school departments, the study revealed a strong agreement, with 4 (50%) of principals and 57 (81.42%) of teachers firmly endorsing this aspect. Similarly, the study explored teachers' involvement in decision-making processes, finding that 6 (75%) of respondents agreed or strongly agreed, while 36 of teachers (51.42%) strongly supported this notion. Additionally, the study examined the creation of a shared vision, effective teamwork, and commitment-building. Six of the principals (75%) either strongly agreed or agreed, while 64 (91.43%) of the teachers expressed similar sentiments.

The investigation extended to the implementation of mechanisms to foster harmonious relationships among various stakeholders. Six (75%) principals either strongly agreed or agreed, paralleled by 60 (85.72%) teachers who strongly agreed or agreed with this approach.

Furthermore, the study inquired about principals' role in promoting networking and linkages that encourage collaborative practices. Six (75%) of principals supported this idea, while a noteworthy 61 (87.17%) of teachers concurred. The findings underscore the active role played by both principals and teachers in the Athi River sub-county in promoting collaborative practices, to improve students' academic performance. This implies a potential correlation between collaborative practices and students' academic performances.

These findings are consistent with research by Watson, Partington, Gray, and Mack (2006), who suggested that successful principalship based on cooperation was critical to academic performance, particularly in Aboriginal and minority populations. According to this viewpoint, principals play an important role in establishing collaborative cultures both within and outside of the school environment, which eventually improves students' performance.

The participation of teachers in decision-making processes was found to be beneficial, allowing for shared ownership of plans and solutions. Collaboration serves as a vehicle for informed individuals to contribute while engaging everyone in the decision-making process, which can significantly influence overall learner performance. This notion resonates with Bakhda's (2006) stance on the importance of teamwork in schools, where committees and smaller groups aid in investigating new strategies. In the realm of cultivating harmonious relationships among stakeholders, a substantial number of principals and teachers agreed that mechanisms were in place. This approach contributes to an environment of mutual respect and collaboration among all parties involved.

The null hypothesis tested in this study was:

In the Athi River sub-county of Machakos County, there is no statistically significant correlation between principals promoting collaborative practices and students' performance in school. Pearson correlation analysis was used to explore the relationship between principals

promoting collaborative practices and the academic performance of students. The findings of this investigation are shown in Table 4. 15.

Table 4.15: Pearson Correlation Results for Principals’ Promotion of Collaborative Practices and students’ Academic Performance.

Correlations		Academic Performance	Promotion of collaborative practices
academic Performance	Pearson Correlation	1	.817**
	Sig. (2-tailed)		.037
	N	10	10
Promotion of collaborative practices	Pearson Correlation	.817**	1
	Sig. (2-tailed)	.037	
	N	10	10

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

Source: Field Data (2023)

Table 4.15 revealed a correlation coefficient (r) of 0.817 for principals’ promotion of collaborative practices, indicating a highly robust positive relationship with academic performance. The null hypothesis was rejected, confirming a significant relationship between principals’ promotion of collaborative practices and student performance. Furthermore, the statistical analysis showed that the significance level of principals’ promotion of collaborative practices was highly significant at a p-value of 0.037, which is lower than the standard alpha of 0.05. This indicates a substantial influence of principals’ promotion of collaborative practices on students’ academic performance. These results underscore that effective collaborative efforts by principals contribute to enhanced academic outcomes.

Hattie’s (2009) research further supports these results, highlighting the crucial roles of both teachers and students in enhancing teaching and learning outcomes. Hattie’s meta-analysis underscores the importance of effective teacher-student relationships and responsibilities as

drivers of positive change, complementing the efforts of principals in improving teaching and learning. The significance of cultivating collaborative cultures and structures, both internally and externally, is emphasized, ultimately strengthening the school’s effectiveness and students’ performances.

4.5 Communication of school goals and students’ academic performance

The study sought the principals’ opinions on the extent to which communication of school goals influenced academic performance. The results are presented in Table 4.16.

Table 4.16: Principals’ Responses on the communication of school goals and Academic Performance

Statement	SD		D		A		SA	
	F	%	F	%	F	%	F	%
I orchestrate school programs with the intent of accomplishing established objectives.	0	0	0	0	1	12.5	7	87.5
I engage stakeholders in defining targets and objectives for the school.	0	0	0	0	3	37.5	7	62.5
I elucidate school curriculum programs to the teaching staff.	0	0	1	12.5	2	25	5	62.5
I communicate the school’s vision and mission to both students and teachers.	0	0	1	12.5	1	12.5	6	75
I collaboratively create a comprehensive school work plan in consultation with various stakeholders.	0	0	1	12.5	2	25	5	62.5

Source: Field Data (2023)

Table 4.16 presents the responses of principals regarding the communication of school goals and their influence on academic performance. For the statement “I orchestrate school programs with the intent of accomplishing established objectives,” 7 (87.5%) principals strongly agreed while 1 (12.5%) agreed, highlighting their commitment to implementing programs that align with set objectives. Additionally, none of the principals expressed disagreement or slight disagreement, indicating a high consensus on this role.

Similarly, in response to the the statement,“I engage stakeholders in defining targets and objectives for the school,”5(62.5%) principals strongly agreed while 3 (37.5%) agreed, showcasing their involvement of stakeholders in shaping the school’s goals. No principals expressed disagreement or slight disagreement, reinforcing the importance of collaborative goal-setting.In relation to “I elucidate school curriculum programs to the teaching staff,”2 (25%) of principals agreed, indicating their efforts to clarify curriculum programs for teachers. Additionally, 5 (62.5%) of principals expressed stronger agreement, demonstrating a substantial recognition of their role in this aspect of communication.

Regarding the statement “I communicate the school’s vision and mission to both students and teachers,”6 (75%) of principals strongly agreed, while 1 (12.5%) agreed, underlining their dedication to conveying the institution’s vision and mission. Only 1(12.5%) principal expressed disagreement, implying a general alignment in their communication practices.Lastly, for the statement “I collaboratively create a comprehensive school work plan in consultation with various stakeholders,”2 (25%) of principals agreed, suggesting their collaborative approach in developing work plans. Furthermore, 5 (62.5%) of the principals expressed stronger agreement, indicating their belief in the efficacy of this participatory planning process. Only 1 (12.5%) disagreed and none of the principals strongly disagreed, demonstrating a consensus in this communication practice.

The study also aimed to gather teachers’ perspectives on how the principal employed goal-setting skills to influence academic performance. The responses are detailed in Table 4.17.

Table 4.17: Teachers Response on Principal’s communication of school Goals

Statement	SD		D		A		SA	
	F	%	F	%	F	%	F	%
The principal orchestrates school programs with the intent of accomplishing established objectives.	9	12.85	3	4.29	27	38.57	31	44.29
The principal engages stakeholders in defining targets and objectives for the school.	6	8.57	1	1.43	14	20	49	70
The principal elucidates school curriculum programs to the teaching staff.	0	0	0	0	25	35.71	45	64.29
The principal communicates the school’s vision and mission to both students and teachers.	0	0	10	14.29	28	40	32	45.71
The principal collaboratively creates a comprehensive school work plan in consultation with various stakeholders.	6	8.57	9	12.86	17	24.28	38	54.29

Source: Field Data (2023)

Table 4.17 presents the responses of teachers regarding the principal’s communication of school goals and their influence on academic performance. For the statement “The principal orchestrates school programs with the intent of accomplishing established objectives,” 31 (44.29%) of teachers strongly agreed, acknowledging the principal’s role in aligning programs with objectives. Additionally, 27 (38.57%) of teachers agreed, demonstrating a recognition of this leadership approach, while a combined 12 (17.14%) of teachers expressed strong disagreement or slight disagreement.

In response to the statement “The principal engages stakeholders in defining targets and objectives for the school,” 49 (70%) of teachers strongly agreed, highlighting the principal’s inclusivity in goal-setting. An additional 14 (20%) teachers agreed, further emphasizing the collaborative nature of the principal’s approach. Only 1 (1.43%) expressed disagreement, showcasing a strong consensus in favour of this communication practice. Regarding “The principal elucidates school curriculum programs to the teaching staff,” 45 (64.29%) of teachers

strongly agreed, underscoring the principal's efforts in clarifying curriculum programs. Furthermore, 25 (35.71%) of teachers agreed, indicating their alignment with this communication role. No teachers expressed disagreement or slight disagreement, indicating a high level of recognition for this aspect of communication.

In relation to the statement "The principal communicates the school's vision and mission to both students and teachers,"³²(45.71%) of teachers strongly agreed, affirming the principal's commitment to conveying the institution's vision. Additionally, 28 (40%) of teachers agreed, reinforcing the principal's influence in this area, while 10 (14.29%) of teachers expressed slight disagreement.

Lastly, for the statement "The principal collaboratively creates a comprehensive school work plan in consultation with various stakeholders,"³⁸ (54.29%) teachers strongly agreed, showcasing the principal's collaborative approach to work planning. An additional 17 (24.28%) of teachers agreed, indicating their recognition of this participatory process. While a combined 15 (21.43%) expressed disagreement or slight disagreement, the overall consensus leaned towards agreement with this communication practice.

From the interviewees, principal C highlighted that; -

"Effective communication of school goals sets the tone for academic excellence and creates a shared vision within our school community. When teachers understand our academic priorities and work collaboratively to achieve them, we see a tangible improvement in student performance and overall school success."

The responses of both principals and teachers were combined to create a consolidated average index of principals' communication of school goals. Responses scored as SA = Strongly Agree and A = Agree were combined. Table 4.18 presents the gathered results.

Table 4.18: Principals' and Teachers' Responses on the communication of school goals

Statement	Principals				Teachers			
	A		SA		A		SA	
	F	%	F	%	F	%	F	%
The principal orchestrated school programs with the intent of accomplishing established objectives.	1	12.5	7	87.5	27	38.57	31	44.29
The principal engages stakeholders in defining targets and objectives for the school.	1	12.5	5	62.5	14	20	49	70
The principal elucidates school curriculum programs to the teaching staff.	2	25	5	62.5	25	35.71	45	64.29
The principal communicates the school's vision and mission to both students and teachers.	1	12.5	6	75	28	40	32	45.71
The principal collaboratively creates a comprehensive school work plan in consultation with various stakeholders.	2	25	5	62.5	17	24.28	38	54.29

Source: Field Data (2023)

The statistics revealed a significant consensus among principals (7; 87.5%) that principals played a pivotal role in conducting school programs aimed at achieving set goals. This viewpoint was validated by the teacher responses, with 31 (44.29%) strongly agreeing. These findings resonated with a study conducted by Abe et al. (2014), where goal-setting contributed to improved management of instructional time and effective school programs, ultimately leading to enhanced performance.

The study then explored whether principals involved other stakeholders in goal-setting. Here, 5 (62.5%) of principals strongly agreed, and 31 (44.29%) of teachers strongly supported this notion. This approach aligned with the perspective of Locke and Lutham (2002), emphasizing the importance of principal-stakeholder collaboration in defining and communicating school goals. However, the results indicated room for improvement in this area, as the percentage was

relatively low, suggesting that principals in the Athi River sub-county should enhance their engagement of stakeholders to enhance performance.

Moreover, data indicated that principals were proactive in explaining school curriculum programs to teachers as expressed by 5 (62.5%) of the principals. This practice facilitated a well-informed teaching staff regarding Ministry of Education Curriculum Programs and their implementation. Forty-five Teachers' responses (64.29%) supported this assertion, aligning with the findings of Salleh (2013) on the principal's paramount role in involving stakeholders, thus fostering a cohesive team for better performance.

