

**PRINCIPALS' PERFORMANCE CONTRACTING AND ITS EFFECTS ON
ACADEMIC PERFORMANCE OF STUDENTS IN PUBLIC
SECONDARY SCHOOLS IN KALAMA SUB-COUNTY,
MACHAKOS COUNTY, KENYA**

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**A Research Project Submitted to the School of Education in Partial Fulfilment of
the Requirement for the Award of Degree of Master of Education in
Educational Administration of Machakos University, Kenya**

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DECLARATION

This project is my own work and has been developed consequent to personal reading and research. I confirm that it has not been submitted to any other university or institution for conferment of a degree or any other award.

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LIST OF ABBREVIATIONS AND ACCRONYMS

AGM	Annual General Meeting
BOM	Board of Management
CAPAM	Commonwealth Association for Public Administration and Management
CEB	County Education Board
CEOs	Chief Executive Officers
CD	County Director
COCE	Code of Conduct and Ethics
CORT	Code of Regulation of Teachers
CSO	Curriculum Support Officers
ERS	Economic Recovery Strategy
GPRA	Government Performance and Results Act
GOK	Government of Kenya
HOI	Head of Institution
KCSE	Kenya Certificate for Secondary Education
KESSHA	Kenya Secondary School Heads Association
MOE	Ministry of Education
MOU	Memorandum of Understanding
NPM	New Public Management
OECD	Organization of Economic Cooperation and Development
PC	Performance Contracting
POYA	Principal of Year Award
PS	Permanent Secretary
QASO	Quality Assurance and Standards Officer
ROK	Republic of Kenya

SCD	Sub-County Directors
TEPIK	Teacher Performance and Integrity Project
TOYA	Teacher of Year Award
TPAD	Teacher Performance and Appraisal Development
TPD	Teacher Professional Development
TSC	Teachers Service Commission
USA	United States of America

ABSTRACT

Performance contracting is one of the management tools used to elevate learning of learners in public learning institutions. Principals of public secondary schools sign performance contracts with their employer (TSC) at the start of the year with key intention being to improve academic performance of schools. However, the academic performance of learners has dwindled between 2019 and 2023 in public secondary schools in Kalama Sub County, Machakos County in Kenya. This study therefore was analysing principal's performance contracting and its effect on the academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya. The study was guided by four specific research objectives which include: to examine effects of implementation of work plan by principals, principal's supervision, principal's training and motivation of principals on the academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya. The study was guided by the goal setting theory. The study adopted descriptive survey research design. The study was a census of all 33 principals from public secondary schools in Kalama Sub County, Machakos County. Data was collected using questionnaires which was distributed through drop and pick method. Qualitative data from open ended questions in the questionnaires was analysed thematically through content analysis and presented in descriptive statements. Quantitative data was keyed in to a SPSS analysis software (Version 29.0) to elicit both descriptive and inferential statistics. Descriptive data was analysed using percentage, mean and standard deviation. Inferential statistics was analysed using multiple linear regression model at 95 percent confidence level to determine whether there is relationship between principals' performance contracting and academic performance of secondary schools in Kalama Sub County, Machakos County, Kenya. The study findings indicated that all aspects of the process of performance contracting which include implementation of operational work plan by principals, supervision of principals, training of principals and motivation of principals had significant positive effect on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya. The study recommends that there should be training to the principals and BOM on policy guidelines and on how they can manage school resources prudently to achieve success of the school and MOE should train both principals and BOM on how to prepare operational and strategic plan and how to implement them effectively. Secondly, QASOs, CSO and other field officers need to be facilitated in order to monitor schools and how teachers prepare professional documents, management of learners' discipline and classroom attendance. Lastly, there should be a proper system for rewarding any outstanding performance among teachers in schools.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter comprises of background to the study, statement of the problem, purpose of the study, specific objectives and research questions. The chapter also consists of the significance of the study, scope of the study, limitations and delimitations of the study, assumptions of the study, conceptual framework and operational definition of terms.

1.2 Background of the Study

The concept of Performance Contracting (PC) is gaining prominence in both public service and private sector due to its undisputed connection with performance of firms and service delivery (Mbua & Sarisar, 2013; Perera, Zhou, Udeaja, Victoria & Chen, 2016). Performance Contracting is traced back in the late 1960s in France and other countries like India, Pakistan and Korea (OECD, 2018). Performance Contracting in 1970s was viewed as management tool to help organizations in achieving their goals through structured and continuous process of motivating, measuring and rewarding both personal and team performance.

Performance Contracting is perceived as shift from previous management tools like the Carrot-and-Stick policies which were dominant during industrial period in 19th century and were phased out due to their irrelevance and rigidity (Barclays Africa, 2017). New Zealand championed adoption of Performance Contracting in the public sector and now it is applied by all Organization of Economic Cooperation and Development (OECD) countries (OECD, 2018). In United States of America (USA), Performance Contracting picked when government came up with Government Performance and Results Act

(GPRA) in 1993 which helped minimize energy and operational cost thus helping realize its federal sustainability goals (OECD, 2018).

The concept of Performance Contracting has been diversely conceptualized. According to Perera et al (2016), Performance Contracting is viewed as management control system where a contractual agreement is made on performing certain task or giving service which is dictated by certain terms over a certain period of time specifying resources to be utilized and the performance standards. It further outlines the expectations of both the manager and employees, key responsibilities, performance standards for each task and incentives for achieving set targets (Perera et al., 2016; Kumar & Wise, 2016).

According to Ricker (2018), Performance Contracting is a liberally negotiated performance agreement tool between government and management of its agencies in order to guarantee accountability, efficiency, improvement of competences among employees. Performance Contracting states the purpose, commitments and responsibilities of the contracting parties which is thrust towards agreed performance by public enterprise. Ricker (2018) further asserts that Performance Contracting is rooted on management by outcome rather than management by processes. Hitherto, Kumar and Wise (2016) viewed Performance Contracting as Memorandum of Understanding (MOU) between government and public agency which encompasses evaluating organizations performance aiming at continuous improvement over certain period of time.

Common Wealth Association for Public Administration and Management (CAPAM) (2005) view Performance Contracting as a branch of management control system which

offer information on expectation of managers, aids institutions in coming up with viable patterns of traits and in ensuring accountability by public officials. The core reason for Performance Contracting is clarifying objectives of organizations, how it relates with government, setting of targets which can be monitored and initializing performance evaluations pegged on results rather than conforming to rules and regulations which are bureaucratic (Salemi, 2009). Performance Contracting lead to higher inputs, improved communication, training and motivation of employees. Armstrong (2007), accentuates that Performance Contracting outlines work to be done, what is expected to be achieved, attributes (skill and knowledge) and competence required to achieve the results.

Performance Contracting endeavors to privatize the public sector style of management without changing the ownership of the organization where the management of organizations set targets which are evaluated after a certain period of time as it has been the case for private sector (Bangura, 2009). New Public Management (NPM) push for promotion of private sectors practices in public organizations (Balogun, 2003). Diminishing service delivery in public sectors in developing countries have prompted adoption NPM model in public institutions. NPM has prompted restructuring of public institutions where management has been given autonomy and its accountable for the performance of the organization (Osborne & Gaebler, 2002). Balogun (2003) observed that essence of Performance Contracting should be improving efficiency and effectiveness in the management of public service.

According to Mbua and Sarisar (2013), Performance Contracting can be conceptualized using the process lenses which enumerate various stages of Performance Contracting. Schwella (1988) advocate for use of fairly standardized Performance Contracting

process. The scholar operationalized Performance Contracting processes using four main phases which include: implementation of work plan, training for skill development, supervision which encompass monitoring and evaluation and motivation or rewarding of outstanding performance.

Implementation of Workplan entails coming up with activities that will help achieve anticipation results by making choice of options and development of action plan to access the opportunities identified. Implementation of work plan involves coming up with detailed layout of how duties and responsibilities will be organized in an organization so that it may realize its goals (Armstrong, 2006). The strategic plan offers heads of institutions and their staff guidelines and support so that they may implements its operational work plan uniquely based on school contexts, academic, social and emotional demands of their learners (Bottom & Fry, 2009). Strategic planning provides focus and guidelines to the school for the future by continuously directing the school towards certain direction (Okode, 2013).

Training involves identifying the employees' skills and knowledge requirements and equipping them with those tacit knowledge and skills in order to realize an organizational goal (Armstrong, 2006). In a school context, training involves equipping teachers with necessary knowledge and skills in areas like pedagogy, teaching and professional skills (Krnetić, Bjekić, Milošević, 2007). Teaching skills will be offered by training teachers on various approaches, strategies and techniques to improve on planning and reinforcing on the instructions and assessment of learners. Professional skills on other hand offer strategies and approaches that would assist teachers develop and grow in their career which include aspects like interpersonal, counselling,

information management, computer skills among others which help teacher to grow professionally (Gibbs & Coffey, 2004; Krneta, Bjekić & Milošević, 2007). Teachers who are adequately trained and more skilled are likely to improve academic performance of learners in their institutions (Ulla, 2018; Giovazolias, Syngelaki, & Papastylianou, 2019).

Supervision involves monitoring and evaluation which are key components in the implementation of Performance Contracting in schools. Monitoring is continuous process that provides teachers and stakeholders with regular feedback on performance of certain task while taking in to account the external environment while evaluation involves reviewing and rating of effectiveness on the program (Sawchuk, 2015; Almeida, 2017). Through supervision there is tracking of inputs, activities and outcomes to aid in decision making. Meaningful evaluation on effectiveness of teaching, strength and areas of improvement, feedback and support leads to professional development. Regular feedback to the manager on their progress aid in the achievements of the agreed performance objectives (Armstrong & Baron, 2004).

Performance contracting is successful if employees are motivated and rewarded for their outstanding performance in school. Rewards are all forms of financial and nonfinancial benefit an employee receives for performing a task diligently and effectively (Ayesha, 2014). It may come in form of recognitions, awards or material gifting (Armstrong, 2006). Motivation and rewards systems may be extrinsic or intrinsic. Extrinsic motivations are received as part of job which include payments, promotions, benefits while intrinsic motivation emanate from actually doing the work like recognition, personal characteristics and work content (Izzyana, 2014). Olaide and

Adeola (2014) notes that through motivation and rewarding employees an institution is in position to attract, reward and motivate its employees in attaining education goals by ensuring the workforce is skilled, committed and well-motivated for the work.

According to Kobia and Mohamed (2006), Performance Contracting has been adopted in developing countries in Africa including: Nigeria, Gambia, Ghana and Kenya. Public sector management reforms in Africa is experiencing myriad of challenges which compromise speed, scope and quality of services rendered which include: corruption, accountability and inadequate resource utilization (Polidano & David, 2009). Performance Contracting is therefore paramount in initiating a management culture that emphasizes the centrality of the citizens or customers as well as accountability for results (Johnson & Johnson, 2016). Performance Contracting in most institutions in Africa is viewed as a structured tool which help in ensuring there is consistency in service delivery and there is improved performance of individual employees (Grapinet, Baloch, Jaiko & Jadiel, 2019).

For Sub-Saharan Africa, improving quality of education is visible challenge where recruitment, motivation and retaining skilled teachers are viewed as a step towards improvement of schools (World Bank, 2017). A study conducted in Rwanda indicated that Performance Contracting led to effectiveness and quality of teaching and students learning in Rwandese education programs and accelerated economic growth (Danielson, 2019). According to Leaver, Clare; Ozier, Owen; Serneels, Pieter; Zeitlin, Andrew (2020), Rwanda through the Ministry of Education (MOE) entrenched Performance Contracting in the education system mainly in allocation of finances, personnel training and supervision. Nuwagaba (2021) notes that Performance

Contracting implementation in Rwanda led more trained teachers being employed and an improvement in service delivery in education sector by 67% in schools.

Government of Kenya (GOK) instituted Performance Contracting to its ministries after the Economic Recovery Strategy (ERS) for Wealth and Employment Creation of 2003-2007. ERS outlined its commitment on improving performance of the ministries and state-owned corporations through performance contracting (Republic of Kenya, 2003). The Performance Contracting was geared toward improved service delivery by ensuring management of government entities were accountable for their performance, improve efficiency in service delivery and utilization of public resources and create culture of result-based performance (Republic of Kenya, 2007).

The Ministry of Education (MOE) introduced Performance Contracting in 2004 in line with Legal Notice No. 93 of 2004 (GOK, 2004). It was expected that head of institutions were to sign performance contracts and be accountable for the performance of their schools by July 1st 2005. Review on Performance Contracting through the National Customer Satisfaction Survey Report of 2009 indicated there was significant benefits witnessed by improved transparency, responsiveness to public service and accountability. It is however noted that teachers resisted Performance Contracting as witnessed by Kenya Secondary School Heads Association (KESSHA) shouting down Education Minister and his Permanent Secretary (PS) during Annual General Meeting (AGM) in Mombasa in 2005 (Oswago, 2005).

Performance Contracting for principals in public schools in Kenya was introduced by Teachers Service Commission (TSC) in 2016 (TSC, 2016). Principals of public secondary schools are employees of TSC which is an independent constitutional

commission established under article 237 (1) of constitution of Kenya 2010 (ROK, 2010, TSC, 2012). The commission is vested with responsibility of monitoring, appraising and evaluating performance of teachers and managers of public institutions (TSC, 2012).

Performance Contracting is viewed as a management tool for measuring performance against performance targets where it is expected that the head of institution should sign performance contract each year with the employer (TSC, 2015). The performance contract specifies the mutual performance obligations, intentions and responsibilities of the parties for a given contract period. The TSC through its field officers at County level that is County Directors (CDs), Sub-County Directors (SCDs) and Curriculum Support Officers (CSOs) monitor, supervise and evaluate performance of all school heads (TSC, 2016). Performance Contracting of principals in secondary schools conform to tenets of Result- Based Management (TSC, 2016).

The Performance Contracting and Teacher Performance Appraisal and Development (TPAD) are performance management tool used by TSC geared towards quality teaching and improved learning in schools. It is part of broader public-sector reforms aimed at improving efficiency and effectiveness in learning institutions leading to improved performance as provided in section 11(f) of TSC Act of 2012. The provisions give responsibility to TSC to monitor the conduct and performance of teachers in the teaching service as outlined in regulation 52 of Code of Regulation of Teachers (2015). Its overall purpose is to build a performance-oriented culture and instill accountability in public learning institutions (TSC, 2016).

Before institutionalization of PC and TPAD, TSC piloted it with program named Teacher Performance and Integrity Project (TEPIK) funded by British Council in 2014 and 2015 piloted in TSC headquarters and six counties that is Kwale, Samburu, Nyeri, Uasin Gishu, Kitui and Kisumu Counties (TSC, 2015). It was observed that 75% of schools involved in the program improved their performance (TSC, 2015). TEPIK helped in revising Code of Conduct and Ethics (COCE) and Code of Regulation of Teachers (CORT) in 2015, facilitated training of teachers and field officers and came up with the appraisal instruments. It also facilitated monitoring of Teacher Professional Development (TPD), coming up with National Performance Contracting Guidelines for the 12th Performance Contracting cycle to guide heads of institutions in implementing their performance contracts. Later in 2016, the program was cascaded to all employees which involved linking performance contracts with performance appraisal systems and performance incentives and sanctions (TSC, 2016). It is expected that principals should set target with TSC County Director at the start of every year where evaluation and feedback of the previous year is given before signing new year contracts (TSC, 2016).