Principals' involvement in explaining the school's vision and mission to students and teachers was assessed in the study's next phase. Seven principals (75%) strongly agreed with this practice, while 32 (45.71%) teacher responses reflected a strong agreement. This finding harmonized with the research of Wilson (2012) in the USA, emphasizing the principal's responsibility to communicate the school's vision and mission to stakeholders for cohesive goals and improved examination performance.

Finally, the study explored whether principals developed detailed schoolwork plans in collaboration with stakeholders. Five principals (62.5%) strongly agreed, and 38 (54.29%) teachers' responses demonstrated a strong agreement. These results resonated with the research of Quinn (2002) and Kiplagat (2012), suggesting that the collaborative involvement of key stakeholders in goal formulation, implementation, and evaluation contributed to enhanced academic performance. The study then examined the correlation between principals' effectiveness in setting school goals and students' academic performance using the Pearson correlation coefficient. The null hypothesis stated that there is no statistically significant correlation between principals' communication of school goals and student performance.

To determine whether such a relationship exists, a simple regression analysis was used to link principals' communication of school goals to the academic performance of students. The resultant correlation coefficient (r) was used to determine the existence, strength, and direction of this link. The basic regression analysis revealed that the Pearson correlation coefficient (r) was 0.968, with a p-value of 0.000.

Table 4.19: Principals' communication of school Goals and Academic Performance

Correlations		Academic Performance	Communication of school goals
Academic Performance	Pearson Correlation	1	.968**
	Sig. (2-tailed)		.000
	N	10	10
Communication of school goals	Pearson Correlation	.968**	1
	Sig. (2-tailed)	.000	
	N	10	10

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

(a) Independent variable: Principals communication of school goals

(b) Dependent Variable: Academic Performance

Source: Field Data (2023)

Table 4.19 presented a correlation coefficient (r) of 0.968 for principals' communication of school goals, indicating an exceptionally strong positive relationship between this factor and academic performance. The significance level of principals' goal-setting skills was underscored by a p-value of 0.000, which is below the alpha threshold of 0.05, signifying a highly significant influence of principals' communication of school goals on students' academic performance. These findings suggest that effective communication of school goals by principals correlates with improved academic performance among students.

The coefficient implies that as principals proficiently communicate school goals, there is a corresponding rise in students' academic performance, and conversely, a decline when communication is less effective. As a result, the null hypothesis, which proposed there was no statistically significant connection between principals' communication of school goals and students' academic performance in public secondary schools in the Athi River subcounty, was rejected. Instead, the alternative hypothesis, which predicted a statistically significant link between these factors, was supported. This highlights the essential role of principals in establishing clear school goals to improve students' academic performance.

These findings aligned with research by Wilson (2012) and Salleh (2013) on the benefits of goal-setting in educational institutions. Effective goal communication, teamwork, and the development of well-defined work plans were found to foster commitment, inclusivity, and ultimately, improved performance. The researcher's perspective concurred with these findings, emphasizing that goal-setting encourages team spirit and ownership, consistent with Kiplagat's (2012) observation of teamwork's role in Kenya's learning institutions.

4.6 Supervision of teaching and students' academic performance

The fourth goal of this study was to evaluate the influence of principals' supervision of teaching on academic performance in public secondary schools in the Athi River Sub- County of Machakos County. Both teachers and principals were polled using structured questions to determine the influence of principals' instructional leadership practices on students' academic performance

Figure 4.2 demonstrates administrators' reactions to the extent to which their supervisory tactics influence the academic performance of students.

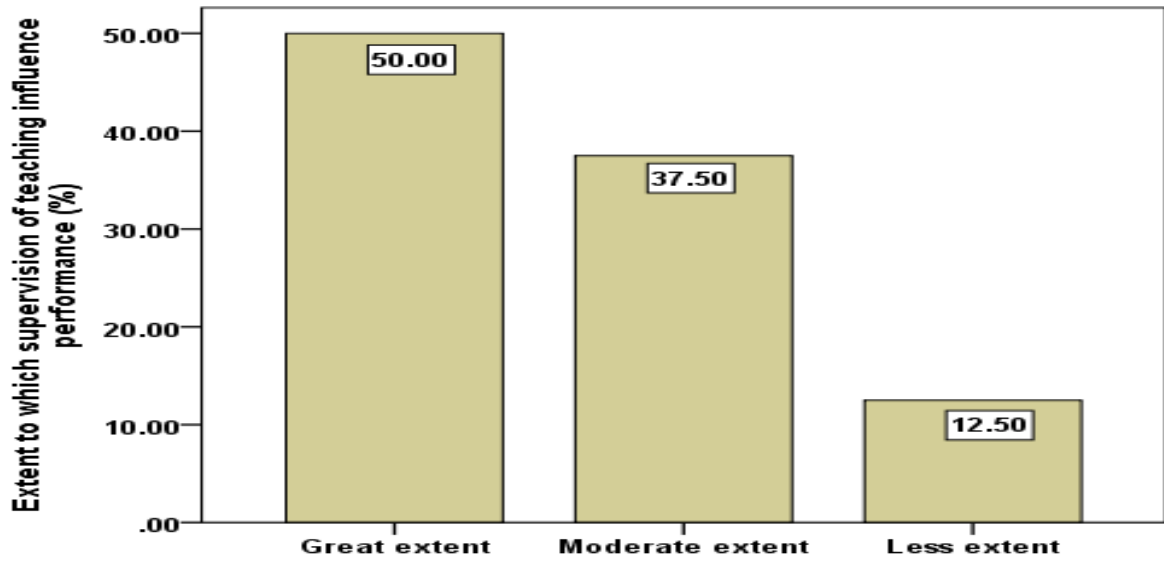


Figure 4.2: Supervision of Teaching on Academic Performance

Source: Field Data (2023)

According to the findings depicted in Figure 4.2, 4 (50%) of the principals strongly agreed that supervision of teaching significantly influences academic performance, while 3 (37.5%) agreed to a moderate extent. Additionally, 1 (12.5%) principal indicated a lesser extent of agreement with this notion. Similarly, principals and teachers were asked to provide their views on the influence of teacher supervision on academic performance. The research presented statements on instructional leadership methods and asked respondents to score their agreement on a 4-point Likert scale, from Strongly Agree (SA) to Strongly Disagree (SD). Table 4.20 summarizes the results of this assessment.

Table 4. 20: Principals' Supervision of teaching and academic Performance

Statement	SD		D		A		SA	
	F	%	F	%	F	%	F	%
I review students' exercise books following supervision activities.	0	0	1	12.5	1	12.5	6	75
I provide valuable and constructive feedback subsequent to supervision.	0	0	1	12.5	1	12.5	6	75
I regularly perform classroom observations on teachers.	0	0	1	12.5	3	37.5	4	50

I propose innovative approaches and instructional methods following supervision sessions.	1	12.5	0	0	2	25	5	62.5
I ensure that teachers create and implement well-structured schemes of work.	1	12.5	1	12.5	2	25	4	50

Source: Field Data (2023)

Table 4.20 presents a detailed insight into the perceptions of principals, revealing the influence of their supervision on teaching practices and subsequently, on students' academic performance. The statement on review of students' exercise addresses the practice of reviewing students' exercise books following supervision activities. Notably, only 1 (12.5%) principal disagreed and none of the principals strongly disagreed with this practice. Instead, the responses exhibit an overwhelming consensus regarding its efficacy. Six (75%) principals strongly agreed that the review of exercise books, conducted in the aftermath of supervision, significantly contributes to the enhancement of teaching quality.

The value of constructive feedback as a post-supervision mechanism is evident. Principals' perspectives converge once again, with none expressing strong disagreement and 1 (12.5%) expressing slight disagreement. A considerable 6 (75%) of principals strongly agreed while 1 (12.5%) slightly acknowledged the importance of this feedback loop in enriching teaching effectiveness. The practice of regularly observing classrooms to monitor teachers' performance reveals an interesting dynamic. While all principals recognize the significance of classroom observations, the distribution of responses demonstrates variations. Three (37.5%) principals agreed, and an additional 4 (50%) strongly agreed that this practice plays a substantial role in refining teaching practices, leading to enhanced academic performance.

In response to the statement about principals proposing innovative approaches and instructional methods after supervision sessions, the data unveils a mixed perspective. While 1 (12.5%) strongly disagreed and no principals indicated disagreement, 2 (25%) agreed, and an impressive

5 (62.5%) strongly agreed with this notion. This suggests that the role of principals in guiding teachers toward innovative pedagogical techniques is notably influential. The final statement pertains to the principals' role in ensuring teachers create and implement well-structured schemes of work. Once more, the distribution of responses underscores a consensus on the importance of this practice. Four (50%) of principals strongly agreed, accompanied by 2 (25%) agreeing, signifying a shared belief in the pivotal influence of structured teaching plans on both teaching quality and students' academic performance.

The study also aimed to gather the perspectives of teachers regarding the principal's approach to supervising teaching and its influence on student academic performance. The summary of teachers' responses is presented in Table 4.21.

Table 4.21: Teachers Responses on Principals' Instructional leadership of Teaching

Statement	SD		D		A		SA	
	F	%	F	%	F	%	F	%
The principal reviews students' exercise books following supervision activities.	2	2.86	3	4.29	29	41.43	36	51.43
The principal provides valuable and constructive feedback subsequent to supervision.	5	7.14	13	18.57	22	31.43	30	42.86
The principal regularly performs classroom observations on teachers.	11	15.72	1	1.43	25	35.71	33	47.14
The principal proposes innovative approaches and instructional methods following supervision sessions.	1	1.43	1	1.43	20	28.57	48	68.57
The principal ensures that teachers create and implement well-structured schemes of work.	1	1.43	7	10	18	25.71	44	62.86

Source: Field Data (2023)

In Table 4.21, the focus is on the responses of teachers regarding the instructional leadership of teachers by principals and its correlation with academic performance. The first statement

discusses the principal's engagement with students' exercise books after conducting supervision activities. It indicates that 2 (2.86%) of teachers strongly disagree, 3 (4.29%) disagree, 29 (41.43%) agree, and 36 (51.43%) strongly agree with this practice. The second statement focuses on whether the principal provides valuable and constructive feedback after supervision. The distribution of responses shows that 5 (7.14%) teachers strongly disagree, 13 (18.57%) disagree, 22 (31.43%) agree, and 30 (42.86%) strongly agree.

The third statement relates to the principal's regular classroom observations of teachers. Interestingly, 11 (15.72%) strongly disagree, only 1 (1.43%) disagree, 25 (35.71%) agree, and 33 (47.14%) strongly agree with this aspect of instructional leadership. Moving on, the fourth statement addresses whether the principal introduces innovative approaches and instructional methods following supervision sessions. One (1.43%) strongly disagrees another 1 (1.43%) disagree, 20 (28.57%) agree, and a significant 48 (68.57%) strongly agree with this practice.

The fifth statement explores whether the principal ensures that teachers develop and implement well-structured schemes of work. The responses reveal that 1 (1.43%) strongly disagree, 7 (10%) disagree, 18 (25.71%) agree, and 44 (62.86%) strongly agree with this supervision approach. The data suggests varying levels of agreement and disagreement among teachers, indicating both areas of alignment and potential areas for improvement in the supervision processes.

Table 4.22: Principals' and Teachers Responses on supervision of teaching

Statement	Principals				Teachers			
	A		SA		A		SA	
	F	%	F	%	F	%	F	%
The principal reviews students' exercise books following supervision activities.	1	12.5	6	75	29	41.43	36	51.43
The principal provides valuable and constructive feedback subsequent to supervision.	1	12.5	6	75	22	31.43	30	42.86
The principal regularly performs classroom observations on teachers.	3	37.5	4	50	25	35.71	33	47.14
The principal proposes innovative approaches and instructional methods following supervision sessions.	2	25	5	62.5	20	28.57	48	68.57
The principal ensures that teachers create and implement well-structured schemes of work	2	25	4	50	18	25.71	44	62.86

Source: Field Data (2023)

In the initial inquiry that sought to determine whether principals reviewed students' exercise books after supervision, the results indicated that 6 (75%) of principals strongly concurred with this notion, while 36 (51.43%) of teachers also expressed strong agreement. This suggests that a significant proportion of principals in the Athi River sub-county engaged in the practice of checking students' exercise books post-supervision. This action reflected a willingness among principals to seek feedback following supervision to gauge the assimilation of new skills by students. However, the percentage of teachers in agreement was relatively lower, suggesting room for enhancement in instructional leadership practices by principals to boost academic performance. This finding aligned with a study by Samoei (2015), which highlighted supervision practices encompassing aspects like teacher punctuality, student academic progress monitoring, and reviewing students' notes.

In relation to this objective, the survey examined whether principals provided constructive and valuable feedback after conducting supervision. The findings revealed that 6 (75%) of the principals strongly agreed with this statement, while 30 (42.86%) of the teachers also expressed strong agreement. This aligns with the research conducted by Kimeu (2010) in Kenya, highlighting the importance of effective supervisory practices such as setting benchmarks, fostering a supportive school environment, and providing timely feedback to teachers post-supervision.

Similarly, Zepeda (2013) emphasized the significance of establishing individualized relationships between teachers and supervisors to facilitate skill development and enhance performance. Thus, principals within the Athi River sub-county were observed to provide constructive feedback to teachers post-supervision. This practice enabled teachers to identify strengths and weaknesses, facilitating opportunities for skill development to enhance student performance. Notably, feedback is crucial as it pinpoints performance gaps requiring remediation, aligning with TSC's TPAD program and Performance Contracting (PC).

The subsequent investigation explored whether principals conducted periodic lesson observations. The findings showed that 4 (50%) principals strongly agreed with this statement, whereas 33 (47.14%) of teachers expressed strong agreement. These results indicated that slightly above half of the principals in the Athi River sub-county engaged in lesson observations. However, the proportion of principals strongly agreeing was only half of the total, implying that instructional leadership practices such as lesson observations need to be strengthened by principals for better academic performance. Lesson observations enable principals to offer relevant feedback on teaching and learning, facilitating the formulation of teacher capacity-building programs. This observation aligned with research by Stephen (2014) and Clark (2015), highlighting the role of supervision involving observation, self-assessment, evaluation, feedback, and knowledge and skill acquisition through instruction, modelling,

collaborative problem-solving, mentoring, and support, all of which contribute to improved performance.

The fourth statement posed questions to determine whether principals recommended new teaching practices and strategies after supervising. The findings have revealed that 5 of them strongly agreed with this statement which is 62.5 %. This opinion was further allied by the teachers' response out of whom 48 (68.57%) strongly endorsed the response. The findings eclipsed a survey of supervision done by Okumbe (1998) on the USA that laid emphasis on processes like; Physical procedures, which involves the direct observation of classrooms, frequent observations of lessons and giving feedback to the teachers as practitioners who in turn influence the performance of the student. These involving factors give emphasis to the fact that during supervision, a large percentage of head teachers in Athi River sub-county have been proactive in coming up with so many innovative ways of teaching.

Out of the 4 (50%) principals who strongly supported this assertion concerning whether or not teachers prepared and used schemes work while at Athi river sub county, 44 (62.86%) of their respective counterparts affirmed the preparedness and usage of the such teaching schemes – this one is encouraging as it shows a commendable unity of effort among the principals and teachers towards promoting professional teaching documents. This is in line with what TSC has set as the PC for principals as well as TPADs for teachers which have been developed to be implemented in schools, so all that also fits here. Sule et al also arrive at the similar conclusion in their study that supervision needs to assume multi facets; ranging from checking lesson plans or schemes of work records keeping student notes punctuality class attendance among other activities in parallel with students' performance.

From the interviewees, principal D highlighted that; -

“Supervision of teaching plays a critical role in maintaining instructional quality and supporting teacher growth. Through regular classroom observations, constructive feedback, and professional development opportunities, we ensure that our educators are equipped with the tools and support they need to deliver effective instruction and drive student academic progress.”

The null hypothesis tested in this study was as follows:

H04. There is no statistically significant relationship between principal-supervision of teaching and students’ performance in school in public secondary schools in Kenya’s Athi River sub-county.

A simple regression analysis was performed to determine whether there was a correlation between principals’ supervision of teachers and student academic performance. This investigation includes computing a correlation coefficient (r) to identify the existence, strength, and direction of the link. Table 4.23 contains a thorough summary of the findings from this investigation.

Table 4.23: Simple Regression Model Summary of the Influence of Principal Supervision of Teaching on Students’ Academic Performance.

Correlations		Academic Performance	Supervision of teaching
Academic Performance	Pearson Correlation	1	.721**
	Sig. (2-tailed)		.023
	N	10	10
Supervision of teaching	Pearson Correlation	.721**	1
	Sig. (2-tailed)	.023	
	N	10	10

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

(a) Independent variable: principal’s supervision of teaching practices

(b)Dependent Variable: academic performance

Source: Field Data (2023)

Table 4.23 indicated a correlation coefficient (r) of 0.721 for principals' supervision of teaching, demonstrating a strong positive relationship with students' academic performance. Moreover, the statistical significance of principals' supervision of teaching was highly significant with a p-value of 0.023, which is lower than the alpha level of 0.05. This underscores a substantial influence of principals' supervision of teaching on students' academic performance in public secondary schools in the Athi River sub-county.

These findings suggest that active engagement of principals in instructional leadership practices correlates positively with improved academic outcomes among students. The rejection of the null hypothesis confirms a statistically significant relationship between principals' supervision of teaching and students' academic performance in public secondary schools in the Athi River sub-county.

These findings are consistent with prior research by Clark (2015), Sule et al. (2015), and Okumbe (1998), emphasizing the positive influence of class observation, ongoing teacher monitoring, feedback, and frequent lesson observations on student outcomes. However, they contrast with the findings of Naz et al., (2009) in Asian countries, where supervision was viewed negatively by teachers. The researcher's viewpoint supports the concept that instructional leadership enhances teaching practices and curriculum coverage, as advocated by the Teachers Service Commission through initiatives such as Performance Contracting (PC) for principals and Teacher Performance, Appraisal, and Development (TPAD) for teachers.

A T-test was conducted to assess the statistical significance of each regression coefficient, which indicates the strength of influence of each independent variable on the dependent variable. The findings of this analysis are presented in Table 4.24.

Table 4.24: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std Error	Beta	t	Sig.
(Constant)	0.323	0.024		1.648	0.105
Promoting the teaching profession	0.182	0.026	0.319	6.604	0.000
Principals' collaborative practices	0.272	0.024	0.534	6.745	0.000
Communication of school goals	0.229	0.034	0.476	8.866	0.000
Principals' supervision of teaching	0.216	0.046	0.253	6.354	0.000

Source: Field Data (2023)

The regression equation generated for the study was as follows.

$$Y_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Y (Academic performance) = 0.323 (Constant) + 0.182 (Promoting the teaching profession) + 0.272 (Principals' collaborative practices) + 0.229 (Communication of school goals) + 0.216 (principals' supervision of teaching) + 0.024 (Std Error).

The regression analysis indicated significant relationships between promoting the teaching profession and academic performance ($\beta = 0.182, p \leq 0.05$), principals' collaborative practices and academic performance ($\beta = 0.272, p \leq 0.05$), communication of school goals and academic performance ($\beta = 0.229, p \leq 0.05$), and principals' supervision of teaching and academic performance ($\beta = 0.216, p \leq 0.05$).

Specifically, the coefficient for promoting the teaching profession is 0.182, suggesting that a one-unit change in promoting the teaching profession corresponds to a predicted 0.182 change in academic performance, holding all other variables constant. Similarly, the coefficient for principals' collaborative practices is 0.272, indicating that a one-unit change in collaborative

practices predicts a 0.272 change in academic performance, all else being equal. For communication of school goals, the coefficient is 0.229, meaning a one-unit change in this variable predicts a 0.229 change in academic performance, with other variables held constant. Lastly, the coefficient for principals' supervision of teaching is 0.216, indicating that a one-unit change in supervision predicts a 0.216 change in academic performance, keeping other variables constant.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter offers a thorough summary of the study, organized into four sections: a review of the principal findings, the conclusions derived from these findings, recommendations stemming from the conclusions, and suggestions for further research.

5.1 Summary of the Major Findings

The findings of the study are summarized as follows:

5.1.1 Promotion of Staff Professional Development and Academic Performance

Specifically in the study conducted in Athi River sub-Council, it was ascertained that majority of head teachers as well as tutors support provision of funds for staff professional development in schools' some budgets. On the involvement of principals in the promotion of the skills of their teachers, it was revealed that most of them, to the extent of 75%, advocated for upgrade of their teachers' skills.

Further, the majority of head teachers and teachers opined that workshops/training seminars should be held often for improvement of skills of the teachers as espoused in the TSC guidelines. Regarding staff training, it is important to note that teachers endorse these programs as indicated by the survey. It also noted that the degree of support towards career advancement for education workers synchronizes with the boost in student performance ($r = 0.59$). These kinds of results show that it is impossible to interfere with the constant growth culture of a school and the training of teachers without the participation of leader. Principals' encouragement of staff professional development was highly significant with a P-value of 0.01, which is less than the usual alpha of 0.05. This underscores a substantial influence of principals' efforts in enhancing students' academic performance through staff professional development.

5.1.2 Promotion of Collaborative Practices and Students' Overall Performance

In the light of the results of the study that focused on the collaborative practices within the schools within Athi River sub-county, it was evidenced that the head teachers played a central role in promoting teamwork among teachers. Employees from distinct departments said that other schools approved and accepted collaborations between teachers based on a majority of affirmations from the educators. In addition, the study also endorsed the need for bringing about the stakeholders' commitment or a shared vision, team development of all concerned and reconciliation.

The extent of principals' collaboration with other teachers for improved performance was significantly positively correlated with academic achievement, exhibiting a correlation coefficient of $r = .817$. This indicates that enhanced school outcomes are likely to be realized when head teachers and other educators work together towards the common objective of improving academic performance. These findings augment previous research that highlighted the significance of school cultures fostering collaboration among educators about instructional delivery and its impact on student achievement. The null hypothesis was rejected, indicating a substantial correlation between principals' support of collaborative practices and student performance. The statistical study revealed that the significance level of principals' encouragement of collaborative practices was very significant, with a p-value of 0.037, which is below the standard alpha of 0.05. This signifies a considerable impact of principals' encouragement of collaborative activities on students' academic achievement.

5.1.3 Principal Communication of School Goal and Academic Performance

A poll of teachers in Athi River Sub County revealed that 87.5% said school heads were essential for coordinating activities related to program execution aimed at specific objectives. This aligned with the premise that objectives improve time management during instruction, hence facilitating the implementation of school programs and resulting in superior academic

outcomes. Additional data revealed that over half of the head teachers, specifically 62.5%, were actively engaged in ensuring that educators were informed about school curricular activities, and the same number included various stakeholders in the formulation of these objectives.