Performance Contracting of principals has been critical on the academic performance of learners in secondary schools in Kenya. However, Ochola (2019) observed that Performance Contracting evaluated outcomes against set targets yet ideal service delivery and academic performance crosscut wide range of activities which have bearing on the overall outcome of schools. Mabubi, Nyakundi and Areba (2020) enumerated some limiting factors which included adequacy of available fiscal and human resources, staff expertise and transfers, new technology and timely staff inservicing, level of experience in management of the curriculum supervision, local economic activities, school location and catchment area and other non-target activities

which may affect principals' level of Performance Contracting implementation and which may not be considered.

The effectiveness of Performance Contracting of principals and its link to academic performance of students in secondary school has been explored. Studies by Kwedho (2015) and Muraguri (2015) contrast one another on whether Performance Contracting has effects on academic performance of students in secondary schools. This implies that Performance Contracting of principals and influence to academic performance of students in secondary schools is inconclusive.

Academic performance of students in secondary schools is pegged on grades. It is used to evaluate the quality of teaching instructions in schools. Kenya Certificate of Secondary Education (KCSE) average scores for all subjects have been used to determine the best performing learners and institutions. Smith and Kubacka (2017) acknowledges utilization of national examination results as the impartial metric in educator's assessment that can be used both locally in Kenya and internationally.

Kalama Sub County has 33 public secondary schools. The sub county has been trailing the other eight Sub Counties in the academic performance of students in KCSE in Machakos County (Unpublished Education Report, Machakos County). Most schools have witnessed decline in academic performance amongst students in KCSE from 2019 to 2023. The highest score in KCSE examination of the year 2023 was B+ in Kalama Sub County. The transition of secondary school students to university schools has dropped between 2019 and 2023 with only 166 out of 1925 students transiting to university in KCSE 2022 which translates to 8.62 percent of total number of students who sat for KCSE in 2023. Most schools' average performance has been below 5.0 (below an average of C-) in KCSE performance with only three schools out of 33

secondary schools scoring above mean grade of 5.0. Table 1.1 shows the summary of academic performance of secondary schools from 2019-2023 in Kalama Sub County.

Table 1.1: KCSE Performance of Public Secondary Schools in Kalama Sub County.

KCSE Year	2019	2020	2021	2022	2023
School with mean grade above 5.0	6	4	3	3	3
Schools with mean grade between 3.0- 5.0	18	17	19	16	14
Schools with mean grade below 3.0	9	12	11	14	16
Percentage transition to university	16.3%	11.6%	10.2%	8.7%	8.62%

Source: Kalama Sub County Education Office (2023)

Secondary school principals sign performance contracts at the start of every year. It is anticipated that Performance Contracting of principals would lead to improved academic performance of students. However, despite principals signing performance contract every year; the academic performance of most secondary schools has dwindled in Kalama Sub County, Machakos County. This has created a lacuna which this study needs to investigate on whether principals' Performance Contracting has influence on the academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya.

1.3 Statement of the Problem

Performance Contracting has been adopted by most government entities where employees sign agreement with employees so that they improve in service delivery, efficiency and effectiveness in utilization of resources and ensure accountability of public officials (Ricker, 2018). Principals sign performance contracts with TSC at the

start of each year where they set targets which are evaluated before signing new contracts. The core target is linked to improving quality of education and academic performance of schools.

It is however noted despite principals signing performance contracts annually, most principals do not meet their targets and academic performance of learners in KCSE in their schools is below the set targets. Most public secondary schools' academic performance in Kalama Sub County has been on a downward trend for the last five years. The number of learners attaining quality grades and transiting to universities from public secondary schools have consistently dropped from 16.3% to 8.62% between the years 2019 to 2023. The KCSE performance 2023 shows that 16 schools scored an average below 3.0 (D plain) with only 3 schools scoring mean grade of 5.0 (C minus) out of the 33 public secondary schools (Unpublished Sub County Education Report – Kalama Sub County). This indicates a controversy whether implementation of Performance Contracting has influence on the academic performance of students in public secondary schools in Kalama Sub County.

The existing empirical studies have indicated a paradox and inconclusive results. For instance, study by Ochola (2019) and Muriithi (2019) claimed implementation of Performance Contracting may or may not affect academic performance of learners in school as ideal academic performance is influenced by diverse factors. This creates a lacuna which this study needs to investigate to find out whether Performance Contracting of principals has effect on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya.

1.4 Purpose of the Study

The purpose of the study was to determine the effects of Performance Contracting of principals on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya. The study aimed at coming up with recommendation that would aid at improving the implementation of performance contracting in schools by principals thus leading to improved academic performance in public primary schools in the area of the study.

1.5 Specific Objectives of the Study

This study was guided by the following objectives:

- i) To examine the effects of implementation of work plan by principals on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya.
- ii) To establish the effects of principal's supervision on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya.
- iii) To determine the effects of principal's training on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya.
- iv) To determine the effects of motivation of principals on the academic performance of students in public secondary schools, in Kalama Sub County, Machakos County, Kenya.

1.6 Research Hypotheses

The study was guided by the following research hypotheses:

- i) H_{01} : Implementation of work plan by principals has no significant effect on the academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya.
- ii) H_{02} : Principal's supervision has no significant effect on the academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya.
- iii) H_{03} : Training of principals has no significant effect on the academic performance of students in secondary schools in Kalama Sub-County, Machakos County, Kenya.
- iv) H_{04} : Motivation of principals has no significant effect on the academic performance of students in secondary schools, in Kalama Sub-County, Machakos County, Kenya.

1.7 Significance of the Study

This study would benefit various people and institutions as follows: First, the principals would acquire knowledge relating to how they can effectively implement the performance contracts signed with their employer in order to improve academic performance of students in secondary schools. The study would aid principals in understanding how relevant implementation of operational work plan, supervision, training and motivation of head of institutions is on improving academic performance of learners in schools. This would help in proper adoption of performance contracting practices in secondary schools and provision of learner-friendly environment which would enable them explore their potentials and improve their academic performance.

The Board of Management (BOM) would gain knowledge on the key components of performance contracts signed by principals and how they can be linked to academic performance of schools. The knowledge would help the management in identifying the challenges which principals encounter in implementation of Performance Contracts. This would help them in coming up with strategies which in turn help in improving academic performance of students in secondary schools.

The TSC as the employer of principals would acquire knowledge which is vital in instituting, monitoring and evaluating the implementation of performance contracting in school. This would be key in ensuring the management of schools particularly head of institutions address the pertinent issues addressed by the performance contracts. This in return would lead to improvement in the quality of instructions and academic performance of learners in schools.

The Government of Kenya (GOK) would acquire knowledge on how best it can effectively empower its employees in the public service to effectively implement Performance Contracts in the government entities. This would help promote efficiency and effectiveness in service delivery, utilization of resources and to make all public officers accountable. It would also offer paramount insight for policy makers in government on how to improve on Performance Contracting to enhance productivity of government employees and how to improve on the procedures and system of the PC. The study would further help policy makers in education by coming up with guidelines that would help in implementation of government agenda on ‘access to education by all people’ by ensuring principals are guided in their operations by ensuring they don’t

disadvantage any learners despite their socio-economic background and by ensuring schools offer equal platform for all learners to thrive.

Lastly, the study would add body of knowledge relating performance contracting in schools and how it is linked to academic performance in secondary schools. It would expand literature related to how the process of performance contracting is linked to academic performance of learners. This form basis for future research based on the same constructs and in different contexts like tertiary institutions and even in private entities.

1.8 Scope of the Study

The study was carried out in all public secondary schools in Kalama Sub County, Machakos County and did not include private secondary schools. Principals in private schools were not involved in the study because they don't sign Performance Contracting with Teachers Service Commission as their counterparts in public institutions. The school principals were the only respondents in the study because they were the only persons who sign Performance Contracts and had informed information on Performance Contracting in secondary schools. The study involved all 33 principals of public secondary schools in Kalama Sub County as they are informed on Performance Contracting and as the Chief Executive Officers (CEOs) of the schools they are accountable for the performance of their schools. Kalama Sub County was involved in the study because the Sub County has witnessed dwindling academic performance for the period between 2019 and 2023 which raised a need for studying this topic. The study independent variable was addressed using process lenses of Performance Contracting capturing four elements which entailed the process of

Performance Contracting which are implementation of work plan, training, supervision and motivation of principals and how it influences academic performance of learners in public secondary schools.

1.9 Limitations of the Study

The study had varied limitations which include: The respondents were not willing to offer information as they felt like they were exposing the weakness of their management. Researcher briefed the respondents on the purpose of the study before engaging them and assured them of their confidentiality. The study was cross-sectional in nature meaning it studied the variables over short time and did not track the trends as principals of secondary schools implement Performance Contracting in school over a certain period of time. To minimize the effect of the limitation of using cross sectional study, the researcher used census where all respondents were used in the study to ensure all attributes of the variables were addressed by the diversity of the respondents. The study further combined both quantitative and qualitative data to complement each other and ensure all aspects are addressed. It calls for future research to conduct longitudinal research to validate findings.

1.10 Assumptions of the Study

The study had the following assumptions: First, all principals of public secondary schools do sign performance contracts in their respective schools in Kalama Sub County each year. Secondly, the respondents willingly participated in the study and were cooperative during the study. Lastly, all principals were knowledgeable on PC matters and the information on PC policy was published and distributed to all public secondary schools for their absorption.

1.11 Theoretical Framework

This study was anchored on the tenets of the Goal Setting Theory (GST). The Goal Setting Theory (GST) was proposed by Locke (1968). The theory acknowledged the prominent role played by setting goals in elevated performance of any institution. The theory appreciated value and value judgement as key determinant of cognitive performance of people (Okumbe, 1999). The theory accentuate that employees are committed to their work if there is goal set for them to achieve. It noted that if employees set goals, it becomes easier working to achieve such goals which is effective if the value and value judgements triggered emotions to achieve set targets. When goals are achieved, the results are seen through employee's performance, actions or responses (Locke, Latham, & Erez, 1988). The theory was mostly used in the field of management as applied by Wekesa (2023).

The theory acknowledged how paramount individual's efforts aid in achieving the sets (Locke & Latham, 1990). Locke and Latham (2002) noted when individuals remain positive and they have requisite capacity and are committed they achieve set goal with less difficulty. The theory advocated for zero conflict of interest in order to achieve set goal (Locke & Latham, 2006).

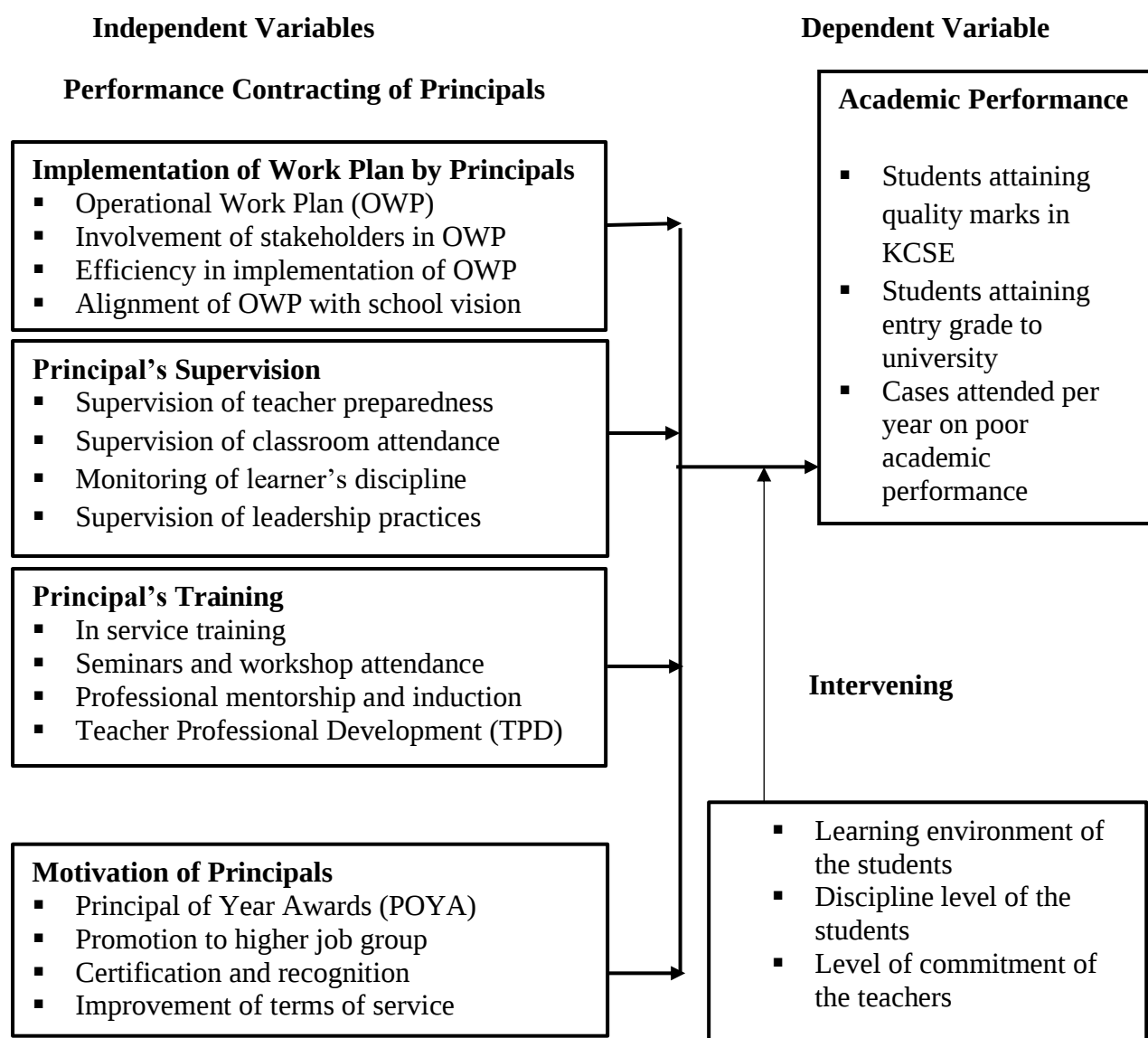
PC involves setting of targets which are evaluated at the end of every academic year. The setting of targets goes hand in hand with coming up with work plan which to help in realising set targets. The head institutions signs contract with employer at the start of year. This PC contains target which the principals should achieve within a year and which are contained in an Operational Work Plan (OWP).