Principals' engagement in articulating the school's vision and mission to students and teachers (75%) and in formulating comprehensive school work plans in conjunction with stakeholders (62.5%) was also observed. A robust positive association ($r = .968$) was identified between principals' goal-setting abilities and students' academic performance, underscoring the importance of excellent goal-setting methods. The importance of principals' goal-setting abilities was highlighted by a p-value of 0.000, which is below the alpha threshold of 0.05, indicating a very significant impact of principals' communication of school objectives on students' academic performance. The findings indicate that the effective communication of school objectives by principals is associated with enhanced academic performance among pupils.

5.1.4 Supervision of Teaching and Students' Academic Performance

The study revealed that a substantial percentage of principals in the Athi River sub-county examined students' exercise books following supervision (75%). Nonetheless, although a majority of principals offered constructive and meaningful feedback following supervision (75%), just over half performed periodic lesson observations (50%). Nevertheless, a significant proportion of principals proposed innovative pedagogical strategies and techniques following supervision (62.5%), whereas both administrators and teachers emphasized the development and use of work schemes. A significant positive association ($r = .721$) existed between principals' teaching supervision methods and academic performance, underscoring the critical role of good instructional leadership in enhancing student outcomes. These findings highlight

the significance of instructional leadership in improving teaching and learning outcomes in public secondary schools within the Athi River sub-county, Machakos County, Kenya.

5.2 Conclusions of the Study

Principals' support and involvement in strategies and programs towards improving teachers' professional development Based on the findings of the study, almost all the principals of public secondary schools in the Athi River sub-county were fully supportive of strategies and programs that sought to enhance the professional competence of their teachers. It is therefore worthy of note that both institutions are dedicated to improving the capacities of their respective students.

Moreover, almost all of them give the impression of being open to partnership as echoes the following observation. The measures that they took as a team bore the sole purpose of enhancing the learner's academic performance implying a decorated concern towards creating a conducive environment to achieve the goals of each individual learner.

From the research study, the hypothesis formulated from the research work suggests that the head teachers of all public secondary schools in Athi River sub-county effectively communicate and or put into practice school objectives to boost students' performances. This has a connotation to emphasizing the importance of making educational objectives understandable a factor that enhances learning progress among students.

Similarly, it was established that in Athi River sub-county, principals of public secondary schools implemented instructional leadership practices to the quantitative sample mean. Consequently, these behaviours led to improvement in students' performance indicating that presence of a teacher as a supervisor is vital in instilling performance among students.

Apart from classroom observations, which are recommended practice for principals, there are other strategies that principals can use to enhance teaching and learning conditions and therefore indirectly support students' performance. This implies that creating such conditions is a process that requires being carried out progressively.

In conclusion it is evident that the variable that one declares as being significant in a sense that the researcher expects it to be different from all other variables which has been the case is the point of the study. Since it was pointed out that that it had a greater and more significant effect to the students' performance in the public secondary schools the importance of the communication of the principals' goals should be underlined. In conclusion, the study concerns several facts of principals' instructional leadership which include Professional development, cooperative approach and instructional supervision.

Subsequently, there is the recognition of the need for principals to communicate their goals and this is postged as variable that is unique in the study since it influenced and had a considerably larger effect on offer of students in the public secondary schools in the Athi River sub-county, Kenya. Such resultant possible means that open and decisive communication of school goals from t

he principals to the school clients, especially teachers is an important aspect that positively influences student learning outcomes. Whereas with the other predictors, the outcomes assumed mechanisms which alternatively enhance the teachers' practices in their classrooms (for example, professional development may enhance the teaching quality; team meetings – the collegiality at work place) as well as the school goals communication affects student learning directly. This was affirmed during the study by the hypothesis that was tested and which served as a major determinant in the predication of student academic outcome in the study region.

The sections dedicated to school goals imply that student performance must be made clear and aligned, indicating that the principals should pay significant attention to the ways in which school goals are communicated. This brings us to the culture of raising and communicating goals, which clearly highlights that in spite of all the other factors that may prove successful, this particular aspect can only be considered paradigmatic in terms of its significance to the learning process and its outcomes on students.

5.3 Recommendations of the Study

There were two major recommendations of the study as follows;

5.3.1 Policy Recommendations:

These two are the recommendations and they are as follows;

i. Academic Performance strategies:

This calls for more refined research efforts aimed at identifying and closing academic performance gaps in public secondary schools in Athi River sub-county. The principal should use focused strategies that were deduced from the results generated by the present analysis. This can entail doing secondary cognitive needs assessments for every school, providing greater funds, and requisite support to schools in transition to deteriorating academic performance. It is recommended that further augmentation of these improvement measures should need a regular check and balance system to assure its appropriate and timely implementation as well as to integrate it and the principles of instructional leadership mentioned in the study.

ii. Promote instructional leadership capacity to school principals:

Pursuant to this study, that establishes the significance of instructional leadership in enhancing teaching performance, the following recommendation is made; there is need to develop a framework training for the principals in the Athi River sub-county. This program should focus

on fostering leadership skills of principals for instructional leadership, including the area of professional development for teachers, and the development of collaborative teaching practices. All stakeholders should ensure that they bring in preparedness to support all aspects needed in schools such as resources, mentorship and opportunities for improvement to enhance school performance in the long run. This intervention should be developed with the aim of optimizing its influence on students for school goals as founded in the study, in terms of communication-frequency.

5.3.2 Practice Recommendations:

Recommendation were as follows;

- i. Teacher capacity-building initiatives: Principals should prioritize teacher capacity-building initiatives such as workshops, seminars, and refresher courses. These programs are essential for equipping teachers with up-to-date skills, competencies, attitudes, and subject-specific knowledge, ultimately enhancing teaching effectiveness and students' academic performances.
- ii. Exploring roles of instructional leaders: Schools should explore the roles of other instructional leaders within the educational system, such as deputy principals, heads of departments, and senior teachers, in contributing to teacher professional development and overall school performance. Foster collaboration and shared responsibility among instructional leaders to drive continuous improvement in teaching and learning practices.

5.4 Suggestions for Further Research

The research has offered valuable insights into the influence of principals' instructional leadership on academic performance in public secondary schools located in the Athi River sub-county.

- i. Compare different models of instructional leadership employed in public secondary schools to identify best practices and effective strategies for improving student outcomes. Investigate variations in leadership approaches and their implications for teaching and learning effectiveness.
- ii. Explore the relationship between school climate, culture, and academic performance in Athi River sub-county's public secondary schools. Investigate how factors such as school leadership, teacher-student relationships, and disciplinary practices contribute to the overall learning environment and student success.
- iii. Investigate the role of parental and community involvement in supporting student academic performance in Athi River sub-county's public secondary schools. Explore strategies for enhancing partnerships between schools, families, and communities to foster student success and well-being.



REFERENCES

- Abdul Wahab, M., & Abdullah, A. G. K. (2007). *The influence of the principal's instructional leadership on the pedagogical practices of PPSMI educators.*
- Abe, I. I., Ilogu, G. C., & Madueke, I. L. (2014). The Influence of Goal-Setting Skills on Students' Academic Performance in English Language in Enugu, Nigeria. *New Approach in Educational Research*, 3 (2), 93–99.
- Admiraal, W., Schenke, W., De Jong, L., Emmelot, Y., & Sligte, H. (2021). Schools as professional learning communities: in what ways may schools promote the professional development of their educators? *Professional development in education*, 47(4), 684-698.
- Alkadash, T. M., Almaamari, Q., Mohsen Al-Absy, M. S., & Raju, V. (2020). Theory of transformative leadership impacting employee performance within a supply chain model: the mediating role of job autonomy in Palestinian banks during the Covid-19 outbreak. *International Journal of Supply Chain Management (IJSCM)*[ISSN 2050-7399 (Online), 2051-3771 (Print)].
- Al-Kuwari, M. M., Du, X., & Koç, M. (2021). Assessment of educational efficacy within the framework of sustainable development: A case analysis of the Qatari educational system. *Prospects*, 1-15.
- Austin, K. S., Allen, G. E., Brunsting, N. C., Common, E. A., & Lane, K. L. (2023). Active supervision: enabling educators and family to assist students across diverse learning environments. *Mitigating Academic Failure: Alternative Education for Children and Youth*, 1-8.
- Ayo, L., & Fraser, C. (2008). The Four Constructs of Collegiality. *International Journal of Evidence-Based Coaching & Mentoring*, 6(1).

- Bakhda, S. (2006). *Administration and Assessment of Educational Institutions*. Nairobi: Oxford University Press, East Africa Ltd.
- Bakia, M., Shear, L., Toyama, Y., & Lasseter, A. (2012). *Comprehending the Consequences of Online Education on Academic Efficiency*. U.S. Department of Education, Office of Educational Technology.
- Bass B. M., Avolio B. J. (2000). *MLQ Multifactor Leadership Questionnaire*. Redwood City: Mind Garden.
- Boxall, P. (2003). Human Resource strategy and competitive advantage within the service industry. *Human Resource Management Journal*, 13(3), 5-20.
- Brauckmann, S., Pashiardis, P., & Ärlestig, H. (2023). Integrating context and educational leadership: Enhancing the professional development of school principals. *Professional development in education*, 49(1), 4-15.
- Brownfield, K. (2022). *A Quantitative Analysis of the Interrelationships between Psychological Safety, Collaborative Capacity, and School Climate in Middle Schools* (Doctoral dissertation, Lindenwood University).
- Brush, B. L., Mentz, G., Jensen, M., Jacobs, B., Saylor, K. M., Rowe, Z., Israel, B. A. and Lachance, L., & Lachance, L. (2020). A scoping literature analysis on the success of enduring community-based participatory research (CBPR) collaborations. *Health Education & Behavior*, 47(4), 556-568.
- Bush, T. (2020). Theories of educational leadership and administration. *Theories of Educational Leadership and Management*, 1-208.
- Cieminski, A. B. (2023). The Function of Principal Supervisors in Facilitating Succession Practices. *Succession Planning for School Administrators: Identifying High-Impact Practices, Programs, and Frameworks in P-12 Schools*, 89.

- Cirocki, A., & Farrell, T. S. (2019). Professional advancement of secondary school English as a Foreign Language educators: Voices from Indonesia. *System*, 85, 102111.
- Clark, P.Y. (2015). *Teachers as designers of self-directed learning*. In A. Hargreaves and G. Fullan (Eds.) *Understanding teacher development*. New York: Teachers College Press.
- Cornet, M., Huizinga, F., Minne, B. & Webbink, D. (2006). *Knowledge management*. (Kansrijk kennisbeleid). Den Haag: Cultureel Plan Bureau.
- Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, California: Sage Publications.
- Dhungana, N. (2020). Investigating the community's opinion of headmasters' transformative leadership in secondary schools in Nepal. *American Journal of Educational Research*, 8(9), 633-642.
- DuFour, R. (2002). *The learning-centered principal*. *Educational leadership*, 59(8), 12-15.
- Fatimah, H., & Syahrani, S. (2022). Leadership Approaches to Addressing Educational Challenges. *Indonesian Journal of Education (INJOE)*, 2(3), 282-290.
- Fauzi, M. A., Martin, T., & Ravesangar, K. (2021). The impact of transformational leadership on the entrepreneurial behavior of Malaysian students. *Entrepreneurship and Economic Theory Review*, 9(1), 89-103.
- Fernandez, L. A. L. (2023). *Instructional Leadership of Educators Assisting Students with Profound Disabilities: A Qualitative Descriptive Analysis* (Doctoral dissertation, Grand Canyon University).
- Fiedler, F. E. (1967). *A Theory of Leadership Effectiveness*. McGraw-Hill Series in Management.
- Fossheim, K. (2022). In what manner can non-elected politicians get democratic representation? *Policy & Politics*, 50(2), 243-260.

- Garba, A. S. (2010). Reorienting the educational system in Nigeria towards entrepreneurship development: A mechanism for poverty alleviation. *European Journal of Social Sciences*, 15(1), 140-150.
- Getange, K. N., & Obar, E. (2016). Consequences of Private Supplementary Tuition on Students' Academic Performance in Secondary Education in Awendo Sub-county, Migori County, Kenya. *International Journal of Novel Research in Education and Learning*, 3(3), 5-21.
- Gitau, E. W. (2010). The Collegiality of Principals and Its Impact on K.C.P.E. Performance in Public Schools in Kandara Division, Murang'a District, Kenya. Unpublished M.Ed. Project, University of Nairobi.
- Gore, J., & Rosser, B. (2022). Transcending content-centric professional development: impactful professional learning via authentic learning communities across several grades and disciplines. *Professional development in education*, 48(2), 218-232.
- Hallinger, P. (2018). Revealing obscured literature: A thorough evaluation of studies on educational leadership and management in Africa. *Educational Management Administration & Leadership*, 46(3), 362-384.
- Hallinger, P., & Hosseingholizadeh, R. (2020). Investigating instructional leadership in Iran: A mixed methods analysis of high- and low-performing principals. *Educational Management Administration & Leadership*, 48(4), 595-616.
- Han, I. (2022). Understanding the interplay between professional identity and metacognition among English teachers in pedagogical problem-solving. *Behavioral Sciences*, 12(2), 32.
- Hassan, A. (2011). *Lifelong learning: Implications for education policy*", Chapter 5, in *Lifelong Learning Policy and Research*. Portland Press.

- Hattie, J. (2009). *Visible learning. A synthesis of over 800 met analyses relating to performance*. Routledge, 270 Madison Avenue, New York, NY 10016
- Haug, B. S., & Mork, S. M. (2021). Translating 21st-century abilities from concept to classroom: What educators identify as beneficial professional development in response to emerging educational reform demands. *Teaching and Teacher Education*, 100, 103286.
- Hodge, K. (2019). *Analyzing the leadership approaches of superintendents inside Ohio's developmental disability system*. Youngstown State University.
- Hope, S. T., Abrams, L. M., & Marshall, D. T. (2022). Coaching during teacher residency programs: a method for professional learning and growth for practicing educators. *International Journal of Mentoring and Coaching in Education*, (ahead-of-print).
- Hoy, W. K., & Miskel, C. G. (1982). *Educational administration: Theory, research, and practice*.(pp. 185-219).
- Huang, R., Ritzhaupt, A. D., Sommer, M., Zhu, J., Stephen, A., Valle, N., Hampton, J., & Li, J. (2020). The impact of gamification in educational environments on student learning outcomes: A meta-analysis. *Educational Technology Research and Development*, 68, 1875-1901.
- Imants, J., & Van der Wal, M. M. (2020). A framework for educator autonomy in professional advancement and institutional transformation. *Journal of Curriculum Studies*, 52(1), 1-14.
- Irene, T. S., Chepkonga, S., & Mochama, J. (2020). The correlation between teachers' collegiality and students' academic performance in the KCPE within the Central Division of Narok North Sub-County, Kenya.

- Irungu, C. M. (2020). The impact of principals' instructional leadership practices on student performance in secondary schools in Murang'a and Kirinyaga Counties, Kenya. (Doctoral dissertation, Karatina University).
- Irungu, C., Kagema, J., & Gachahi, M. (2019). The impact of principals' oversight of instruction on enhancing student achievement.
- Jensen, M., Potočnik, K., & Chaudhry, S. (2020). A mixed-methods investigation of CEO transformative leadership and organizational performance. *European Management Journal*, 38(6), 836-845.
- Karakose, T., Polat, H., & Papadakis, S. (2021). Analyzing educators' viewpoints of the digital leadership roles and technological competencies of school principals during the COVID-19 pandemic. *Sustainability*, 13(23), 13448.
- Karari, J., Mukolwe, N., & Kimani, M. (2022). Personality Traits Related to Problem-Solving as Indicators of Academic Achievement among Gifted and Talented Students in Public Primary Schools in Nairobi County. *African Journal of Empirical Research*, 3(1).
- Kasneji, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., Hüllermeier, E. & Kasneji, G. (2023). ChatGPT for good? Regarding the opportunities and challenges presented by massive language models in the field of education. *Learning and Individual Differences*, 103, 102274.
- Katsarou, E., & Chatzipanagiotou, P. (2021). A Critical Analysis of Selected Literature Regarding Learner-Centered Interactions in Online Education. *Electronic Journal of e-Learning*, 19(5), 349-362.
- Kibue, A. W. (2013). *Transformational Leadership Management of Public Secondary School in Athi River Sub-county*. Unpublished M.Ed. Project, Nairobi, Mount Kenya University.

- Kimacia, P. (2012). *The correlation between principals' collegiality and the academic success of female students in the KCSE inside public secondary schools in Narok District, Kenya. Unpublished Master of Education Project.* University of Nairobi.
- Kimeu, J. M. (2010). Impact of secondary school principals' instructional leadership techniques on KCSE results in Kasikeu Division, Kenya. Unpublished M. Ed project University of Nairobi, Nairobi, Kenya.
- Kiplagat, P. K. (2012). Institutional determinants affecting head teachers' execution of curriculum modifications in secondary schools within Kipkelion District, Kenya (Doctoral dissertation, University of Nairobi, Kenya).
- Kiven, L., Nsaiboti, E. P., & Ateka, F. (2018). Leadership Competencies Employed by Principals to Improve Teacher Retention at Private Secondary Schools in Machakos County, Kenya.
- Kothari, C. R. (2005). *Research Methodology.* New International Publishers, New Delhi.
- Kukkar, A., Mohana, R., Sharma, A., & Nayyar, A. (2023). Forecasting student academic achievement based on their emotional health and engagement on diverse e-learning platforms. *Education and Information Technologies*, 1-30.
- Kumari, H. L. (2023). An Examination of Instructional Leadership Roles of Principals in Type 1AB and Type 1C Schools in Sri Lanka.
- Lacka, E., Wong, T. C., & Haddoud, M. Y. (2021). Can digital technology enhance pupils' efficiency? Investigating the function of Virtual Learning Environments and Social Media utilization in Higher Education. *Computers & Education*, 163, 104099.
- Lee, D. H. L. (2023). When societal hierarchy intersects with hierarchical school culture: Implications for educational leaders in Hong Kong, China. *Educational Management Administration & Leadership*, 17411432231158299.

- Leithwood, K. (2021). An examination of data about equitable school leadership. *Education Sciences*, 11(8), 377.
- Leithwood, K., & Jantzi, D. (2008). Connecting leadership to student learning: The impact of leader efficacy. *Quarterly Journal of Educational Administration*, 44(4), 496-528.
- Leithwood, K., Seashore, K., Anderson, S., & Wahlstrom, K. (2004). Review of research: The impact of leadership on student learning.
- Liu, Y., Bellibaş, M. Ş., & Gümüş, S. (2021). The influence of instructional leadership and distributed leadership on teacher self-efficacy and work satisfaction: Mediating roles of a supportive school culture and teacher collaboration. *Educational Management Administration & Leadership*, 49(3), 430-453.
- Locke, E. A., & Latham, G. P. (2002). Developing a practically applicable theory of goal setting and task motivation: A 35-year journey. *American psychologist*, 57(9), 705.
- Louis, K. S., & Kruse, S. D. (2021). Fostering Community in Reform: Visual Representations of Organizational Learning in Urban Schools 1. In *Organizational learning in schools* (pp. 17-45). Taylor & Francis.
- Lyonga, N. A. N. (2019). Transformational Leadership Skills of Principals and Job Satisfaction of Teachers in Secondary Schools in the Meme Division of Cameroon. *European Journal of Education Studies*.
- Mahoney, J. L., Weissberg, R. P., Greenberg, M. T., Dusenbury, L., Jagers, R. J., Niemi, K., Schlinger, M., Schlund, J., Shriver, T.P., VanAusdal, K. & Yoder, N. (2021). Systemic social and emotional learning: Advancing educational achievement for all children from preschool to high school. *American Psychologist*, 76(7), 1128.
- Martin, A., Tarnanen, M., & Tynjälä, P. (2021). Accounts of professional growth within a teachers' creative writing collective. *New Writing*, 18(4), 480-495.

- Martins, D. S., Schreiber, B. R., & You, X. (Eds.). (2023). *Writing on the Wall: Literary Education and Opposition to Isolationism*. University Press of Colorado.
- Maruf, I. R., Nugroho, B. S., Kurniawan, A., Musiafa, Z., & Satria, E. (2022). Virtual Learning Applications: Optimal Instructional Leadership Strategies in the Digital Era to Enhance Student Learning Outcomes. *Jurnal Iqra': Kajian Ilmu Pendidikan*, 7(1), 32-43.
- Mbuthia, D. (2020). The difficulty of reconciling national and sub-national identities through heritage creation in post-devolution Kenya.
- McGee, E. O., & Martin, D. B. (2011). "You would not comprehend the lengths I must traverse to demonstrate my intellectual worth!" Management of stereotypes among academically proficient Black students in mathematics and engineering. *American Educational Research Journal*, 48(6), 1347-1389.
- McKeown, D., Wijekumar, K., Owens, J., Harris, K., Graham, S., Lei, P., & FitzPatrick, E. (2023). Professional development for evidence-based writing instruction: Enhancing fourth-grade performance. *Contemporary Educational Psychology*, 102152.
- Melissa, T., & Kaylan, C. (2015). Is Effective Teacher Professional Development merely an illusion?. *Journal on Education Policy Programme*. New America.
- Ministry of Education (2019). *A report on the academic achievement of secondary schools*. Nairobi: Government Printer.
- Mirkamali, M. (2011). *Management and publication in education: Leadership*. Tehran: Ramin publications.
- Muasya, P. M. (2018). *The impact of instructional collegiality on academic performance in public secondary schools in Machakos County, Kenya*. (Doctoral dissertation, Kenyatta University).
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative & qualitative approaches*, 2(2). Nairobi: Acts Press.

- Mulang, H. (2021). The Impact of Competencies, Work Motivation, and Learning Environment on Human Resource Performance. *Golden Ratio of Human Resource Management*, 1(2), 84-93.
- Mumo, R. M. (2014). Correlation between the Attributes of Instructional Supervisors and Students' Academic Performance in Kenya Certificate of Secondary Education from Public Schools in Machakos County, Kenya.
- Murphy, J. T., & Levinson, M. (2023). *Instructional Moves for Powerful Teaching in Higher Education*. Harvard Education Press.
- Musungu, L. L. & Nasongo, J. W. (2014). The principal's instructional influence on academic achievement in secondary schools within Vihiga District, Kenya. *Educational Research and Review*, Vol. 3 (10), 316-323
- Mutiso, K. B., Kirimi, F., & Itegi, F. (2020). Impact of Principals' Instructional Supervisory Practices on Students' Academic Achievement in Public Secondary Schools in Machakos County, Kenya. *International Journal of Advanced Research*, 8(03), 621-631.
- Mutuku, A. W., Arasa, R., & Kinyili, J. (2019). The moderating influence of educational infrastructure on the correlation between human resource management methods and academic achievement in secondary schools within Machakos County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(9), 464-494.
- Mutuku, A. W., Arasa, R., & Kinyili, J. (2021). The impact of staff recruitment and selection processes on the academic performance of secondary schools in Machakos County, Kenya. *Business Administration and Management Research Journal*, 3 (2), 264, 290.