Implementation of the operational work plan is evaluated at the end of the year where one way of evaluating it is through evaluating the academic performance of the students in KCSE in terms of quality grades and the transition to university. To fully implement

the work plan well, the principals are engaged on wide range of training including Sub County insets, principal's conferences. Principals also are supervised by immediate supervisors who are field officers that is Curriculum Support Officers (CSOs), TSC Sub County Directors and County Directors on how they implement school programs and the OWP. Whenever, schools excel well principals are rewarded at the Sub County or County level or even employers through promotions and programs like Principal of The Year (POYA). These steps touch on the entire process of Performance Contracting (Independent variable) which have informed the objectives of the study as applied by Mbua and Sarisar (2013) who view PC as a process involving four step that is coming up with work plan (setting targets), training (Employee capacity building), supervisions (Monitoring and evaluation) and lastly after succeeding motivation (Rewarding). It further addresses aspects of academic performance which is the dependent variable of this study. Therefore, the theory sufficiently informed both independent variable (Principal's Performance Contracting) and the dependent variable that is academic performance of secondary schools.

1.12 Conceptual Framework

The conceptual framework describes how variables of the study have been operationalized in to various indicators. It describes how the variables are interrelated in a diagrammatic form. Principals' performance contracting was the independent variable while academic performance was the dependent variable.



Source: Author (2024)

Figure 1.1: Conceptual Framework on the Relationship between Performance Contracting and Academic Performance

Figure 1.1 shows the relationship between independent and dependent variables. Performance contracting of principals (Independent variable) may have effect on the academic performance of students (Dependent variable) in public secondary schools. Performance contracting of principals was operationalized using dimensions which include: implementation of work plan by principals, principal's supervision, principal's training and motivation of principals. Academic performance of students was

conceptualized in terms of students attaining quality marks in KCSE, students attaining entry grade to university and cases attended per year on poor academic performance. The focus was on how aspects of Performance Contracting of principals related to academic performance of students in public secondary schools. This study tried to establish whether there was a direct relationship between the principals' performance contracting and academic performance. The intervening variables of the study were operationalized using learning environment of the school, discipline level of the students, level of stake holder's support and level of commitment of the teachers. Intervening variables affected the strength and the direction of the relationship between principal's Performance Contracting and the academic performance of students. However, this study considered the intervening variable as a constant and was not included during the analysis of the findings of this study.

1.13 Operational Definition of Terms

The following section outlined the meaning of terms as applied in the context of this study:

Academic Performance	Extent at which learners have achieved their education goals measured through national examination.
Career Development	This entails how teachers broaden their relevant knowledge and skills which enables them, to attain higher levels of growth in their work and also attain their goals.
Monitoring	It is regular checking of the performance of teachers by their supervisors.
Monitoring and Evaluation	It involves regular and systematic assessment of teachers work by their supervisors in order to enhance efficiency and effectiveness in implementation of all programs.
Motivation	These are things or tasks which energizes teacher's behavior and directs him/her towards achieving certain goal in the work set up.
Performance Contracting	It is the agreement between employer and employees on the performance targets and on responsibility which each party should play to achieve the institutional goal.
Public Sector	It is administrative structures or offices that deals with the delivery of goods and services on behalf of the government.

Rewarding	These are prizes (material or psychological) that are geared towards motivation of teachers in their work in order to improve performance of the teachers.
Training	Process of impacting knowledge and skills to teachers so that they may be efficient and effective in the performance of their duties.
Skill Development	This is a process on impacting necessary competences among teachers which is relevant to them for accomplishing certain institutional goal.
Supervision	It is the process of managing and overseeing school activities and ensuring that everything is done as per the set rules and guidelines.
Work Plan	It is detailed layout of how duties and responsibilities will be organized in an organization and how resources will be sourced in order to realize its goals.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed literature related to principal's performance contracting on the academic performance of students in secondary schools. It explored thematic review of existing empirical literature relating to performance contracting affect academic performance on a broader perspective. It also explores how components in the process of performance contracting relate to academic performance of students in schools. It comprised of performance contracting and academic performance, implementation of work plan by principals and the academic performance, principal's supervision and the academic performance, principal's training and the academic performance and motivation of principals and the academic performance. It further reviewed the intervening variables affecting the implementation of performance contracting and academic performance and the summary of research gaps.

2.2 Performance Contracting and Academic Performance

According to Fournier (2019), academic performance is interchangeably used with academic achievement. The scholar defines academic achievement as the extent to which a student, teacher or institution has attained their short- or long-term educational goals. Ekal and Mungai (2024) observe that academic performance may be equated to exam results which is used to determine student's aptitude as well as to choose them for further education and career opportunities. Fournier (2019) recommends that to measurement of the performance of an educational system involves reviewing the academic success by identifying the number of learners who have achieved higher qualification by the end of schooling.

Okello (2023) defined academic performances as the degree of a student's accomplishment his or her tasks and studies. The scholar operationalize indicator of academic performance is grades which reflect the student's "score" for their subjects and overall tenure. It can also be measured by how well a student meets standards set out by an institution itself or an external examination body either set up by the government or an independent outfit. Okello (2023) noted that initially there was no standardized assessment where assessment was very subjective but with standardization function which is fulfilled by establishments outside the schools helped in putting this in check.

Various studies have been advanced linking how performance contracting affect academic performance of learners using broader lenses when all aspects of performance contracting have been pooled together. Onyango, Chelang'a and Abiero (2024) conducted a survey on how customers perceive the effectiveness of performance contracting in improving public service delivery at the Kenya School of Government. The study was anchored on the principal agent theory and the New Public Management (NPM) theory. The study utilized descriptive survey design while using mixed method approach. A sample of 480 respondents were selected using simple random and purposive sampling methods. Data was collected using questionnaires, interview schedules and focused group discussions. Quantitative data was analysed using descriptive statistics while qualitative data was analysed using inferential statistics. The study findings indicated that effective performance contracting was key delivery of high-quality public services. The study had notable gaps for instance use of purposive sampling which is non-representative in nature. The study also used tertiary institution where results cannot be generalized to performance in secondary schools.

Wekesa (2023) conducted a study effect of performance contracting strategic elements on implementation of performance appraisal systems in public universities within Mount Kenya region. The study was anchored on agency theory, the expectancy theory, the goal-setting theory and theory of planned behaviour. The study used descriptive survey research design. The sample size was 136 respondents from the 7 chartered public universities in Mount Kenya Region who were sampled using random sampling methods. Data was collected using questionnaire while data was analysed using quantitative data analysis to derive descriptive statistics. The study findings indicated that organizational structure, monitoring and evaluation, employee attitude and training had a positive effect on the implementation of performance appraisals in public Universities in Mount Kenya Region. The study had gap in that it used descriptive statistics which limit the scholar from drawing inferences from the study results.

Shingiro and Oniye (2022) conducted a study on the effect of teachers' performance contracts on quality of education in selected secondary schools in Rwamagana district, Rwanda. The study utilized descriptive research design combining both quantitative and qualitative approach. Data was collected from 140 respondents in three selected schools. Descriptive and inferential analysis were used to analyze data. The study findings indicated that teachers' performance contract affected quality of education through the level of employees understanding on the role and process of performance contract on education. The study recommends setting of targets to aid in timely implementation of the performance contracts in schools. The study had contextual gap as it was carried in Rwanda unlike this study which will be done in Kenyan context limiting generalization of findings.

Kaupa and Atiku (2020) conducted qualitative research on how the implementation of performance management system was challenged in Namibian Public Sector. The study involved 42 participants and data was collected using interviews. The thematic data analysis technique was used to analyze the data where themes emanating from the interviews were grouped together and analysed. The study findings indicated that key issues affecting implementation of performance management and performance of organization were: inadequate supervision, training, involvement of employees, poor communications of programs and poor feedback on the performance management. The study had contextual lacuna as it was carried out in Namibian public sector unlike this study which will be carried out in secondary schools in Kenyan context limiting generalization of results findings.

2.3 Implementation of Work Plan by Principals and the Academic Performance

Olsen (2012), refer work plan as a formalized road map that describes how your company executes the chosen strategy. A plan spells out where an organization is going over the next year or more and how it is going to get there. The scholar notes that strategic plans are often accompanied by parallel implementation work plans which outline responsibilities, timelines, resource requirements and organizational or operational changes required in order to deliver on strategic plan activities. Work plan is derived from the broader organizational strategic plan which Ong (2018) view it as the benchmark for success of an organization where if a school has a strategic plan it can monitor the progress and evaluate if it is in the right track and generally offer direction for future.

Odette and Andala (2022) conducted a research on the relationship between school strategic planning and students' academic performance of secondary schools in Rusizi district in Rwanda. The study operationalized strategic planning using dimension like stakeholders' involvement and communication of vision. The study employed correlational research design. The study population was 988 from whom simple random sampling and convenient sampling was used to sample 91 respondents. Data was collected using questionnaire. Data analysis was done using regression model. The study findings indicated that strategic planning had effect on the academic performance of students in secondary schools in Rwanda. The study had methodological gaps as it utilized convenience sampling which is non-representative of population and may be biased limiting generalization of the study findings.

Kwaslema and Onyango (2021) investigated the schools' effectiveness in the development of the strategic plan and the perception of teachers on the implementation of the strategic plan and how it affects the academic performance among the public secondary schools in Babati District, Tanzania. The study employed mixed research where convergent parallel design was used. The target population was 2844 stakeholders from 5 schools which were randomly sampled. Purposive, stratified and random sampling was used to sample 185 respondents who included one district education officer, four ward education officers, five school heads, eighty teachers, and ninety-five students. Data was collected using questionnaire and interview. Analysis was done using descriptive statistics in terms of frequencies, percentages and means. Study findings indicated that effectiveness of strategic plan development and its implementation had positive impact on academic performance of secondary schools in Babati district in Tanzania. The study had contextual gap as it was carried out in

Tanzania which is different from Kenya in terms of regulatory frameworks and cultural background.

Seje, Ombati and Maithya (2021), evaluated the implementation of strategic planning as a tool for improving performance management practices by principals of public secondary schools in Nyamira County, Kenya. The study explored how strategic plans are prepared, implemented and challenges in implementation and how it is linked to performance in schools. The study was anchored on quantitative management theory. The study utilized descriptive survey which involved principals, deputy principals and HODs who were sampled using purposive and simple random sampling. Questionnaires were used to collect data which was analysed using descriptive statistics. The findings indicated that despite most schools having clear strategy implementation design and structure, the implementation levels were low and weak which affected improvement in performance management practices. The study had the following methodological shortcomings: First, the study utilized purposive sampling which is non-representative in nature and secondly, the study did not utilize inferential statistics which makes the researcher limited in making inferences on the relationship between variables and whether the relationship is significant.

Nugraha, Reftyawati and Sari (2020) investigated how effectively school strategic plans can be implemented and the best practices to improve schools among state of junior high school in Islam Cendekia Cianjur, Indonesia. The study utilized qualitative research methods. The study findings indicated that SMP Islam Cendekia Cianjur achieved maximum results in implementing annual work plans. The study had methodological notable gaps. First the study utilized a case study which limits

generalization of findings. Secondly, the study utilized qualitative research methods which doesn't allow making of inferences from the study. The study also had contextual gaps which limit generalization of findings to Kenyan context.

2.4 Principal's Supervision and the Academic Performance

According to Archibong (2010), supervision in school set up is a series of activities undertaken by senior personnel in education with aim of offering sensitization, mobilization and motivation of teaching staff in performing duties aimed at attaining aims and objectives of the education system. Okendu (2012) view supervision as the process of enhancing the professional growth of the teachers, the curriculum and improving the techniques of teaching in the classroom through democratic interactions between the teacher and the supervisor. Peretomode (2004) categorize supervision in to two categories that is: personnel and instructional supervision. Personnel supervision aim at professional growth while instructional supervision aims at making teaching and learning situation better for the benefit of both teachers and learners.

Mwakajitu and Lekule, C. (2022) examined how instructional supervision enhance teachers' professional development in public secondary schools in Rombo District, Kilimanjaro-Tanzania. The study was anchored on instructional leadership theory. The study used mixed research approach with convergent parallel design. Questionnaires and interview schedule were adopted to elicit data from District Education Officer (DEO), District Quality Assurance Officer (DQAO), Ward Education Officers (WEO's), heads of schools and teachers who were sampled using stratified, simple random and purposive sampling. The study findings indicated that instructional supervision contributes to enhancing teachers' ability to use different instructional

methods, ability to prepare teaching materials and enhances teaching performance. The study had the following limitations: first the study utilized purposive sampling which is non-representative in nature limiting generalization of the findings.

Manduku, Ngok & Mauti (2021) explored how instructional supervision had impact on the student performance and teacher effectiveness in public secondary schools in Nakuru County, Kenya. The study was anchored on the symbolic interaction theory which was advanced by Blumer in 1969. The study utilized correlational research design. Respondents of this study were principals, teachers and County Director of Education (CDE) who were sampled using purposive, stratified and systematic sampling methods. Data was collected using questionnaires, interviews and document analysis where secondary data like articles, journals and internet were analysed. Data was analysed using Pearson Moment Correlation and hypothesis were tested using chi-square test of independence. The results indicated that instructional supervision had impact on the student performance and effectiveness of teachers in public secondary schools. The study notable methodological gaps as it used some non-representative sampling procedures which limit generalization of study findings.

Sindayigaya, Ngarambe and Nyamweya (2020) conducted a study on monitoring and evaluation and institutional performance focusing on Teacher Self-Learning Academy (TSLA) project on school's academic performance in Bugesera district in Rwanda. The study adopted a descriptive survey design. The target population was P5 and P6 in 15 district primary schools. The study population was 956 respondents who included 300 teachers, 15 head teachers, 15 SEOs and 615 students of 15 primary schools in Bugesera district and 11 plan international officers who were sampled using simple random

sampling, stratified and purposive sampling. Data was collected using questionnaire and interview schedules. Data was analysed using correlational analysis. The study findings indicate that there was a positive correlation between project monitoring and evaluation of school's activities and academic performance in English for P5&P6 learners. The study had contextual gap as it was carried out in Rwanda unlike in Kenya where this study will be carried limiting generalization of findings.

Ajibade and Ajibade (2020) conducted study on influence of monitoring and evaluation on students' academic performance as relates to education trend in Ondo State, Nigeria. The inquiry utilized a non-experimental type of research which was descriptive research in nature. The study purposively sampled 300 Senior Secondary Schools (SSS) II students, 20 teachers and school administrators. Three validated research instruments were used to collect data. Data was analysed using frequency counts and percentages. The study findings indicated that monitoring and evaluation had positive effect on academic performance. The study was limited in that it analysed only descriptive statistics which limit making conclusions as there was no inferences that could be made on the relationship between variables.

Phocas & Andala (2020) conducted a study on teachers' instructional supervision and students' academic performance in core subjects in lower secondary schools in Kayonza district in Rwanda. The study adopted a correlational research design. The study involved a sample size of 288 respondents who were chosen using simple random and purposive sampling techniques. Tools used to collect data were interview and questionnaire. Data was analysed quantitatively using both descriptive and inferential statistics. The study findings indicated that there was a significant relationship between teachers' instructional supervision and students' academic performance in core subjects

in lower secondary schools. The study had contextual gap as it was carried out in schools in Rwanda limiting generalization of findings to Kenyan context.

2.5 Principal's Training and the Academic Performance

Training involves identifying the employees' skills and knowledge requirements and equipping them with those tacit knowledge and skills in order to realize an organizational goal (Saira, Zafar and Hafeez, 2021). Ulla (2018) view training as valuable practice which aids teachers acquire required skill in a particular subject. Trained teacher arms themselves with repertoire of skills and knowledge which thrill learners' interest in a certain subject through their improved pedagogy which leads to improved academic performance and offering of solutions to educational problems (Giovazolias, Syngelaki, & Papastylianou, 2019). Saira, Zafar and Hafeez (2021) further acknowledges that when teacher is trained and skilful they have capacity to teach and adopt varied methodologies of teaching. Wuryaningsih, Susilastuti, Darwin and Pierewan (2019) on the other hand affirms that when teacher apply a varied teaching methods and styles it in return leads to higher academic achievements of the learners.

Hafeez (2021) conducted study on impact of teacher's training on interest and academic achievements of students by multiple teaching methods in government schools in Dera Ghazi Khan, Punjab in India. The study utilized experimental research design. The study utilized multi-stage sampling to sample 80 students who were divided in to 4 groups each 20 students namely: lecture teaching method (control group), discussion teaching method (experimental method), inquiry teaching method (experimental group) and demonstration teaching method (experimental group). Pretest was done before

teaches went to training and post-test done after the teachers were trained. The instruments used for collection of data were Computer Course Achievement Test (CCAT) and computer course Interest Scale (CCIS). The results for both pre and post were analysed to derive to descriptive statistics and ANOVA test. The study findings indicated that training of the teacher's plays an important role for choosing the best method for teaching and improved academic achievements and interests of students. The study had contextual gaps as it was done in India and this limited generalization of findings to Kenyan context.

Saeed and Akbar (2021) investigated on the relationship of teachers' professional skills and students' achievement in English at BA level in Punjab, India. The study was quantitative in nature and utilized correlational research design. The study population was 4th year students in session for academic ear 2014/2015 in 206-degree colleges which are affiliated to university of Punjab in the 36 districts of Punjab. The sample size was 20 percent of the colleges where 1330 students were randomly sampled. Data was collected using Students' Questionnaire for Teachers' Professional Skills (SQTPS) analysed using regression analysis. The study findings indicated a weak relationship between teacher's professional skills in assessment and student's achievements in English at BA levels. The study had contextual gap as it was done in India among higher education students which limit generalization of findings to Kenyan context and in basic education level.

Padillo, Manguilimotan, Capuno and Espina (2021) conducted a survey on Professional development activities and teacher performance in private non-sectarian universities in Metro Cebu, Philippines. The study was quantitative in nature and utilized descriptive

survey research design. Respondents were sampled through universal sampling. Data was collected through a questionnaire where it was analysed using percentage, weighted mean and Pearson-r correlation. The results of the study indicated that professional development activities were crucial on the performance of teachers. The study had methodological gap as it utilized non-representative sampling techniques which might limit generalization of findings.

Zhaohui and Anning (2020) investigated on impact of teachers' professional development on students' academic performance in higher Education in Jiangsu University in China. The Professional Development (PD) was operationalized using courses and workshops, reading of professional literature, education conferences and seminars, individual and collaborative research, observation visits to other universities, conflict management, classroom management and building students' engagement. The research is quantitative in nature and is a survey. The study involved 298 teachers out of 2550 faculty member who were randomly sampled. The data was collected using questionnaires and data was analysed using confirmatory factor analysis and structural equation model. The study finding indicated that PD had significant positive impact on student's academic performance in higher education. The study has contextual gaps as it was done in China and higher learning institutions of learning which limit generalization of findings to Kenyan context.

2.6 Motivation of Principals and the Academic Performance

Watene, Kodak and Choge (2020) defines motivation as the maintenance of goal oriented behaviors guided by processes that guides, maintains and guides such behaviors. The scholars noted that our behaviors are guided by motivation which has

three aspects namely: intensity, persistence and activation. When one decides to start something that is activation while consistently getting involved in the activity without ceasing and withstanding the obstacles is called persistence. The vigor and concentration exhibited in pursuing your goal is the intensity (Watene, Kodak & Choge, 2020).

Motivation takes two perspective that is intrinsic and extrinsic motivation. Izzyana (2014) clarifies that eextrinsic motivations are received as part of job which include payments, promotions and benefits while intrinsic motivation emanates from actually doing the work diligently or effectively like recognition, personal characteristics and work content. Carnie (2017) view motivation using two parameters that is material motivations and social motivates. Material motivations include toys, treats, outings, privileges and permissions. Social motivations include hugs, smiles, congratulations, compliments and kudos.

Ekal and Mungai (2024) investigated whether Principals' motivation and problem-solving practices had influence on students' academic performance in public secondary schools in Turkana County, Kenya. The study adopted Fielders' contingency theory. The study utilized descriptive survey research design where 300 respondents were sampled using both a census, simple random selection and stratified random sampling for principals, teachers and students respectively. Questionnaires was used to collect data which was analysed using descriptive statistics that is percentages, frequencies and means while thematic narratives and direct quotes were used to analyse qualitative data. The study findings indicated that principals who motivate their teachers through recognition, appreciating successes in programs, offer professional mentorship and create positive school culture boast teachers' morale leading to improved instructional

quality and student engagement thus leading to better academic achievement in schools. Collaborative problem-solving initiatives were noted to foster innovation and resilience thus leading to improved academic performance in schools. The study had notable methodological gaps as it only analysed quantitative data descriptively thus limiting making of inferences whether the relationship was significant.

Mnjokava (2024) conducted a study on the influence of school heads' motivation strategies on teachers' performance in public secondary schools in Arusha Region, Tanzania. The study was anchored on Walberg's achievement theories. The study utilized mixed methods approach and concurrent triangulation research design. Questionnaires and an interview guide were used to collect data from 88 teachers and 8 school heads who were sampled using purposive and stratified random sampling techniques. Data was analysed quantitatively using Pearson's Product Moment correlation analysis while qualitative data was analysed thematically and presented in narrative forms. The results indicated that motivation played key role in improving teachers' performance and improved students' academic performance. The study had contextual gaps as the study was done in Tanzanian which is different from Kenyan education context.

Musyoki, Mulwa and Mwanza (2024) investigated influence of principals' practices in motivating teachers on students' academic performance in public day secondary schools in Kitui West Sub-County. The study was underpinned on job demands-resources theory. The study used descriptive survey research design where it involved principals and teachers who were sampled using census and systematic sampling to get 26 principals and 38 teachers. The data was collected using questionnaires and analysed using descriptive statistics while qualitative data was analysed and presented in

narrative form. The study findings indicated that principals' motivation management practices influence students' academic performance. The study had notable methodological gap as it did not consider inferential analysis which would have indicated whether the relationship between the variables are significant and the strength of the relationship.

Chima (2023) conducted a survey on impact of reward system in students' academic achievement in government secondary schools in Gwagwalada area council FCT in Abuja, Nigeria. The study utilized survey research design. The target population was all secondary schools in Gwagwalada area council FCT in Abuja. The sample size was 150 students who were sampled using proportionate sampling. Data was collected using questionnaire and analysed using percentage and mean score. The study finding indicated that students like praise and gift and feel motivated when praised and when students are rewarded they perform better. The study had contextual gap which limited generalization of findings to Kenyan context.

Watene, Kodak and Choge (2020), studied the influence of principals' motivational strategies on performance in Kenya Certificate of Secondary Education in secondary schools in Nyandarua County, Kenya. The key pillar theory was expectancy theory and transformational leadership theory. The study used descriptive survey research design and collected data using questionnaires from principals, teachers, and students who were random sampled from the 167 public secondary schools in Nyandarua County. Descriptive analysis was used to analyze data where it was found that there was a significant relationship between the academic performance of a school and motivational strategies of principals. The study had notable methodological gap. It analysed data

only descriptively and did not do inferential analysis to know whether the strength of relationship between the variables and whether it was significant

2.7 Intervening Variables Affecting the Implementation of Performance Contracting and Academic Performance

Most employees in working set up tend to resist anything that doesn't promote their working condition, workload, income and personal growth (Ngare, 2008). The scholar notes that signing of performance contracts emanate from ignorance and misinformation on what is entailed in the PC. The scholar further enumerates various factor which affect performance contracting of teachers which include physical facilities, teachers and nature of the learners in particular school. Aduda (2008) observed that teachers are skeptical on PC as they fear it may annul the existing contracts and performance of teachers were measured through national examinations. Various factors may affect strength and direction of the relationship of performance contracting and academic performance in schools which include learning environment of the students, discipline level of the students and level of commitment of the teachers.

2.7.1 Learning Environment of the Students

Okello (2023) categorize learning environment to include classroom spaces, administrative places, circulation spaces like school compound, spaces for conveniences, general infrastructure, instructional accessories, the teachers and students which are key in the learning process. The scholar indicates that when school environment is conducive, it thrills learners to academic excellence by encouraging effective teaching and learning. This prompt need for conducive learning environment and provision of adequate learning facilities.

Amali, Ridzuan, Rahmat, Seng and Mustafa (2023) did a quantitative study on learning environment in relation to Bronfenbrenner's ecological systems theory of 1995. The environment was categorized using five perspectives which include demographic profile, microsystem, mesosystem, exosystem and macrosystem. The study involved 101 diploma and degree level university students taking French language courses in a public university in Malaysia. The study findings indicated that learning environment had strong impact on the learning and academic performance of the learners in universities.

Learning environment of the students may influence how performance contracting affect academic performance of learners in schools. According to Takwate (2018) the distribution, availability and upkeep of school facilities is key predictor of academic achievement among Senior Secondary School students in Adamawa State, Nigeria. The scholar observed a link between how school resources are efficiently allocated and effectively utilized on academic performance of learners in schools.

Wordu and Nlerenchi (2019) conducted a descriptive survey where the study deduced that there was a significant relationship between school plant provision and academic performance of students in the secondary schools. The scholars further advocated for proper planning and adequate provision and maintenance of infrastructure in order to improve academic performance of learners in secondary schools in Nigeria. Naigaga (2019) indicated that schools with equipped laboratories have their students performing better than their counterparts in schools without laboratories or those with ill equipped laboratories. This suggests that building up an appealing and positive learning condition

for students is one of the most innovative ways for strategic improvement of academic performance of learners.

2.7.2 Discipline Level of the Students

The discipline of learners influences their level of academic performance in schools. According to study Bironga (2015) majority of adolescents are likely to be involved in vices in secondary schools which has bearing on how they perform in schools. A competent principal ought to have a working discipline policy which guides a safe and positive learning community in school. Guidelines of the mission, vision, and attendance are key to instilling a sense of responsibility in students. Wheldall (2017) posits that school discipline includes actions when students fail to adhere to school guidelines as these will affect the students' academic performance.

Bishop, Craven, Galer, Wilson and Duggins-Clay (2022) indicated that to realise success in schools there is need for student to have safe and that allows them to engage while learning. The scholars call for discipline policies in schools which reinforces values and safety of the learners. They observe that ineffective discipline practices that punish students harshly and take them away from the classroom like suspensions, alternative school placements, corporal punishment, referrals to law enforcement, and expulsions when practised in schools affect performance of learners.

Hakizayezu and Andala (2022) conducted a survey on relationship between students' discipline and academic performance in Gatsibo District secondary schools in Rwanda. The study was descriptive in nature and utilized quantitative approach. The study involved 338 respondents who filled questionnaires. The study indicated that students conduct affect significantly the academic performance of students in secondary schools.

2.7.3 Level of Commitment of the Teachers

Staff commitment is critical in organization realizing its potentials (Armstrong & Baron, 2002). It is prudent so that an education Managers may achieve the best to ensure there is shared understanding of vision, mission, values and strategic objectives or the organization. It is a duty of managers to ensure that performance appraisal policy is understood, accessible and adhered to by all levels of staff. If supervisors play their role in performance appraisal process effectively, the employees will understand them. Supervisors should ensure that their employees are made aware of organizational goals and objectives for easy setting of their targets (Rummler & Brache, 2012; Silberman & Biech, 2015).

Alzoraiki, Ahmad, Ateeq, Naji, Almaamari and Beshr (2023) explored the role teachers' commitment play on transformational leadership and sustainable teaching performance in Malaysia. The study involved 374 participants who were sampled using stratified random sampling. The data was analysed using SEM modelling. The study findings indicated that teachers' commitment mediated the relationship between transformational leadership and sustainable teaching performance in Malaysia.

El Kalai, Kirmi and Ait Lhassan (2021) investigated the effect of teacher commitment on student academic achievement in high schools in Tangier in Morocco. The study was based on a quantitative methodological approach of a positivist hypothetical deductive nature. Questionnaires was used to collect data from 204 teachers and 380 students in 29 local public secondary schools. The study results indicated that the teacher commitment had a positive and statistically significant effect on student academic achievement through student engagement in local public secondary schools in Morocco.

From the literature review, it noted there are notable moderating factors which affect the implementation of performance contracting and academic performance of learners in schools. These factors affect the strength and direction of the relationship between performance contracting and academic performance either positively or negatively. There is gap in most studies reviewed as they utilized varied moderating factors (variables) in explaining its effects on the relationship between performance contracting and academic performance of learners in schools.

The intervening or moderating variables outlined in the literature are critical in defining the impact of performance contracting (PC) on academic performance. These intervening variables either strengthen or weaken the impact that performance contracting has on academic performance, depending on their interaction. Let us discuss the main intervening variables and how they may affect academic performance.

2.8 Research Gaps

There various gaps that has been noted while reviewing the study on the relationship between principals' Performance Contracting and academic performance of students in secondary schools.

First, there were methodological gaps noted in the extant reviewed literature reviewed. The first methodological gaps noted was on sampling. Some studies used sampling methods like convenience and purposive sampling which were non-representative and may be biased limiting generalization of findings in the entire population. Second methodological gaps noted was analysis where some studies relieved only descriptive statistics in making conclusion on the relationship between variable although relationship between variables can be well concluded by conducting inferential

analysis. To bridge the gap this study will conduct a census sampling. Secondly, data will be analysed using both descriptive and inferential statistics and content analysis for qualitative data.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology that was used during data collection and analysis. The chapter contains research design, location of the study, target population and sample size and sampling technique. The chapter also entails research instruments, piloting of research instruments, validity and reliability of the instrument, data collection procedure, data analysis and presentation and ethical considerations.

3.2 Research Design

Research design is a general plan that outlines the methodology and procedure for collecting and analysing data (Saunders, Lewis & Thornhill, 2019). Frankel and Wallen (2019) clarifies research design to be guideline of how the entire study would be carried out from formulation of the study to the conclusion.

This study adopted descriptive survey research design. According to Kumar and Deshmukh (2017), descriptive survey collects data about the prevailing circumstances of a situation or population. It seeks accurate profile of people and events with aim of viewing the problem with wider lenses thus coming with new ideas and insights on the concept under investigation. It addresses question of “what is”, “how often”, “how much” and “who is” (Saunders, *et. al.*, 2019).

The choice of the descriptive survey research design was informed by the fact that it is effective in understanding population attributes comprehensively. It also cost and time effective and allowed collection of data over a large number of respondents easy. The design also allowed generalization of findings on the topic under investigations.

Descriptive survey design utilized a questionnaire which had both questions in a Likert scale to collect quantitative data and open-ended questions in the questionnaire after the Likert scale to collect qualitative data. The design helped in exploring how principals' performance contracting influence academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya.