- Mutuku, G. K. (2015). Initiatives of the Kenya National Union of Teachers impacting the delivery of quality education in elementary schools within Machakos County, Kenya (Doctoral dissertation).
- Mutula, C. M. (2012). The correlation between the leadership conduct of public secondary school principals and the motivational levels of teachers in Machakos District, Kenya. Unpublished M. Ed project. Nairobi. Mount Kenya University.
- Naz, A., Awan, R. N., & Nasreen, A. (2009). A comparative analysis of instructional leadership in public and private schools in Punjab. *Journal of Educational Research*, 12(2), 53-267.
- Nerlino, E. (2020). A theoretical grounding of teacher leadership. *Journal of Professional Capital and Community*.
- Ngina, D., & Kalai, M. J. (2016). Impact of Principals' Transformational Corporate Leadership Practices on Teachers' Job Commitment in Public Secondary Schools in Athi River Sub-County, Machakos County, Kenya. *African Journal of Education and Practice*, 7(2), 57 - 79.
- Nicolopoulou, A., & Smith, P. K. (2022). *Social Play and Social Development*. The Wiley-Blackwell Handbook of Childhood Social Development, 538-554.
- Nyamongo, D. N., Sang, A., Nyaoga, R. B., & Matoke, Y. K. (2014). The correlation between school-related factors and student performance in the Kenya Certificate of Secondary Examination in Masaba North District, Kenya. Thesis, University of Nairobi.
- Nzuve, S. N. (2011). *Components of Organizational Behavior*, University of Nairobi Press, Nairobi.
- Oder, T., & Eisenschmidt, E. (2018). Educators' assessments of school climate as a reflection of their attitudes of effective pedagogy. *Cambridge Journal of Education*, 48(1), 3-20.

- Okumbe, J. (2001). *Human Resources Management: An Educational Perspective*. Nairobi: Educational Development and Research Bureau, 2001.
- Okumbe, J. A. O. (1998). *Educational Management: Theory and Practice*. African Books Collective Ltd., The Jam Factory, 27 Park End Street, Oxford OX1 1HU, United Kingdom (paperback: ISBN-9966-846-42-5, \$18).
- Olmo-Extremera, M., Townsend, A., & Domingo Segovia, J. (2022). Resilient leadership among principals: case studies of underperforming schools in Spain. *International Journal of Leadership in Education*, 1-20.
- Owan, V. J., Johnson, A. J., Osim, R. O., Anagbogu, G. E., Otu, B. D., Undie, S. B., Ogabor, J. O., Apie, M. A. & Ekere, S. C. (2023). Supervisory Practices in Educational Institutions and Teacher Job Effectiveness Analyzed Through Bootstrapping in Covariance-Based Structural Equation Modeling. *Cogent Education*, 10(1), 2168406.
- Oyugi, M., & Gogo, J. O. (2019). The impact of principals' leadership styles on students' academic performance in secondary schools within Awendo Sub-County, Kenya.
- Özdemir, N. (2019). Principal leadership and student performance: Mediated paths of professional community and instructional practices of teachers. *KEDI Journal of Educational Policy*, 16(1).
- Pan, H. L. W. (2023). Learner-Centered Instruction Facilitated by Teacher Learning Communities: The Intermediary Role of Teacher Self-Efficacy and Collaborative Professional Development. *Sustainability*, 15(6), 4850.
- Pasternak, D. L., Harris, S. D., Lewis, C., Wolk, M. A., Wu, X., & Evans, L. M. (2023). Implementing culturally responsive practices: Consequences for ongoing education and teacher empowerment. *Teaching and Teacher Education*, 122, 103976.

- Qadach, M., Schechter, C., & Da'as, R. A. (2020). Instructional leadership and teachers' intention to depart: The mediating influence of collective teacher efficacy and a shared vision. *Educational Management Administration & Leadership*, 48(4), 617-634.
- Quinn, D. M. (2002). The impact of principal leadership behaviors on instructional practices and student engagement. *Journal of Educational Administration*, 40(5), 447-467.
- Rahman, A. (2021). The Leadership Function of School Principals in Virtual Education during the Covid-19 Pandemic. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 5(1), 165-175.
- Rivas, G. (2023). Leadership Strategies Employed by Elementary Principals to Address the Academic and Non-Academic Requirements of English Learners (Doctoral dissertation, Virginia Tech).
- Robinson, V. M., Lloyd, C. A., & Rowe, K. J. (2008). The impact of leadership on student outcomes: An examination of the varying effects of leadership styles. *Educational Administration Quarterly*, 44(5), 635-674.
- Roorda, D. L., Zee, M., & Koomen, H. M. (2021). Remember the reliance of students on teachers! A meta-analysis examining the relationships between students' school adjustment and the moderating influence of student and teacher variables. *Attachment & Human Development*, 23(5), 490-503.
- Sahlberg, P. (2021). Finnish Lessons 3.0: What insights can the global community derive from the educational reforms in Finland? Teachers College Press.
- Salleh, M. J. (2013). Optimal strategies for articulating and conveying educational objectives by principals of cluster secondary schools in Malaysia. *International Journal of Arts and Commerce*, 2(2), 33-44.

- Samoei Sr, C. J. (2015). Instructional Supervisory Role of Principals and Its Influence on Students' Academic Performance in Public Secondary Schools in Nandi North District, Nandi County, Kenya (Doctoral dissertation).
- Sepuru, M., Musonda, I., & Okoro, C. S. (2021). An evaluation of the factors affecting collaboration and their impact on organizational performance: a review. In Collaboration and Integration within Construction, Engineering, Management, and Technology: Proceedings of the 11th International Conference on Construction in the 21st Century, London 2019 (pp. 321-325). Springer International Publishing.
- Sewagegn, A. A. (2020). The connection between learning objectives and assessments: its impact on significant student learning. *Universal Journal of Educational Research*, 8(11), 5044-5052.
- Shen, J., Wu, H., Reeves, P., Zheng, Y., Ryan, L., & Anderson, D. (2020). The correlation between teacher leadership and student achievement: A meta-analysis. *Educational Research Review*, 31, 100357.
- Singh, J., Evans, E., Reed, A., Karch, L., Qualey, K., Singh, L., & Wiersma, H. (2022). Online, hybrid, and in-person education as perceived by teachers, students, administrators, and instructional designers: Insights gained and future directions for the post-vaccine and post-pandemic/COVID-19 era. *Journal of Educational Technology Systems*, 50(3), 301-326.
- Slapac, A., Coppersmith, S. A., & Cheng, J. (2023). Development of global competency as perceived by graduate students in action research courses. *At school in the world: Developing globally engaged teachers*, 98-118.
- SMASSE project (2007). Report on the survey of the influence of the SMASE INSET in Kenya. SMASSE, Nairobi.

- Stephen, S. (2014). The significance of education for sustainable development. Available at <http://www.cgdev.org/files/2844 file Educaiton.Pdf> (Accessed December; 2017).
- Sule, M. A., Eyiene, A., & Egbai, M. E. (2015). Supervisory Instructional Practices and Teacher Effectiveness in Public Secondary Schools in Calabar South Local Government Area, Cross River State, Nigeria. *Journal of Education and Practice*, 6(23), 43-47.
- Suliman, M. A., Abdou, A. H., Ibrahim, M. F., Al-Khaldy, D. A. W., Anas, A. M., Alrefae, W. M. M., & Salama, W. (2023). The Impact of Green Transformational Leadership on Employees' Environmental Performance in the Hotel Industry: Is Green Work Engagement Significant? *Sustainability*, 15(3), 2690.
- Sushila, B., & Bakhda, M. (2004). *Management and evaluation of schools*. Nairobi: Oxford University Press, East African Ltd.
- Suyatno, S., Wantini, W., Pambudi, D. I., Muqowim, M., Tinus, A., & Patimah, L. (2023). Enhancing Pre-Service Teachers' Professionalism through the Exchange of Experiences in the Kampus Mengajar Program. *Education Sciences*, 13(2), 143.
- Sybil, J., Isaac, O., & Oludayo, S. (2000). *Introduction to communication within commercial and organizational contexts*. Ibadan: Spectrum Books Ltd.
- Tindle, R., Hamza, E. G. A., Helal, A. A., Ayoub, A. E. A., & Moustafa, A. (2021). A Systematic Review of the Psychosocial Correlates of Academic Performance.
- Tomaszek, K. (2020). What is the significance of involving kids in school activities? Investigating the mediating effect of student school participation on the links between student alienation and school burnout. *Polish Psychological Bulletin*, 51(2).
- Tus, J. (2020). An Evaluation of School Culture and Its Impact on Student Academic Performance. *IJARW* | ISSN (O)-2582-1008 May, 1(11).

- Unger, F., & Sann, U. (2023). Advocating for Self-Determination and Motivation as Leadership Competencies: A Didactic Approach to Enhance Autonomy Support and the Significance of Role Models in Social Work Management Education. In the Handbook of Applied Teaching and Learning in Social Work Management Education: Theories, Methods, and Practices in Higher Education (pp. 309-337). Cham: Springer International Publishing.
- Vlachopoulos, D., & Makri, A. (2019). A framework analysis of effective practices in online communication and engagement within distance higher education. *International Review of Education*, 65(4), 605-632.
- Walberg, H., (2012). A psychological framework for educational results and efficiency. *Psychological and Education* pp. 81-110
- Wamulla, O. J. (2013). Determinants of Academic Performance in Kenya Certificate of Secondary Education from private institutions in the Westlands Division of Nairobi, Kenya. Kenya. ProjectReport. University of Nairobi.
- Wang, W., Na, X., Cao, D., Gong, J., Xi, J., Xing, Y., & Wang, F. Y. (2020). A review and viewpoints on decision-making in shared control of driver automation. *IEEE/CAA Journal of Automatica Sinica*, 7(5), 1289-1307.
- Watson, P., Partington, G., Gray, J., & Mack, L. (2006). Culture, communities, and students. Perth, WA: Aboriginal Education and Training Council.
- Weuffen, S., Burke, J., Goriss-Hunter, A., Plunkett, M., & Emmett, S. (2023). Advancing a sustainable, adaptive, inclusive, and varied global educational future. Inclusion, Equity, Diversity, and Social Justice in Education: A Critical Examination of the Sustainable Development Goals (pp. 277-286). Singapore: Springer Nature Singapore.