3.3 Location of the Study

The study was conducted in Kalama Sub County, Machakos County, Kenya. Its geographical coordinates are 1° 36' 17" S and 37° 19' 36" E. Kalama Sub County borders Machakos Sub County in Machakos County to North, Kajiado County to west, Makueni County to south and eastern part. The Sub County is 487.2 KM². The Sub County has a population of 54,462 people as per 2019 population census. The Sub County headquarter is at Kyangala town which is 34.3 kilometres from the County headquarters, Machakos town.

The Sub County has three educational zone namely: Kalama, Muumandu and Kola zones. The Sub County has thirty-three public secondary schools. The justification for choosing Kalama Sub County was that the Sub County had consistently been posting poor academic results in KCSE compared to the other eight Sub Counties in Machakos County.

3.4 Target Population

According to Creswell and Creswell (2023), target population is total number of individuals or entities which research desire to investigate. This study interacted with 33 principals of public secondary schools in Kalama Sub County in Machakos County. Principals of public secondary schools were targeted because they were the only people

in schools who signed performance contracts hence, they were likely to give focused information on the study area. The other persons in secondary schools do not interact much with performance contracts thus they were likely not having relevant information on the subject matter.

3.5 Sampling Techniques and Sample Size

Sampling technique is procedure utilized in selecting representative of the entire population (Sekaran & Bougie, 2016). Sample size on the other hand is sub set from the entire population which is used during the study to make inference on the entire population characteristics (Chetty, Johanson & Martin, 2014). This study conducted a census of all the 33 principals of public secondary schools in Kalama Sub County in Machakos County. Census was effectively used in this study due to the population being not big and where they offered more comprehensive data on the topic of study unlike when sub section of the population was used.

3.6 Research Instruments

This study elicited primary data using semi-structured questionnaires. The questionnaire was structured in such a way that it was anonymous and thus giving freedom to respondents to give their candid responses. Cohen, Manion and Morrison (2018) emphasize that researcher should obtain participant's consent and ensure there is privacy and confidentiality in data collection in order to get valid results.

The questionnaire had six parts. The first part addressed demographic information of the respondents while part two up to six addressed the study variables. It should be noted that from part two up to six; each part had a Likert scale which addressed level of agreement and disagreement on the statement related to the study variable. Each

Likert scale was followed by open-ended questions which sought respondents' opinion on the study variable under investigation in each section.

3.7 Pilot Study of Research Instruments

Before actual collection of data, a pilot study was conducted in five randomly sampled public secondary schools in Machakos Sub County in Machakos County. Machakos Sub County was used for pilot study because it had similar characteristics as Kalama Sub County. Five principals were involved in the pilot study. Results from the pilot study were used to determine the validity and reliability of the research instrument used in this study. Schools used in the pilot study were not involved in the final study.

3.7.1 Validity of the Instruments

Kasomo (2015) defines validity as degree at which the instrument's outcome accurately represents what it intended to measure on the subject under investigation. This study used face and content validity to determine the validity of the questionnaire. To ascertain the face and content validity of the instruments, researcher sought guidance from the experts in the area of the study before carrying out the final study. The instruments were then appraised by the research supervisors and fellow colleague Masters students where their comments were considered while making amendments to the instruments before actual collection of the data.

3.7.2 Reliability of the Instruments

Sekaran and Bougie (2016) define reliability as internal consistency where study instruments consistently give the same findings over several repeated trials. The researcher piloted the questionnaires to sampled principals in Machakos Sub County two times at an interval of two weeks to check if the items in the questionnaire were

reliable. Items found unreliable or vague were modified to make them reliable. Cronbach's Alpha was used to measure reliability of the questionnaires' items. Tavakol and Dennick (2011) recommends that if Cronbach's alpha coefficient for items is above 0.7 then the items of the research instruments were considered as reliable. Table 3.1 presents the findings on the reliability of the research instruments

Table 3.1: Reliability Test results

Variable	Cronbach's Alpha	Number of items
Implementation of work plan by principals	0.807	12
Principal's supervision	0.824	12
Principal's training	0.779	12
Motivation of the principals	0.813	12
Academic performance	0.801	6
Overall Reliability Coefficient	0.805	54

The Cronbach's Alpha coefficient for the variables determined in table 3.3 results were as follows: implementation of workplan by principals ($\alpha=0.807$), principal's supervision ($\alpha=0.824$), principal's training ($\alpha=0.779$), motivation of the principals ($\alpha=0.813$) and academic performance ($\alpha=0.801$). The findings indicated that all variables had values which were greater than 0.7. Field (2013) proposed that when the value is greater than 0.7, the item is reliable and can be adopted as an item of the research tool. The aggregated value of all 54 items of the five variables was 0.805 implying that all items jointly were reliable.

3.8 Data Collection Procedure

Researcher collected data using self-administered questionnaires. Before going to field, the researcher got approval from the graduate school of the university. The researcher

then obtained permit from National Commission for Science, Technology and Innovation (NACOSTI) and authority from County Director of Education to interact with secondary school principals. Questionnaires were distributed using drop and pick method. It involved researcher first dropping the tools and giving guidelines and expectations to the participants and the giving them two to three weeks to fill them. Research obtained contact of the participants (principals of the school) which were used as contact person to make follow up so that when completely filled to collect them. When the researcher confirmed the questionnaires had been filled, they were collected for collation and data analysis. It took one month to collect the data.

3.9 Data Analysis and Presentation

The data analysis started by researcher sorting data according to the study objectives. Quantitative data were coded entered to excel sheet after which the data were exported and run through Statistical Package for Social Sciences (SPSS) version 29.0 software to give descriptive and inferential statistics. Descriptive statistics was presented in form of frequencies, percentage, mean and standard deviation to give insights on attributes of the respondents and variables.

Inferential statistics used multiple regression analysis model to measure the relationship between principal's Performance Contacting and the academic performance of secondary schools. Hypotheses were tested at 95% level of confidence. To determine how academic performance was explained by principals' PC, the study used adjusted coefficient of determination (R^2) at 0.05 significance level. Analysis of Variance (ANOVA) was used to test if the regression model is statistically significant.

To analyse qualitative data derived from open ended questions in the questionnaires, content analysis was used. Content analysis involved analysing data using common themes to draw conclusion from the patterns of the themes. The findings of qualitative data was presented in a narrative form as recommended by Cooper and Schindler (2014). The analysis involved triangulation of both qualitative and quantitative findings in order to draw conclusions.

3.10 Ethical Considerations

Ethics are the norms regulating people's conduct and which are important to their welfare (Minja, 2009). The ethical considerations relate to standards, principles and guidelines which enable researcher to carry out study with great responsibility, integrity and ethics. First, the researcher obtained approval and introductory letter from the graduate school of Machakos University after which permit to carry out study was sought from National Commission for Science, Technology, and Innovation (NACOSTI). Before going to the field to collect data at Kalama Sub County, researcher obtained permission from County Director of Education (CDE), Machakos County to interact with the sampled schools.

Secondly, the researcher sought for consent before engaging respondents to the study. This involved briefing the respondents on the aim of the study and succinctly elaborating the role of the respondents. The respondents were advised that they can drop the research at any level if they felt uncomfortable.

Lastly, researcher assured respondents on the confidentiality of the data collected. Respondents were briefed that they expected to keep their identities anonymous and

they were not expected to write their names in the questionnaires. Respondents were further briefed that no specific respondents were to be mentioned in the study.

CHAPTER FOUR

PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents findings of the study based on principals' performance contracting and its effects on academic performance of students in public secondary schools in Kalama Sub-County, Machakos County, Kenya. The chapter involves presentation of findings and interpretation of the study which were presented thematically as per research objectives. The first section presented descriptive statistics which analysed the state of the study variables and demographic characteristics of the respondents. The second section presented inferential statistics presented as per study objectives and hypothesis. The third section presented the thematic qualitative data analysis.

4.2 Descriptive Analysis

This section entails the analysis of response rate and characteristics of respondents of the study. The section further discusses descriptive statistics of all thematic areas based on the study variables to determine the state of each variable. The analysis was done using percentage, mean and standard deviation. The analysis results were presented using tables, bar graphs and pie charts.

4.2.1 Analysis of Response Rate

The study targeted to interact with 33 principals of public secondary schools in Kalama Sub County in Machakos County. Out of 33 anticipated respondents, 31 filled and returned the questionnaires while 2 questionnaires were not returned. Figure 4.1 present summary of response rate of questionnaires.

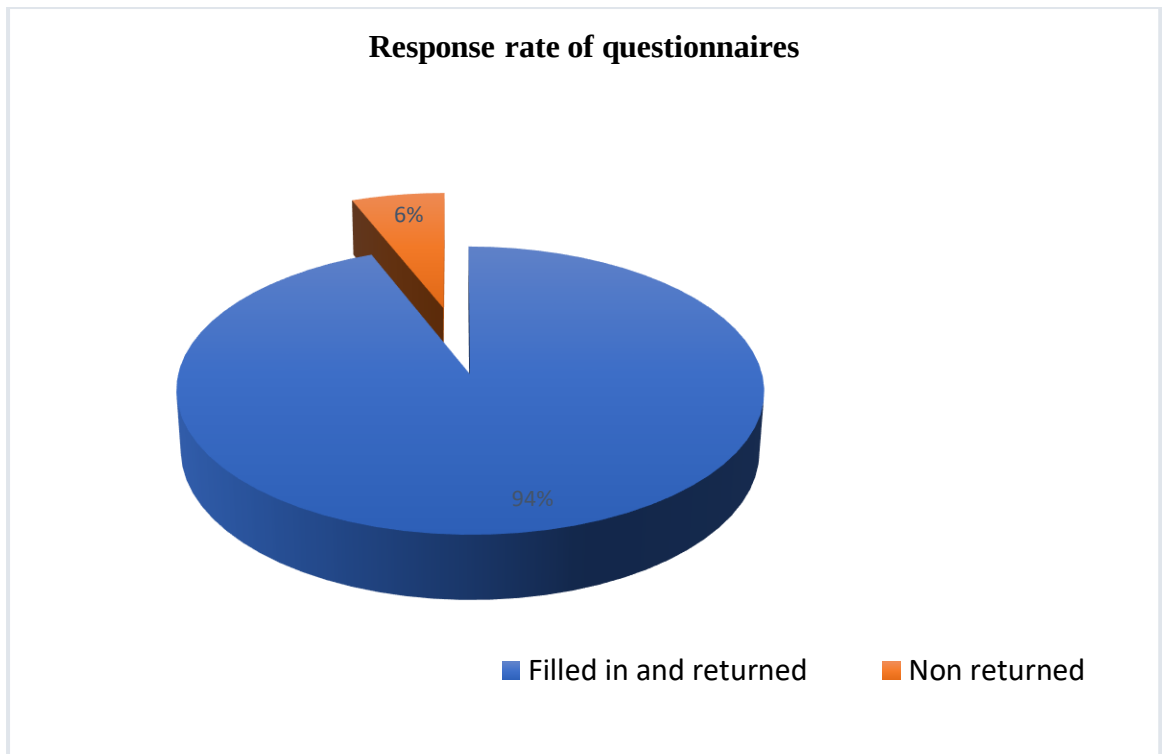


Figure 4.1: Response Rate of Questionnaires

The findings in Figure 4.1 indicate that 94% of the anticipated respondents filled and returned the questionnaires. It was only 6% who did not return their questionnaires. This response rate was acceptable in line with recommendation by Mugenda and Mugenda (2003) who opines that when the rate of response is above 70%, it is good enough and adequate for coming up with inferences and making conclusions based on the study findings.

4.2.2 Demographic Characteristics of Respondents

The study sought to find the demographic characteristics of the respondents who filled the questionnaires. The demographic characteristics were organized and analysed in terms of gender, age, education level, working experience as principals of public secondary schools in Kalama Sub County, Machakos County. The results were presented in Table 4.1 showing the demographic characteristics of the respondents.

Table 4.1: Demographic Characteristics of Respondents

Category	Sub-category	Frequency	Percentage
Gender	Male	20	64.5
	Female	11	35.5
	Total	31	100.0
Age	Below 35 years	0	0
	35-44 years	0	0
	45-54 years	19	61.29
	Above 55 years	12	38.71
	Total	31	100.0
Education level	Diploma certificate	0	0
	Bachelor's degree	21	67.74
	Master's degree	10	32.26
	PhD degree	0	0
	Total	31	100.0
Experience as principal	1-5 years	2	6.45
	6-10 years	6	19.36
	11-15 years	14	45.16
	Above 15 years	9	29.03
	Total	31	100.0

The results in Table 4.1 indicates that there were almost double male principals who filled questionnaires than female participants. It was noted that 64.5% of the respondents were male principals compared to 35.5 % female counterparts. Gender analysis helped in understanding the demographic characteristics and it was noted it adhered to constitutional requirement of one third gender rule.

From the study findings it was noted that most principals were aged between 45-54 years as noted by 61.29% of the respondents. The other band of principals were aged above 55 years as noted by 38.71% of the respondents. No principal was of age group below 44years. This implies that most principals are at advanced age as it is the apex in the secondary school leadership and most principals attain that fete at advanced ages.

The study indicated that over two thirds of the respondents (67.74%) who filled questionnaires were holders of Bachelor's degree. The other lot of respondents were Master's degree holders as indicated by 32.26% of all respondents. None of the respondents had diploma certificate or a PhD degree. Although level of education was not a thematic area it was key in understanding level of education attainment of respondents involved in the study.

The study sought further to find out the experience of principals in terms of number of the years they had served as principals. The study indicated that most participants had served as principals for 11-15 years as indicated by 45.16% of all respondents followed by 29.03% of principals who had served for more than 15 years. Those who served for 6-10 years were 19.36% of principals with the least principals that is 6.45% serving for less than 5 years. It can be deduced from the findings that most of the principals were highly experienced serving for more than 10 years.

4.2.3 Implementation of Work Plan by Principals of Public Secondary Schools

This study sought to find the state of implementation of work plan by principals in public secondary schools in Kalama Sub County. It sought from the respondents on their level of agreement or disagreement on various statement on implementation of work plan by principals in public secondary schools. Table 4.2 presented descriptive statistics on the state of implementation of work plan by principals in public secondary schools in Kalama Sub County in Machakos County.

Table 4.2: Descriptive Statistics on Implementation of Work Plan by Principals

Implementation of Work Plan by Principals	N	SD %	D %	NS %	A %	SA %	Mean	Std. Dev.
Operational Work Plan (OWP)								
There is operational work plan in this school	31	0	0	0	35.5	64.5	4.65	.486
Operational work plan is uploaded online in this school	31	0	0	9.7	35.5	54.8	4.56	.467
Operationalization of OWP is linked to school performance	31	0	19.4	19.4	22.6	38.7	3.81	1.167
Aggregate Scores for operational work plan							4.34	.707
Involvement of stakeholders in OWP								
School stakeholders are involved in preparation of OWP in this school	31	0	9.7	29.0	41.9	19.4	3.71	.902
School stakeholders are involved in implementation of OWP	31	0	0	25.8	64.5	9.7	3.84	.583
Stakeholders' engagement is associated with improved performance	31	0	0	9.7	74.2	16.1	4.06	.512
Aggregate Scores for Involvement of stakeholders in OWP							3.87	.666
Effectiveness in implementation of OWP								
I implement the OWP in our school effectively	31	0	9.7	19.4	61.3	9.7	3.71	.583
I meet timelines set in the OWP in this school	31	0	9.7	29.0	41.9	19.4	3.71	.902
Proper implementation of OWP is linked to school performance	31	0	9.7	32.3	29.0	29.0	3.77	.990
Aggregate Scores for Effectiveness in implementation of OWP							3.73	.825
Alignment of OWP with school vision								
The OWP is aligned to vision of this school	31	0	0	38.7	41.9	19.4	3.81	.749
I articulate vision of school well during implementation of OWP	31	0	0	16.1	64.5	19.4	4.03	.605
Aligning OWP and school vision is linked to the academic performance of the school	31	0	0	25.8	64.5	9.7	3.84	.583
Aggregate Scores for Alignment of OWP with school vision							3.89	.659
Aggregate Scores for Implementation of Work Plan by Principals							3.96	.714

Results in Table 4.2 indicated that overall mean response for all items on implementation of work plan by principals was 3.96 which is closer to 4.0 (agree) on the 5-point Likert scale adopted in this study. There was low variability of responses which was 0.714. This confirms that work plan was implemented by principals which is a precursor for academic performance of students in public secondary schools in Kalama Sub County, Machakos County in Kenya.

The results indicated that there was agreement by most of the respondents that the school had operational work plan. This was confirmed by the aggregate mean score on availability of operation work plan which was 4.34 skewed towards 4.0 (agree) in 5-point Likert scale adopted by this study and low variability of responses which stood at 0.707. The results further confirmed that most schools had operational work plan which was uploaded online where most respondents strongly agreed on that as indicated by mean of above 4.5 which is close to 5 (strongly agree) and low variability of responses as noted by their corresponding standard deviations. Most of the respondents further opined that operationalization of operational work plan was connected to school academic performance

The mean score for the statement whether stakeholders were involved in coming up and implementation of operational workplan was 3.87 while the standard deviation is 0.666. This aggregate mean index was skewed towards 4.00 implying that respondents agreed as per index in the 5-point Likert scale utilized in this study. This means stakeholders are involved on matters operational workplan which was confirmed by low variability of responses. The mean scores and standard deviations indicated that most respondents agreed with specific statement that school stakeholders are involved in preparation of OWP in their school, school stakeholders are involved in implementation of OWP and stakeholder's engagement was associated with improved performance of students in public secondary schools in Kalama Sub County, Machakos County in Kenya.

It was found from the study that mean score and standard deviation pointed to that there was effective implementation of the operational work plan as indicated by aggregate mean of 3.73 and standard deviation of 0.825. The mean score tends towards 4.0 (agree)

in a 5-point Likert scale and the variability of responses was low. The means and standard deviations of specific statements indicated that there was agreement that schools implemented OWP effectively, they met timelines in set in the OWP and there was connection between proper implementation of OWP and academic performance of students in secondary schools in Kalama Sub County, Machakos County in Kenya.

The results in table 4.2 indicated that the mean score for whether OWP was aligned with the school visions was rated 3.89 while the standard deviation was 0.659. This aggregate mean index was skewed towards 4.00 (agree) as per 5-point Likert scale implying that OWP was aligned with the school visions. The means for specific statements were close to 4.00 (agree) and had low variability of responses as indicated by corresponding standard deviation. This implies that on specific statements school were aligned to school visions and school visions are articulated during implementation of OWP which was also linked to academic performance of students in public secondary schools in Kalama Sub County, Machakos County in Kenya.

4.2.4 Principal's Supervision on their Roles in Public Secondary Schools

This study sought to find the state of principal's supervision in their roles in public secondary schools. It sought from the respondents on their level of agreement or disagreement on state of principal's supervision in public secondary schools. Table 4.3 presented descriptive statistics on principal's supervision.

Table 4.3: Descriptive Statistics on Principal's Supervision

Principal's Supervision	N	SD %	D %	NS %	A %	SA %	mean	Std. Dev.
Supervision of teacher preparedness								
There is internal supervision of preparation of professional documents	31	0	0	9.7	54.8	35.5	4.26	.631
There is external M&E of teachers' preparedness in the school	31	0	0	0	64.5	35.5	4.35	.486
M &E of teachers' preparedness is related to school performance	31	0	0	19.4	61.3	19.4	4.00	.632
Aggregate Scores for Supervision of teacher preparedness							4.20	.583
Supervision of classroom attendance								
There is M&E of class attendance of teachers in the school	31	0	0	0	74.2	25.8	4.26	.445
There is monitoring whether recovery lesson in this school	31	0	0	25.8	74.2	0	3.74	.445
M&E of classroom attendance is linked to school performance	31	0	0	29.0	45.2	25.8	3.97	.752
Aggregate Scores for Supervision of classroom attendance							3.99	.547
Monitoring of learner's discipline								
There are systems to monitor discipline of learners in this school	31	0	0	9.7	80.6	9.7	4.00	.447
Stakeholders are engaged in monitoring of learners in this school	31	0	0	54.8	45.2	0	4.45	.506
M&E of discipline is related to school performance	31	0	0	19.4	41.9	38.7	4.19	.749
Aggregate Scores for Monitoring of learner's discipline							4.21	.567
Supervision of leadership practices								
There are mechanisms to monitor leadership among teachers in this school	31	0	0	19.4	71.0	9.7	3.90	.539
I monitor teachers when I delegate of duties to them	31	0	0	22.6	58.1	19.4	3.97	.657
Supervision of leadership practices affect the academic performance	31	0	9.	9.7	61.3	19.4	3.90	.831
Aggregate Scores for Supervision of leadership practices							3.95	.675
Aggregate Scores for Principal's Supervision							4.09	.593

The results in table 4.3 indicated shows that the overall aggregate mean scores and standard deviation for items on there was supervision of principals stood 4.09 and 0.593 respectively. The mean score was close to 4.00 (agree) on 5point Likert scale as adopted in this study with the standard deviation was low implying variability of responses was

low. This implies that principals were supervised in Kalama Sub County, Machakos County in Kenya.

It was found from the study that most respondents agreed that there was supervision of teacher preparedness in most schools. This was confirmed by the aggregate mean score of 4.20 which is skewed towards 4.0 (agree) as per the 5-point Likert scale utilized and low variability of responses with standard deviation of 0.583. On the specific statements, most respondents agreed that there was internal supervision of preparation of professional documents, there is external monitoring and evaluation of teachers' preparedness in the school and supervision of teacher's preparedness was linked to school performance in Kalama Sub County in Machakos County.

In relation to whether there was supervision of classroom attendance, most principals agreed with the statement. The aggregate mean score for the statement was 3.99 which tends towards 4.0 (agree) as per the 5-point Likert scale utilized with standard deviation being 0.776 which was low. The means and standard deviation for specific statements indicated that in most schools there was monitoring of classroom attendance and lesson recovery and the monitoring of classroom attendance by teachers was linked to academic performance of students in public secondary schools in Kalama Sub County in Machakos County.

The study findings in table 4.3 indicate that most participants had concurred that there was monitoring of learner's discipline in public secondary schools in Kalama Sub County in Machakos County. This was confirmed by aggregate mean score attributed to that which was 4.21 and standard deviation of 0.567. This mean score of 4.21 is close to 4.00 (agree) as per the 5-point Likert scale utilized where the variability of responses was low. The means and standard deviation further confirmed that there were systems

for monitoring discipline of learners in most schools and stakeholders placed crucial role in monitoring of learners. This was noted to be linked to school academic performance in Kalama Sub County, Machakos County in Kenya.

Lastly, the aggregate mean scores and standard deviation for the statement on that there is supervision of leadership practices was 3.95 and 0.675 respectively. The aggregate mean scores of 3.95 tends to 4.00 (agree) on the 5-point Likert scale with the low variability of the responses. This means that leadership practices are supervised in most schools in Kalama Sub County in Machakos County. The means and standard deviations for specific statements confirmed that there were mechanisms to monitor leadership among teachers and when teachers are delegated duties they are monitored. The results further indicate supervision of leadership practices affected the academic performance of students in public secondary schools in in Kalama Sub County, Machakos County in Kenya.

4.2.5 Principal's Training in Public Secondary Schools

The study sought to find the state of principal's training in public secondary schools in Kalama Sub County. It sought from the participants on their level of agreement or disagreement on various statement on principal's training in public secondary schools in Kalama Sub County, Machakos County in Kenya. Table 4.4 presented descriptive statistics on principal's training in public secondary schools.

Table 4.4: Descriptive Statistics on Principal's Training

Principal's Training	N	SD %	D %	NS %	A %	SA %	Mean	Std. Dev.
In service training								
I attend in service training	31	0	0	0	71.0	29.0	4.29	.461
In-service training has helped improve my knowledge and skills	31	0	0	6.5	38.7	54.8	4.48	.625
In-service training has is linked to academic performance of students	31	0	0	0	45.2	54.8	4.55	.506
Aggregate Scores for in service training							4.44	.531
Seminars and workshop attendance								
I attend seminars and workshops in this school	31	0	0	0	61.3	38.7	4.39	.495
Seminars and workshop have improved my knowledge and skills	31	0	0	9.7	51.6	38.7	4.29	.643
Attendance of workshop and seminars has improved school performance	31	0	0	0	54.8	45.2	4.45	.506
Aggregate Scores for seminars and workshop attendance							4.37	.548
Professional mentorship and induction								
There are professional mentorship and induction program in school	31	0	0	0	67.7	32.3	4.32	.475
Mentorship and induction have helped improve my professionalism	31	0	0	0	80.6	19.4	4.19	.402
Professional mentorship and induction have helped improve performance of schools	31	0	0	12.9	58.1	29.0	4.16	.638
Aggregate Scores for professional mentorship and induction							4.22	.505
Teacher Professional Development (TPD)								
The principal has joined professional development programs	31	0	0	9.7	19.4	71.0	3.61	.667
Your skills have been sharpened after joining TPD	31	0	9.7	51.6	19.4	19.4	3.48	.926
TPD has improved performance of learners in school	31	0	9.7	29.0	51.6	9.7	3.62	.803
Aggregate Scores for Teacher Professional Development (TPD)							3.57	.799
Aggregate Scores for Principal's Training							4.15	.596

The results in Table 4.4 indicated shows that the aggregate mean scores and standard deviation for items on whether there was training of principals in Kalama Sub County were 4.15 and 0.596 respectively. The mean score was close to 4.00 on 5-point Likert

scale as adopted in this study. This implies that the principals confirmed there was trainings of principals going in Kalama Sub County, Machakos County, Kenya.

The study realised that most principals had undergone in-service training as noted by mean of 4.44 which was skewed towards 4.0 (agree) as per the Likert scale utilized and low variability of responses as recorded through the standard deviation of 0.531. On the specific statements, most principals agreed they had attended in service training which had helped improve their knowledge and skills. The principals further strongly agreed that in-service training was linked to academic performance of students in public secondary schools in in Kalama Sub County, Machakos County in Kenya.

Results in table 4.4 indicated that there was agreement among principals that they attended seminars and workshops. The aggregate mean score for the observation was 4.37 which tends towards 4.0 (agree) as per 5-point Likert scale utilized and standard deviation of 0.548. There was that as principals attend seminars and workshops it led to improved knowledge and seminars. There was conformance by principals that attendance of workshop and seminars aided in improving academic performance of students in public secondary schools in in Kalama Sub County, Machakos County in Kenya.

The study findings indicate most respondents agreed that there was a professional mentorship and inductions in the area of the study. The mean score attributed to the statement was 4.22 and standard deviation of 0.505. This mean score of 4.22 is close to 4.00 (agree) as per the 5-point Likert scale where the variability of responses was noted to be low. The study further noted that on specific statement that mentorship and induction was practiced in schools; it helped improve professionalism among principals

and improve academic performance of students in public secondary schools in Kalama Sub County.

Lastly, most principals indicated that they had joined teacher professional development programs targeting principals in the area of the study. This was affirmed by the aggregate mean of 3.57 (Which is close to 4.0 for agree in a 5-point Likert scale) and low variability of responses as noted by low standard deviation of 0.924. On the specific statement relating to TPD indicated that principals had joined TPD programs while most principals were not sure whether joining TPD had sharpened their skills. However, the results further indicate that TPD had improved academic performance of learners in public secondary schools in Kalama Sub County, Machakos County in Kenya.

4.2.6 Motivation of Principals in Public Secondary Schools

The study sought to find the level of agreement or disagreement on various statements on motivation of principals in public secondary schools in Kalama Sub County. The analysis was based on mean and standard deviation. Table 4.5 presented descriptive statistics on motivation of principals.

Table 4.5: Descriptive Statistics on Motivation of Principals

Motivation of principals	N	SD %	D %	N %	A %	SA %	Mean	Std. Dev.
Principal of Year Awards (POYA)	31	0	83.9	6.5	9.7	0	2.42	.992
I participate in the POYA awards competition in the sub county								
Winning POYA improves morale and motivates principals in their work	31	0	29.0	9.7	61.3	0	3.32	.902
POYA awards is linked to performance of schools	31	0	9.7	29.0	51.6	9.7	3.61	.803
Aggregate Scores for Principal of Year Awards (POYA)							3.31	.899
Promotion to higher job group								
I have been promoted to higher job group since I become principal	31	19.5	35.5	19.4	9.7	16.1	2.68	1.351
Promotion to higher job group improves job morale	31	0	0	29.0	35.5	35.5	4.06	8.24
Promotion to higher job group is linked to performance of schools	31	0	9.7	19.4	61.3	9.7	3.71	.783
Aggregate Scores for promotion to higher job group							3.48	.986
Certification and recognition								
I have been recognized for outstanding performance in the Sub-County	31	0	48.4	16.1	29.0	6.5	2.94	1.031
Certification and recognition improve principals' job morale	31	0	0	19.4	51.6	29.0	4.10	.700
Certification and recognition are associated with performance of schools	31	0	19.4	9.5	45.2	25.8	3.77	1.055
Aggregate Scores for Certification and recognition							3.60	.929
Improvement of terms of service								
Terms of service have improved after becoming principal of this school	31	0	38.7	16.1	45.2	0	3.06	.929
Good terms of service have motivated the principals in their work	31	0	29.0	0	54.8	16.1	3.58	1.189
Improved term of service is linked to academic performance of schools	31	0	19.4	0	80.6	0	3.61	.803
Aggregate Scores for Improvement of terms of service							3.41	.974
Aggregate Scores for Motivation of principals							3.45	.947

The findings in Table 4.5 indicated that overall mean response for all items on motivation of principals was 3.45 which is closer to 3.0 (not sure) on the 5-point Likert scale adopted in this study. The variability of responses was low at 0.947. This implies that most principals were not sure or doubted whether there was adequate motivation among principals in Kalama Sub County, Machakos County in Kenya.