- Wilson, K. (2012). A research on student performance in classes that establish goals and engage in self-monitoring of their performance. (Doctoral dissertation, Northwest Missouri State University).
- Wirba, A. V. (2021). Transforming Cameroon into a knowledge-based economy (KBE): the significance of education, particularly higher education. *Journal of the Knowledge Economy*, 1-31.
- Yigletu, A., Michael, K., & Atnafu, M. (2023). The impact of formative assessment on the higher-order thinking abilities of pre-service mathematics educators in algebra. *Journal of Pedagogical Research*, 7(1), 187-202.
- Yokuş, G. (2022). Formulating a framework for educational leadership in higher education amid the COVID-19 pandemic: A grounded theory investigation. *Participatory Educational Research*, 9(1), 362-387.
- Yoon, K. S., Duncan, T., Lee, S. W. Y., Scarloss, B., & Shapley, K. L. (2007). Evaluating the impact of teacher professional development on student performance. *issues& answers. rel 2007-no. 033. Regional Educational Laboratory Southwest (NJ1)*.
- Yusuf, M. O., Muhammed, U. D., & Kazeem, A. O. (2014). Leadership style management: A strategy for enhancing organizational performance and effectiveness in Nigeria. *International Journal of Humanities Social Sciences and Education*, 1(2), 17-29.
- Zepeda, S. J. (2013). *Instructional leadership: Applying tools and concepts*. Routledge.
- Zhan, X., & Cao, M. (2023). Contextual imperatives for effective collaborative instructional leadership: a fuzzy-set qualitative comparative analysis. *Journal of Educational Administration*, (ahead-of-print).
- Zhao, C., Tian, G., Wen, Z., & Gao, X. (2021). The association between charismatic leadership and millennial employee innovation performance is mediated by individuals'

identification with leadership, profession, and organization. *Social Behavior and Personality: an international journal*, 49(1), 1-11.



APPENDICES

Appendix I: Letter of Introduction

April, 2020

Dear Sir/Madam,

RE: PERMISSION TO CARRY OUT RESEARCH

I am currently pursuing a Master of Education degree with a specialization in Administration, Leadership, and Education at Mount Kenya University. My research focuses on investigating how principals' instructional leadership influences academic performance in public secondary schools located in Athi River Sub-county, Machakos County, Kenya. You have been selected to participate in this study, and I kindly invite your involvement. Please rest assured that any information you provide will be used strictly for academic purposes, and your identity will be kept confidential in the final research report. Should you wish to receive the study findings, they can be shared with you upon request. Your cooperation and contribution to this research are greatly appreciated. Thank you in advance for your participation.

Yours faithfully,

James Mavindu

Appendix II: Informed Consent Form

Dear respondent,

I am James Mavindu, currently pursuing a Master of Education degree in Administration, Leadership, and Management at Mount Kenya University. As part of my academic research, I am investigating the influence of Principals' Instructional Leadership on Academic Performance in public secondary schools within Athi River Sub-county, Machakos County, Kenya. Your participation in this study is requested, and your responses to a set of questions would greatly contribute to the research. Please rest assured that your privacy and confidentiality will be rigorously upheld throughout the study, and your involvement is entirely voluntary. You have the option to withdraw from the study at any time without any obligation. Kindly note that there is no compensation for participating. If you agree to participate, please signify your consent below. If you have any concerns or wish to discuss any aspect of the study, please feel free to contact me directly;

THE CHAIRMAN

ERC MKU

P. O. Box 342-01000

THIKA

Participant:

Code of Participant

Signature

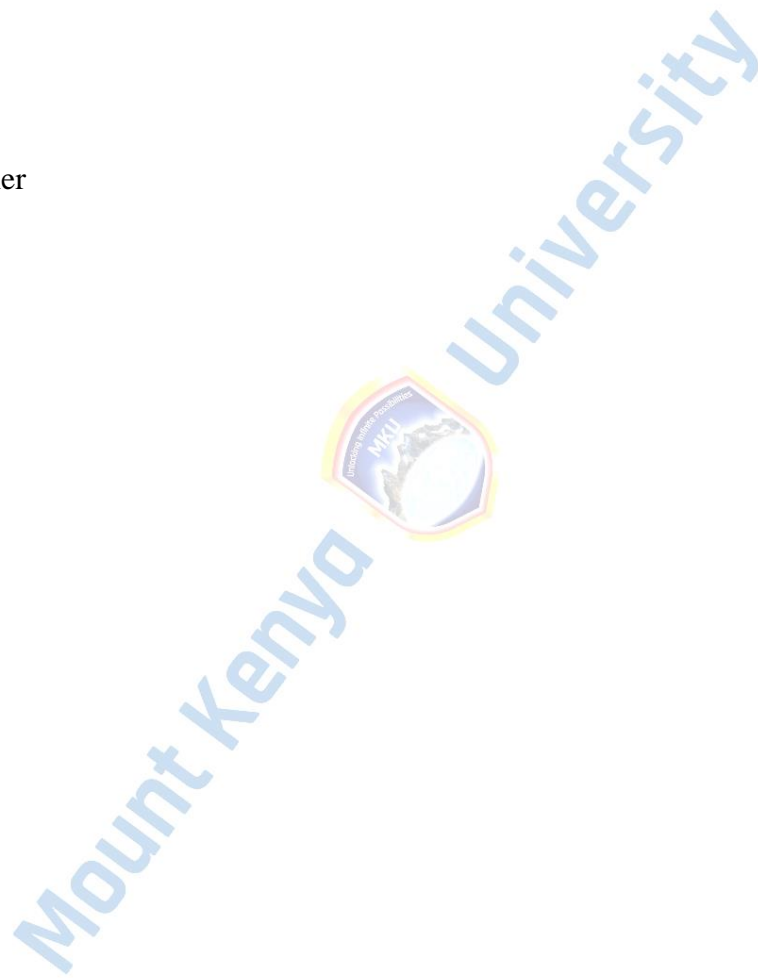
Date

Researcher:

Name of Researcher

Signature

Date



Appendix III: Questionnaire for Secondary School Teachers

Dear respondent,

I am a researcher pursuing a Master of Education in Administration, Leadership, and Management at Mount Kenya University. My current study focuses on examining how Principals' instructional leadership influences Academic Performance in public secondary schools in Athi River Sub-county, Machakos County, Kenya. Your participation in this research is valued, and all information provided will be treated confidentially and used exclusively for this study.

Section A: General Information

Instruction: Please tick against your most appropriate answer and fill in the spaces provided.

1. Gender

Male [] Female []

2. Age

Below 24 yrs [] 25-30yrs [] 31-35yrs [] 36-40yrs []
41-45yrs [] 46-50yrs [] Above 50yrs []

3. Highest level of educational qualification

Diploma in education [] Bachelor's degree [] Master's degree []
PhD []

4. Teaching experience

Below 1yr [] 2-5yrs [] 6-10yrs [] 11-15yrs []
16-20yrs [] Above 20yrs []

5. Length of stay in the same school

1-5yrs [] 6-10yrs [] 11-15yrs [] 16-20yrs []
Above 20yrs []

The principal spearheads school-wide staff development initiatives aimed at enhancing classroom practices.				
The principal fosters a culture where Heads of Departments (HODs) regularly engage in meetings with teachers, sharing insights and knowledge gained from attended courses to enrich CLA classroom teaching.				

Section C: Principals’ promotion of collaborative practices and Students’ Academic Performance in Public Secondary Schools

1. Rate your level of agreement with the following statements on the influence of the principal’s promotion of collaborative practices on academic performance.

Key: **SD**-Strongly Disagree **D**-Disagree **A**-Agree **SA**-Strongly Agree

Test Items	SD	D	A	SA
	1	2	3	4
The principal elevates cooperative strategies within the departments				
The principal includes educators in the decision-making procedure				
The principal fosters a shared vision, and efficient teams, and cultivates dedication				
The principal establishes diverse measures to ensure a cohesive working rapport				
The principal facilitates teacher networking and connections to foster cooperation				

Section D: Principals’ communication of school goals and Students’ Academic Performance in Public Secondary Schools

1. Rate your level of agreement with the following statements on the influence of principals’ communication of school goals on academic performance

Key: **SD**-Strongly Disagree **D**-Disagree **A**-Agree **SA**-Strongly Agree

Test Items	SD	D	A	SA
	1	2	3	4
The principal orchestrates school programs with the intent of accomplishing established objectives.				
The principal engages stakeholders in defining targets and objectives for the school.				
The principal elucidates school curriculum programs to the teaching staff.				
The principal communicates the school’s vision and mission to both students and teachers.				
The principal collaboratively creates a comprehensive school work plan in consultation with various stakeholders.				

Section E: Principals’ supervision of teaching and Students’ Academic Performance in Public Secondary Schools

1. Rate your level of agreement with the following statements on the influence of principals’ supervision of teaching and academic performance

Key: **SD**-Strongly Disagree **D**-Disagree **A**-Agree **SA**-Strongly Agree

Test Items	SD	D	A	SA

	1	2	3	4
The principal reviews students' exercise books following supervision activities.				
The principal provides valuable and constructive feedback subsequent to supervision.				
The principal regularly performs classroom observations on teachers.				
The principal proposes innovative approaches and instructional methods following supervision sessions.				
The principal ensures that teachers create and implement well-structured schemes of work.				

Thank you

James Mavindu

Appendix IV: Questionnaire for Principals

Dear respondent,

The researcher, currently pursuing a Master of Education degree in Administration, Leadership, and Management at Mount Kenya University, is conducting a study on the influence of Principals' instructional leadership on Academic Performance in Public Secondary Schools in Athi River Sub-county, Machakos County, Kenya. Your responses are treated confidentially and utilized solely for this research.

Section A: General Information

1. **Gender** Male [] Female []

2. **Age**
Below 24 yrs [] 25-30yrs [] 31-35yrs [] 36-40yrs []
41-45yrs [] 46-50yrs [] Above 50yrs []

3. **Highest level of educational qualification**
Diploma in education [] Bachelor's degree [] Master's degree []
PhD []

4. **Teaching experience**
Below 1yr [] 2-5yrs [] 6-10yrs [] 11-15yrs []
16-20yrs [] Above 20yrs []

5. **Leadership experience**
Below 1yr [] 2-5yrs [] 6-10yrs [] 11-15yrs []
16-20yrs [] Above 20yrs []

6. **Length of stay in the same school**
1-5yrs [] 6-10yrs [] 11-15yrs [] 16-20yrs []
Above 20yrs []

Section B: Students' Academic Performance in Public Secondary Schools

1. Please, indicate the academic performance of your secondary school in KCSE for the last six years (2017-2022)

Year of Examination	A.	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	KCSE mean
2022													
2021													
2019													
2018													
2017													

Section C: Promotion of teachers’ professional development and Students’ Academic Performance in Public Secondary Schools

Rate your level of agreement with the following statements on teachers’ professional development programs

Key: **SD**-Strongly Disagree **D**-Disagree **A**-Agree **SA**-Strongly Agree

Statement	SD	D	A	SA
	1	2	3	4
I prioritize the inclusion of funds dedicated to staff professional development within the school’s annual budget allocation.				
The principal actively motivates and supports teachers in participating in courses to elevate their professional skills				
I strategically organize workshops and internal training sessions, aligning them with teachers’ instructional requirements.				
I spearhead school-wide staff development initiatives aimed at enhancing classroom practices.				

I foster a culture where Heads of Departments (HODs) regularly engage in meetings with teachers, sharing insights and knowledge gained from attended courses to enrich classroom teaching.				
--	--	--	--	--

Section D: Principals' promotion of collaborative practices and Academic Performance

Rate your level of agreement with the following statements on the influence of your promotion of collaborative practices on academic performance.

Key: **SD**-Strongly Disagree **D**-Disagree **A**-Agree **SA**-Strongly Agree

Statement	SD	D	A	SA
	1	2	3	4
I elevate cooperative strategies within the departments				
I include teachers in the decision-making procedure				
I foster a shared vision, and efficient teams, and cultivate dedication				
I establish diverse measures to ensure a cohesive working rapport				
I facilitate teacher networking and connections to foster cooperation				

Section E: Principals' communication of school goals and Academic Performance

Rate the extent to which you agree with the following statements designed to determine the influence of communication of school goals on academic performance

Key: **SD**-Strongly Disagree **D**-Disagree **A**-Agree **SA**-Strongly Agree

Statement	SD	D	A	SA
	1	2	3	4
I orchestrate school programs with the intent of accomplishing established objectives.				
I engage stakeholders in defining targets and objectives for the school.				
I elucidate school curriculum programs to the teaching staff.				
I communicate the school's vision and mission to both students and teachers.				
I collaboratively create a comprehensive school work plan in consultation with various stakeholders.				

Section F: Principals' supervision of teaching and Academic Performance

1. Rate your level of agreement with the following statements on the influence of your supervision of teaching and academic performance

Key: **SD**-Strongly Disagree **D**-Disagree **A**-Agree **SA**-Strongly Agree

Statement	SD	D	A	SA
	1	2	3	4
I review students' exercise books following supervision activities.				
I provide valuable and constructive feedback subsequent to supervision.				

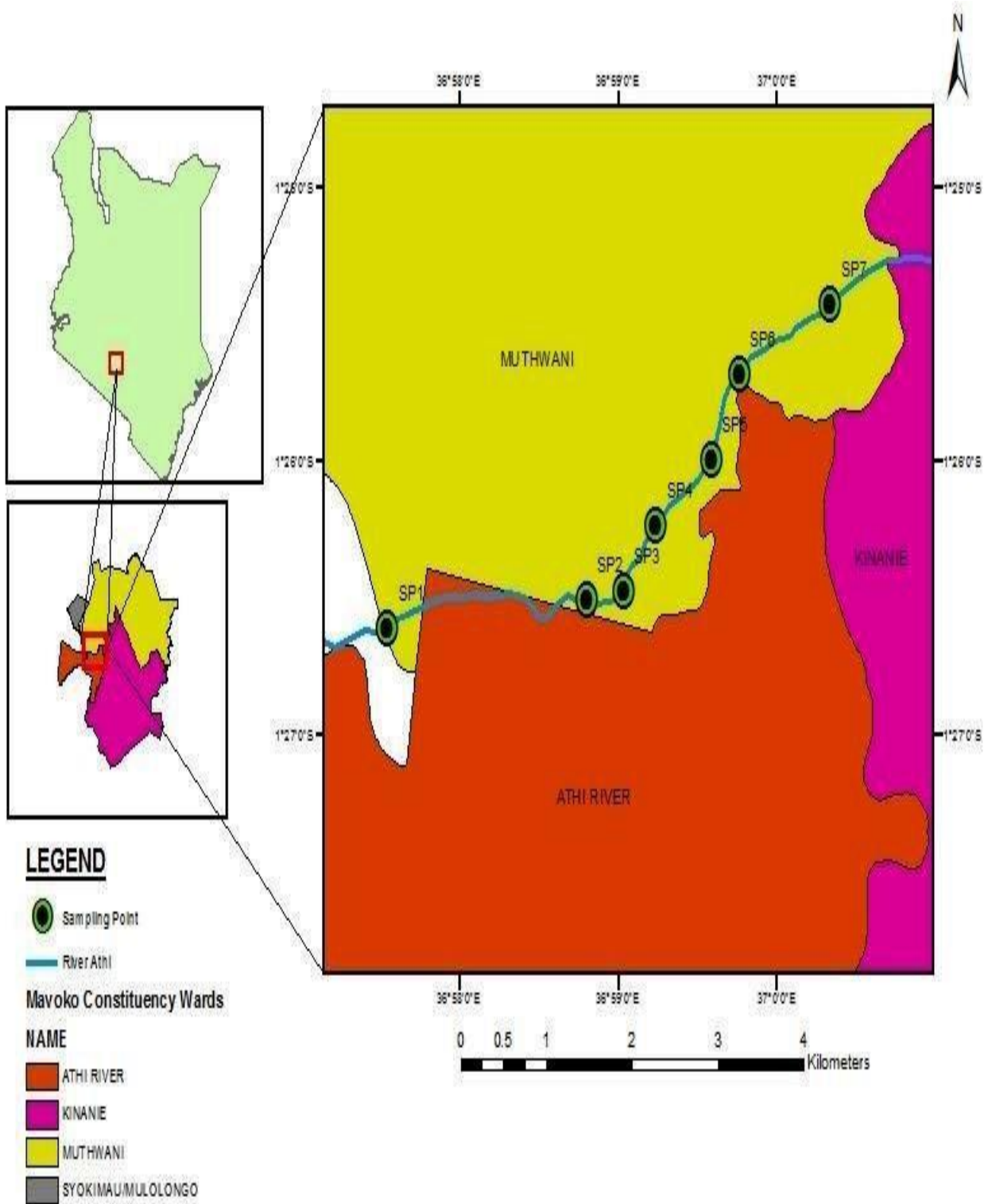
I regularly perform classroom observations on teachers.				
I propose innovative approaches and instructional methods following supervision sessions.				
I ensure that teachers create and implement well-structured schemes of work.				

Thank you

James Mavindu




Appendix V: Map of Mavoko Constituency Showing Athi River Sub-County



Source: IEBC (2012)

Appendix VI: Ethical Approval Letter



Mount Kenya University

REF: MKU/ISERC/2863
TO: JAMES MAVINDU
REG: MED/2018/40640

Date: 16 June 2023

Dear Sir/Madam,

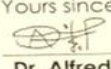
RE: INFLUENCE OF PRINCIPALS' INSTRUCTIONAL LEADERSHIP ON ACADEMIC PERFORMANCE AMONG PUBLIC SECONDARY SCHOOLS AT ATHI RIVER SUB-COUNTY IN MACHAKOS COUNTY, KENYA

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **1907**. The approval period is **16/06/2023 - 15/06/2024**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including informed consents, study instruments, MTA will be used
- ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

The Chairman
Mount Kenya University
Ethics Review Committee
P.O. Box 342 - 0100, Thika

Main Campus, General Kago Road, P.O. Box 342-01000 Thika.
Tel: 020-2878 000, Cell: +254 709 153 000
Email: info@mku.ac.ke Web: www.mku.ac.ke

he National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
 - i. Endanger national security
 - ii. Adversely affect the lives of Kenyans
 - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
 - iv. Result in exploitation of intellectual property rights of communities in Kenya
 - v. Adversely affect the environment
 - vi. Adversely affect the rights of communities
 - vii. Endanger public safety and national cohesion
 - viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and
Innovation(NACOSTI),
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
Telephone: 020 4007000, 0713788787, 0735404245
E-mail: dg@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix VIII: Ministry of education, state department of early learning and basic education research authorization



REPUBLIC OF KENYA

MINISTRY OF EDUCATION
State Department of Early Learning & Basic Education

Telegrams: *SCHOOLING*Machakos
Telephone: Machakos
Fax: Machakos
Email – cdemachakos@yahoo.com
When replying please quote

OFFICE OF THE
COUNTY DIRECTOR OF EDUCATION
EDUCATION
P. O. BOX 2666 – 90100
MACHAKOS

MKS/ED/CDE/R/4/VOL.4/294

Date: 11th July, 2023

Mavindu James
Mt. Kenya University
P.O BOX 66339-00800
NAIROBI

RE: RESEARCH AUTHORIZATION

Reference is made to the letter from National Commission for Science, Technology and Innovation Ref: **NACOSTI/P/23/27281** dated **30th June, 2023**. You are hereby authorized to carry out your research on **“Influence of Principals’ instructional leadership on academic performance among public secondary schools at AthiRiver Sub-County, Machakos County, Kenya”** for a period ending **30th June 2024**.



FOR COUNTY DIRECTOR OF EDUCATION - MACHAKOS
Date:
MINISTRY OF EDUCATION
cdemachakos@yahoo.com

SIMON NJIRU
FOR: COUNTY DIRECTOR OF EDUCATION
MACHAKOS.



MINISTRY OF EDUCATION
STATE DEPARTMENT OF EARLY LEARNING & BASIC EDUCATION

Telegrams: "SCHOOLING" Athi-River

Telephone:

When replying please quote
REF: ATR/ED/G/65/VOL.2




SUB-COUNTY EDUCATION OFFICE
ATHI- RIVER
P.O BOX 114-00204
ATHI-RIVER

Date: 18th JULY, 2023

MAVINDU JAMES
MT.KENYA UNIVERSITY
P.O. BOX 66339-0800
NAIROBI

RE: RESEARCH AUTHORISATION

Reference is made to the letter from National Commission for Science, Technology and Innovation Ref: NACOSTI/P/23/27281 dated 30th June, 2023 and from County Director of Education-Machakos Ref: MKS/ED/CDE/R/4/VOL.4/294 dated 11th July, 2023. You are hereby authorized to carry out your research on "Influence of Principals' Instructional leadership on Academic Performance among public secondary schools at Athi-River sub-county, Machakos, Kenya" for a period ending 30th June, 2024.


OINA PETER (MR.)
SUB-COUNTY DIRECTOR OF EDUCATION
ATHI-RIVER





**OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR AND NATIONAL ADMINISTRATION
STATE DEPARTMENT FOR INTERNAL SECURITY AND NATIONAL
ADMINISTRATION**

Telephone: 21009 and 21983 - 90100
Email Address: cc.machakos@interior.go.ke
Fax No. 044-21999
When replying please quote:

OFFICE OF THE COUNTY COMMISSIONER
P.O. Box 1 - 90100
MACHAKOS

REF: CC/ST/ ADM 5/9 VOL. IV /188

11th July, 2023

The Deputy County Commissioner
ATHI RIVER SUB-COUNTY

RE: RESEARCH AUTHORIZATION - MR. MAVINDU JAMES

The National Commission for Science, Technology and Innovation has authorized the above mentioned student to carry out a research on **"Influence of Principals' Instructional Leadership on Academic Performance Among Public Secondary Schools"** at Athi-River Sub-County in Machakos County - Kenya, for the period ending **30th June 2024**.

Please be notified and accord him the necessary assistance.

ANTHONY NYONGESA
For: COUNTY COMMISSIONER
MACHAKOS COUNTY

Appendix IX: Similarity Index



Page 1 of 167 - Cover Page Submission ID trn:oid:::1:3182712858

JAMES MAVINDU

**INFLUENCE OF PRINCIPALS' INSTRUCTIONAL LEADERSHIP ON
ACADEMIC PERFORMANCE AMONG PUBLIC SECONDARY ...**

 MBA 2025

 MASTERS

 Mount Kenya University

Document Details

Submission ID

trn:oid:::1:3182712858

Submission Date

Mar 14, 2025, 9:03 AM GMT+3

Download Date

Mar 14, 2025, 9:10 AM GMT+3

File Name

JAMES_MAVINDU_MED_THESIS_2025.docx

File Size

2.9 MB

153 Pages

32,114 Words

198,056 Characters

16% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Exclusions

2 Excluded Sources

Match Groups

545 Not Cited or Quoted 22%

Matches with neither in-text citation nor quotation marks

17 Missing Quotations 0%

Matches that are still very similar to source material

27 Missing Citation 2%

Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%

Matches with in-text citation present, but no quotation marks

Integrity Flags

0 Integrity Flags for Review

No suspicious text manipulations found.

Top Sources

20% Internet sources

11% Publications

8% Submitted works (Student Papers)



Mount Kenya University

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.