The results indicated that there was low opinion when asked whether they were involved in Principal of Year Awards (POYA). This was confirmed by aggregated mean of 3.31 which tends towards 3.0 (not sure) in the 5-point Likert scale. The standard deviation was 0.899 indicate low variability of the responses thus indicating that most principals negated and doubted whether they participated in POYA competitions. The respondents (Principals) further negated that they participated in the POYA awards competition in the sub county and whether winning POYA improved morale and motivated principals in their work. However, there is controversy as most principals accepts that POYA awards was linked to performance of public secondary schools in in Kalama Sub County in Machakos County.

The mean score on whether there was promotion to higher job group was 3.48 while the standard deviation was 0.986. This mean index was skewed towards 3.0 for not sure although it was so close to agree mark which starts 3.5 as per index in the Likert scale utilized in this study. This implies respondents were divided opinion on whether they were promotion to higher job groups. Through the analysis, it was most principals agreed that promotion to higher job group improved job morale and was linked to academic performance of students in performance of public secondary schools in Kalama Sub County in Machakos County.

It was found from study that mean score and standard deviation for the statement that there was Certification and recognition of principals to be 3.60 and 0.929 respectively. The mean score tends towards 4.0 (agree) in a Likert scale and with low variability of responses meaning there was certification and recognition of principals in the area of the study. Most principals posed a doubt on whether they were recognized for outstanding performance at the Sub County level. However, there was agreement that certification and recognition not only improved principal's job morale but was also associated with better performance of public secondary schools in Kalama Sub County, Machakos County, Kenya.

Lastly, the aggregate mean scores on whether there were improved terms of service was 3.41 while the standard deviation was 0.974. This mean index was skewed towards 3.00 (Not sure) implying that there were doubts whether respondent's terms of service had improved. The study findings noted that in terms of specific statements that there were doubts by principle if their terms had improved. The findings however noted that most respondents agreed that good terms and services motivated principals in their work and it was also connected with improved academic performance of public schools in Kalama Sub County in Machakos County.

4.2.7 Academic Performance of Students in Public Secondary Schools

The study sought from the respondents on their level of agreement or disagreement on various statement relating to academic performance of students in public secondary schools in Kalama Sub County, Machakos County in Kenya. Table 4.6 presented descriptive statistics on academic performance of students in public secondary schools.

Table 4.6: Descriptive Statistics on Academic Performance of Students

Academic performance in secondary schools	N	SD	D	NS	A	SA	Mean	Std. Dev.
Students attaining quality marks in KCSE	31	0	64.5	35.5	0	0	2.35	.486
Most of learners attain mean grade above C+								
Most of learners have attained quality marks since introduction of PC for principals	31	0	38.7	45.2	16.1	0	2.77	.717
Aggregate Scores for Students attaining quality marks in KCSE							2.56	.602
Students attaining entry grade to university								
Most students who did their KCSE in 2023 gained entry to university	31	0	45.2	54.8	0	0	2.55	.506
The number of students attaining entry grade to university has improved after introduction of PC for principals	31	0	19.4	35.5	45.2	0	3.26	.773
Aggregate Scores for Students attaining entry grade to university							2.91	.426
Cases attended per term on poor academic performance								
The school cases per term related to school performance have reduced in 2023	31	0	9.7	45.2	45.2	0	3.35	.661
When cases related to performance reduce it leads to improved school performance	31	0	9.7	0	80.6	9.7	3.90	.700
Aggregate Scores for Cases attended per term on poor academic performance							3.63	.681
Aggregate Scores for Academic performance of Students in Secondary Schools							3.03	.570

Results in Table 4.6 indicated that overall mean response for all items on academic performance of learners in public secondary schools in Kalama Sub County to be 3.03. This is closer to 3.0 (not sure) on the 5-point Likert scale adopted in this study. This translates to that most participants were disputing or doubting whether there is good academic performance of learners in public secondary schools as confirmed by low variability of responses as denoted by standard deviation of 0.570. This means the academic performance is likely to be average in public secondary schools in Kalama Sub County in Machakos County.

It was also found from the study that mean score and standard deviation on whether most of students attained quality marks in KCSE was 2.35 and 0.486 respectively. The mean score tends towards 2.0 (Disagree) as per 5-point Likert scale utilized with standard deviation being 0.602 which indicated low variability of results. This implies that most respondents disagreed that students were attaining quality grades in KCSE in Kalama Sub County. Most respondents (Principals) further disagreed that most of learners attained mean grade above C+ in KCSE and since introduction of performance contracting for principals, most learners had attained quality marks in their examinations in Kalama Sub County, Machakos County in Kenya.

It was found from study that mean score and standard deviation on if students attained entry grade to university to be 2.91 and 0.426 respectively. The mean score tends towards 3.0 (not sure) in a Likert scale and with low variability of responses meaning there was doubts on whether students were attaining entry grades to universities. Most respondents disagreed that most students who did their KCSE in 2023 had gained entry in to university and there was doubts that number of students attaining entry grade to

university has improved after introduction of PC for principals in public secondary schools in Kalama Sub County, Machakos County, Kenya.

Lastly, the study findings indicated that most respondents supported the opinion that there were cases that were attended on poor academic performance. The mean score attributed to the opinion was 3.63 and standard deviation of 0.681. This mean score of 3.63 is close to 4.00 (agree) as per the 5-point Likert scale where the variability of responses of 0.681 was noted to be low. The findings confirmed that respondents affirmed that the school cases per term related to school performance have reduced in 2023 and cases related to performance have reduced and resulting to improved school performance in public secondary schools in Kalama Sub County, Machakos County, Kenya.

4.3 Inferential Statistics

Multiple regression analysis was used to test hypotheses of the study. Prior to the analysis of the data, some diagnostic tests were done to check whether the assumptions of regression analysis were met. Diagnostic tests ensured that the data was appropriate for making inferences and making conclusion from the study finding.

4.3.1 Diagnostic Tests

Diagnostic tests are carried to identify and give remedy to any violation of the assumptions of multiple regression (Chatterjee & Hadi, 2012). When assumptions of regression analysis are violated, it results to prejudice in estimation of the relationship, precision level of regression coefficient and poor choice of the confidence level. This study conducted normality, linearity, multi-collinearity and homoskedasticity test before carrying out actual data analysis.

4.3.1.1 Normality Test

Shapiro-Wilk test was used to test whether data was normally distributed. The null hypothesis (H_0) was that the data was not normally distributed. The statistics lies between zero and one. The rule of thumb was if P-value was greater than 0.05 then we should reject null hypothesis meaning the data was normally distributed as recommended by Razali and Wah (2011). Table 4.7 shows the normality test results using Shapiro-Wilk Statistics

Table 4.7: Shapiro-Wilk Statistics

Variable	Statistics	Df	Sig.
Implementation of work plan	.683	31	.104
Principal's supervision	.845	31	.110
Principal's training	.684	31	.060
Motivation of the principals	.673	31	.206
Academic Performance	.848	31	.105

Table 4.7 indicate that the P-values for the five research variables were greater than the alpha level of 0.05. The significant level ranged from 0.060 to 0.206 which is greater than the recommended significance level. From the above results, we should reject null hypothesis. It can therefore be concluded that since the calculated probability values were greater than 0.05 and therefore at 95% confidence level, the data was normally distributed and was amenable for further data analysis.

4.3.1.2 The Linearity Test

To assess whether there was linear relationship between the variables, this study adopted Pearson product-moment correlation. The null hypothesis was: (H_0) The linear

relationship does not exist between the variables. The correlation coefficient ranged between -1 and 1. Table 4.8 shows the results for the linearity test.

Table 4.8: Linearity Test

Items		Academic Performance	Conclusion
Implementation of work plan	Pearson Correlation	.638	Linear
	Sig. (2-tailed)	.000	
	N	31	
Principal's supervision	Pearson Correlation	.637	Linear
	Sig. (2-tailed)	.000	
	N	31	
Principal's training	Pearson Correlation	.135	Linear
	Sig. (2-tailed)	.047	
	N	31	
Motivation of the principals	Pearson Correlation	.801	Linear
	Sig. (2-tailed)	.000	
	N	31	

***. Correlation is significant at the 0.01 level (2-tailed).

Results in table 4.8 revealed that all the predictor variables were positively correlated to the dependent variable and were significant since they had a P-value which was less than 0.05. Relying on recommendation by Bewick, Cheek and Ball (2005) when P-value is less than 0.05, we should reject null hypothesis. This translates to that there is a linear relationship between independent variables and the dependent variable. From the analysis, it was realised that when academic performance is regressed against all independent variable, it had a positive and significant linear relationship with the variables.

4.3.1.3 Multi-Collinearity Test

Multicollinearity test was used to measure whether all the predictor variables are correlated. Multicollinearity was tested by calculating the Variance Inflation Factor (VIF) and tolerance as recommended by Field (2009). The null hypothesis (H_0) stated that the coefficient of the variable is zero meaning the variable does not contribute to

the model. The rule of thumb was if tolerance value was more than 0.20 or 0.10 or VIFs was less than 10 this indicates that the level of multicollinearity could be tolerated or no multicollinearity. These results are presented in Table 4.9.

Table 4.9: Collinearity Statistics

Variable	Tolerance	VIF	Comment
Implementation of work plan	.443	2.259	No multicollinearity
Principal's supervision	.503	1.989	No multicollinearity
Principal's training	.848	1.180	No multicollinearity
Motivation of the principals	.528	1.896	No multicollinearity

Table 4.9 indicate that the tolerances and VIFs were greater than 0.2 and less than 10 respectively. Based on the results, we should reject the null hypothesis. It can therefore be concluded that there was no multicollinearity among all independent variables thus, it was in order to maintain all predictor variables in the regression model.

4.3.1.4 Homoskedasticity

Homoskedasticity occurs when there is equal variance of error term. When there is variance in the error term, it is referred as heteroskedasticity which may lead to biased inferences (Machado & Silva, 2013). To assess Homoskedasticity, the study utilized Levene test. The null hypothesis was: H_0 : The variance is equal across the groups. The rule of thumb was if $P > 0.05$, do not reject null hypotheses. The results for Levene test was presented in table 4.10.

Table 4.10: Levene Statistics

Variable	Levene statistics	df1	df2	Sig.
Implementation of work plan	2.724	3	27	.254
Principal's supervision	2.416	3	27	.060
Principal's training	2.713	3	27	.057
Motivation of the principals	2.419	3	27	.209

Table 4.10 indicate that the calculated probability for all study variables was greater than 0.05. It was therefore concluded not to reject null hypothesis that the variance is equal across the groups/variables. The results imply that all independent variables were significantly equal and is amenable for further analysis.

4.4 Test of Hypotheses

The study used multiple regression analysis model to empirically test the four hypotheses of the study. The four hypotheses tested direct effects of aspects of principal's performance contracting (Independent variable) and how it affected the academic performance of students in public secondary schools (Dependent variable). The aspects of principal's performance contracting included implementation of workplan by principals, principal's supervision, principal's training and motivation of principals and how they affect academic performance of students in public secondary schools in Kalama Sub County in Machakos County.

The statistical threshold for testing the hypotheses was at 95% confidence level ($\alpha=0.05$) for making conclusions. The research investigated level at which independent variables explained variation on the academic performance using adjusted R^2 . The study conducted Analysis of Variance (ANOVA) to examine whether the relationship

between variable was significant which involved computing F statistics and its corresponding P-values. Significance value was set at 0.05 that is if P-value is less than 0.05, the conclusion is that the model is significant. The coefficient of predictor values regressed against the dependent values was also evaluated. The summary of regression analysis for principal's performance contracting and academic performance was summarized in table 4.11

Table 4.11: Regression Results for Principal's Performance Contracting and Academic Performance

Model summary					
Model	R	R square	Adjusted R ²	Standard error of estimate	
1	.846 ^a	.716	.673	.2270	
ANOVA					
Model	Sum of squares	df	Mean square	F	Sig.
Regression	3.373	4	.843	16.413	0.000 ^a
Residual	1.336	26	.051		
Total	4.708	31			
a. Predictors: <i>(Constant) Implementation of work plan, principal's supervision, principal's training and motivation of the principals</i>					
b. Dependent Variable: <i>Academic performance of students in public secondary schools</i>					
Model	Unstandardized coefficients		Standardized coefficient (beta)	t	Sig.
	Beta	Std error			
Constant	0.826	.678		1.219	.034
Implementation of work plan	.053	.118	.070	.445	.006
Principal's supervision	.352	.173	.300	.976	.042
Principal's training	.227	.159	.162	.624	.016
Motivation of the principals	.442	.101	.627	4.498	.000
Dependent Variable: <i>Academic performance of students in public secondary schools</i>					

Regression results in Table 4.11 indicate that the adjusted coefficient of determination (Adjusted R² was 0.673. This means that the performance contracting (All its aspects) which is the independent variables jointly explained 67.3% of the changes in the

dependent variable that is academic performance of students in public secondary schools in Kalama Sub County, Machakos County. The F statistics was $F(4, 26) = 16.413$ with a P-value of 0.000. This means that the regression model was statistically significant as the level of significance was less than 0.05 threshold.

The estimated regression model for direct relation was:

Academic Performance = 0.826 + 0.053 Implementation of work plan + 0.352 Principal's supervision + 0.227 Principal's training + 0.529 Motivation of the principals ...Model 4.1

The regression model indicated that holding principal's performance contracting constant at zero, the academic performance of students in public secondary schools in Kalama Sub County, Machakos County was at 0.826. This means adding some aspects of performance contracting will enhance positively and improve the academic performance of students in public secondary schools in Kalama Sub County, Machakos County in Kenya.

4.4.1 Implementation of Work plan by Principals and Academic Performance

The first objective of the study examined the effects of implementation of work plan by principals on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya. The corresponding null hypothesis was H_{01} : Implementation of work plan by principals has no significant effect on the academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya. From the regression model in Table 4.11, it was revealed that implementation of work plan by principals had significant effect on the academic performance of students in public secondary schools at $\beta=0.053$; $t = 0.445$; $p = 0.006$

since the p value was less than 0.05. The analysis implies that a unit change in implementation of work plan by principals would result to an increase of 0.053 on the academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya.

Based on findings in Table 4.11, the null hypothesis should be rejected and therefore be concluded that implementation of work plan by principals had significant effect on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya. The finding is in concomitant with hitherto study by Odette and Andala (2022), Kwaslema and Onyango (2021), Seje, Ombati and Maithya (2021) and Nugraha, Reftyawati and Sari (2020) which asserted that strategic and work plan implementation had effect on the performance of learning institutions.

4.4.2 Principals' Supervision and Academic Performance

The second specific objectives sought to establish the effects of principal's supervision on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya. The corresponding null hypothesis was: H_{02} : Principal's supervision has no significant effect on the academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya.

The regression results in Table 4.11 indicated that principals' supervision had statistically significant effect on the academic performance of students in secondary schools in Kalama Sub County at $\beta=0.352$; $t = 0.976$; $p = 0.042$ since the p value was less than 0.05. The analysis implies that a unit change in principals' supervision would result to an increase of 0.352 of academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya.

The regression results reveal that the relationship between principal's supervision and academic performance are significant at 95% confidence level since the p-value is less than 0.05 thus rejecting the null hypothesis. It can therefore be concluded that principal's supervision had significant positive effect on the academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya. The study findings corroborated well with study findings by Mwakajitu and Lekule, C. (2022), Manduku, Ngok & Mauti (2021), Sindayigaya, Ngarambe and Nyamweya (2020), Ajibade and Ajibade (2020) and Phocas and Andala (2020) who found that supervision was significantly related to academic performance of learners in varied learning institutions.

4.4.3 Principal's Training and Academic Performance

The third specific objective of the study sought to determine the effects of principal's training on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya. The proposed null hypothesis was H_{03} : Training of principals has no significant effect on the academic performance of students in secondary schools in Kalama Sub-County, Machakos County, Kenya.

The regression analysis in Table 4.11 confirmed that the relationship between principal's training and academic performance was statistically significant at $\beta=0.229$; $t = 0.624$; $p = 0.016$, since significance level was less than 0.05 thus rejecting null hypothesis. It was noted that unit increase in principal's training increases academic performance by 0.229 of students in secondary schools in Kalama Sub County, Machakos County, Kenya.

From the study findings, it can therefore be concluded that there is significant positive effect of principal's training on academic performance of students in secondary schools in Kalama Sub County, Machakos County, Kenya. The results were consistent with finding by researchers like Hafeez (2021), Saeed and Akbar (2021), Padillo, Manguilimotan, Capuno and Espina (2021) and Zhaohui and Anning (2020) whose findings indicated there was a connection between teacher training and on students' academic performance in varied learning institutions.

4.4.4 Motivation of Principals and Academic Performance

The fourth objective sought to determine the effects of motivation of principals on the academic performance of students in public secondary schools, in Kalama Sub County, Machakos County, Kenya. The null hypothesis was H_{04} : Motivation of principals has no significant effect on the academic performance of students in secondary schools, in Kalama Sub-County, Machakos County, Kenya.

The regression results in table 4.11 revealed that the beta coefficient for motivation of principals was 0.442 with t-statistics and corresponding p-value of 4.498 and 0.000 respectively. Since the p-value was less than 0.05, we reject the null hypothesis and conclude that there is significant positive effect of motivation of principals on the academic performance of students in public secondary schools. From the beta coefficient of 0.442, it means unit change of motivation of principals improves academic performance by 0.442 in public secondary schools in Kalama Sub County, Machakos County, Kenya. The findings for this study were corroborated with hitherto studies by Ekal and Mungai (2024), Mnjokava (2024), Musyoki, Mulwa and Mwanza (2024) and Chima (2023) which indicated that motivation of principals was connected

to performance of both teachers and academic performance of learners in learning institutions.

4.5 Qualitative Data Analysis

This study obtained qualitative data from the responses given by the respondents from the open-ended questions in the questionnaires. The study extracted opinions from the respondents on the state of various aspects of principal's performance contracting which entails implementation of work plan by principals, supervision of principals, training of principals and motivation of principals and how it connected with the academic performance the academic performance of students in secondary schools, in Kalama Sub-County, Machakos County, Kenya. The collected data was packaged together and analysed on the basis of common themes and patterns which were reported in narrative form.

4.5.1 Implementation of Work plan by Principals and Academic Performance

This study sought the opinion on the state of preparation of work plan by principals and its implementation by principals of secondary schools, in Kalama Sub-County, Machakos County, Kenya. The opinion of most respondents who filled the open-ended questions in the questionnaire was that there most principals prepared OWP at the start of each year and effectively implemented the work plan. Most respondents were of the opinion that they engaged various stakeholders while preparing the operational work plan and even during implementations. It further noted by most respondents that the OWP was connected to both school vision and its strategic plans.

Most respondents were of the opinion that work plan implementation was linked to school academic performance in most institutions in the area of the study. The believed

if the work plan road map is followed well it may be connected with how learners perform in schools. If I may quote one principal opined ‘performance of learners improves if the operational work plan is implemented well in schools’. The observation from the qualitative analysis was in tandem with quantitative data analysis which observed that there were significant positive effects of implementation of work plan by principals on the academic performance the academic performance of students in secondary schools, in Kalama Sub-County, Machakos County, Kenya. These findings validate study by Odette and Andala (2022) and Kwaslema and Onyango (2021) which indicated that there was positive effect of implementation of work plan by principals on the academic performance the academic performance of students in secondary schools.

4.5.2 Principals’ Supervision and Academic Performance

The study sought the respondent’s opinion on the state of supervision of principals on matters teacher preparedness, class attendance, learner’s discipline and leadership practices in this school. Most respondents concurred that principals were supervised as they performed their duties in schools. Most respondents okayed that principals were supervised on how they prepared their professional documents. These professional document aid in learning which is key in promoting academic performance of learners. Most respondents also accepted that principals were supervised on their class attendance and there were mechanisms to monitor class room attendance. The study findings further indicated that principals had systems in their schools to monitor discipline of learners and it involved multiple stakeholders for its success. The respondents further agreed that leadership practices by most principals were supervised on their leadership practices.

Most of the participants were of the opinion that there was positive effect of principal's supervision on the academic performance the academic performance of students in public secondary schools, in Kalama Sub-County, Machakos County, Kenya. These qualitative findings match with quantitative analysis which indicated principal's supervision had significant positive effect on the academic performance of learners in public secondary schools in Kalama Sub County. The study supports hitherto study by Mwakajitu and Lekule (2022) and Manduku, Ngok & Mauti which indicated that principal's supervision had significant effect on the academic performance in learning institutions.

4.5.3 Principal's Training and Academic Performance

The study sought the participants' opinion on the state of principal's training in the area of the study. Most respondents opined that principals were involved in training. The respondents further indicated that principals were involved in training through school INSETS, workshops, seminars, undertaking TPD programs. To quote one of principals indicate "I participated in trainings which are organized both at school and even Sub County and County level through school INSETS, TIMEC programs, workshops and seminars.

There concurrence amongst most respondents that training helps improve teachers' skills and knowledge which also affect academic performance of learners in their schools. Most respondents believed principal's training had effect on the academic performance of learners in public secondary schools they were serving. These qualitative results match with quantitative analysis which indicated that principal's training had significant positive effect on the academic performance in public secondary schools in Kalama Sub County. The study concurs with hitherto study by

Hafeez (2021) and Padillo, Manguilimotan, Capuno and Espina (2021) which indicated that principal's training had significant effect on the academic performance in learning institutions.

4.5.4 Motivation of Principals and Academic Performance

The study sought the opinion on the state of motivation of principals in Kalama Sub County. Most of the respondents involved were of the opinion that principals in Kalama Sub County were motivated using varied methods. Most principals agreed that they were motivated through rewards, promotion to the next job groups, verbal appraisal and being given recommendation letter for the good job they did.

Most respondents further indicated that motivation of Principals had effect on the academic performance of learners in schools. One principal if I quote noted "when principals are motivated, it increases their morale in job and sometimes ends up going an extra mile in their duties which in long-run affect the academic performance of their learners". The qualitative findings were consistent with quantitative data analysis which observed that there was significant positive on the relationship between motivation of principals and academic performance of students in public secondary schools. These findings conforms with findings by Ekal and Mungai (2024) and Mnjokava (2024) which indicated that motivation of principals was had significant positive effect connected to performance of both teachers and academic performance of learners in learning institutions.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusion and the recommendation based on the study findings. The chapter further highlights the recommendation to policy and practice and suggestions for further research in relation to principal's performance contracting and academic performance of students in secondary schools, in Kalama Sub-County, Machakos County, Kenya. The chapter would present each section thematically according to the specific objectives of the study.

5.2 Summary

Performance contracting of principals is one the key management tools which has helped Teachers Service Commission (TSC) to evaluate the performance of their employees (Principals) by the end of each year. The performance contracting cycle starts with setting of targets and preparation of operational work plan of their schools, continuous supervision of principals as they perform their duties which sometimes involve them undertaking some training to peep up their skills and lastly motivation and rewarding for their performance and meeting set targets. These aspects formed basis of conceptualization of performance contracting which was connected with performance of students in secondary schools, in Kalama Sub-County, Machakos County, Kenya. The study findings were organized in to four sub themes which were guided by the study objectives.

The first objective was on how implementation of operational work plan by principals affects the academic performance of students in secondary schools, in Kalama Sub-

County, Machakos County, Kenya. The study noted that the principals were involved in implementation of work plan in schools and they engaged stakeholders in coming up with the work plan plans. The study further noted that the school operational work plan was connected to the school vision. It was further noted that effective implementation of operational work plans had effect on the academic performance in of students in public secondary schools.

The second sub theme of the findings dealt with principal's supervision had effect on the academic performance of students in secondary schools, in Kalama Sub County, Machakos County, Kenya. It was realized from the study that principals were supervised in their operations and particularly in areas like teacher preparations of professional documents, class attendance, how they monitor learner's discipline and on school leadership styles. The study findings indicated that principal's supervision had significant positive effect on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya.

The third objective evaluated whether principal's training had effect on the academic performance of students in secondary schools, in Kalama Sub-County, Machakos County, Kenya. The study opened up a Pandora on whether there were training of principals which most respondents okayed to it. The study enumerated the main ways through principals are trained which included school INSETS, workshops and seminars. It was realized that principal's training had significant positive effect on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya.

The last sub theme tried to establish whether motivation of principals had effect on the academic performance of students in secondary schools, in Kalama Sub-County,

Machakos County, Kenya. It was realised from the study findings that principals were motivated in the area of study. The study further found that principals were motivated through rewarding, promotion to next group, verbal appraisal and recommendation for any work well executed. The study noted that motivation of principals had significant effect on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya.

5.3 Conclusions

There were four major conclusions made based on the study results which were tied to the research objectives. Firstly, it was noted there was implementation of work plan by principals in public secondary schools in the area of the study. The results indicated that implementation of work plan by principals had significant positive effect on the academic performance of learners in public secondary schools. The results underscore the paramount importance of principals in the preparation and implementation of school operational work plan which is a core component in performance contracting of principals. It is therefore logical to conclude that implementation of work plan by principals had effect on the academic performance of students in public secondary schools and need to be encouraged in schools.

Secondly, the study found that supervision of principals was implemented in the area of the study. The study found that supervision of principals had effect on the academic performance among learners in public secondary schools. It is therefore in order to conclude that principal's supervision is paramount in promoting academic performance among learners in public secondary schools. This calls for proper institution of proper supervision strategies in schools in order to pull them towards promoting academic performance of learners in secondary schools.

Thirdly, the study found that principals were trained in Kalama Sub-County in form of school INSETS, workshops and seminars. It was realized that principal's training had significant positive effect on the academic performance of students in public secondary schools in Kalama Sub County, Machakos County, Kenya. Thus, it is with merit to conclude that principal's training had influence on academic performance of students in public secondary schools. Therefore, there is need to leverage on the best training methods for principals in order to support academic performance among learners in public secondary schools.

Lastly, the study found that principals in Kalama Sub County were motivated mostly through rewarding, promotion to next group, verbal appraisal and recommendation for any work well executed. The study found that noted that motivation of principals had significant effect on the academic performance of students in public secondary schools. It is logical therefore to conclude that motivation of principals helps in improving the academic performance in public secondary schools. It is therefore prudent for schools to institute wide range of reward and motivation strategies in valuing those who perform exceedingly well so that it may aid in realizing improved academic performance of the learners.

5.4 Recommendations of the Study

The study findings have offered some key insights that are crucial in formulating policy and in practice. From the study findings, the researcher came up with the following recommendations which include:

- i) School administrators (Principals) should ensure their school annual budgets and operational work plan aligns with school vision and ensure they

followed properly during their implementation and involve all stakeholders during preparation and implementation of the schools plans.

- ii) Head of Institutions (HOIs) and the Head of Departments (HODs) should ensure that each school establish proper supervision strategies on teacher's classroom attendance and preparation of professional documents to ensure teachers are adequately prepared before go to teach.
- iii) Board of Managements (BOMs) and school principals should be trained on how monitor learners' discipline and on ways of upscaling their leadership strategies in schools.
- iv) BOMs should ensure they establish school motivational programs geared towards rewarding outstanding performance of teachers in schools.
- v) TSC should strengthen the Principals of Year Award (POYA) and Teacher of Year Award (TOYA) in rewarding teachers who exhibit outstanding performance in schools and also have clear promotion policy for teachers and HOIs with outstanding performance should be rewarded
- vi) The Ministry of Education (MOE) through its agencies like Kenya Education Management Institute (KEMI) should ensure they train Heads of Institutions (HOIs) together with the Board of Management (BOM) on how to prepare and implement school strategic and operational plans.
- vii) TSC and MOE should ensure that Quality Assurance and Standards Officers (QASOs) and Curriculum Support Officers (CSOs) respectively are facilitated so that they may make regular school visits to check on teacher preparedness and how they attend classes and ensure they offer support to

them on most transformative pedagogical approaches to apply in order to improve learning in schools.

- viii) TSC and MOE should ensure HOIs and BOMs are regularly trained on policy issues and on proper management of all school resources and on initiation of school programs that will lead to improved school performance.

5.5 Recommendations for Further Studies.

The researcher made the following suggestions for further studies:

- i) This study was limited to public secondary schools. This suffers limitation of generalization of findings to all level of education calling for need to replicate the same study in other level of education like primary schools and colleges using the same study variables and bringing in moderating variable like school environment in the study.
- ii) The study did not capture trends of performance contracting over a period of time as it was a cross sectional in nature. Further studies need to be conducted using longitudinal approach for 10 years to capture such trends and also capture moderating variable like school environment which is not captured in this study.

REFERENCES

- Abane, J. A., & Brenya, E. (2021). The relationship between organizational environment antecedents and performance management in local government: evidence from Ghana. *Future Business Journal*, 7(1), 1-17.
- Aduda, A. (2008). *Implementation of Free Secondary Education in Kenya*, Nairobi: Nairobi University Press.
- Ajibade, I.V. & Ajibade, A.O. (2020). Influence of Monitoring and Evaluation on Students Academic Performance as Relates to Education Trend in Ondo State, Nigeria. *International Journal of Education and Evaluation*. Vol. 6, No. 2: 18-35.
- Akomolafe, C. O., & Adesua, V. O. (2016). The Impact of Physical Facilities on Students' Level of Motivation and Academic Performance in Senior Secondary Schools in South West Nigeria. *Journal of Education and Practice*, 7(4), 38-42.
- Alzoraiki, M., Ahmad, A.R., Ateeq, A.A., Naji, G.M.A., Almaamari, Q., & Beshr, B.A.H. (2023). Impact of Teachers' Commitment to the Relationship between Transformational Leadership and Sustainable Teaching Performance. *Sustainability* 15, 4620, 2 -16
- Amali, N. A. K., Ridzuan, M. U. M., Rahmat, N. H., Seng, H. Z., & Mustafa, N. C. (2023). Exploring Learning Environment Through Bronfenbrenner's Ecological Systems Theory. *International Journal of Academic Research in Progressive Education and Development*, Vol. 12(2), 144–162.
- Archibong, F. I. (2010). Instructional Supervision in the Administration of Secondary Education: A Panacea for Quality Assurance. *European Scientific Journal*, 8(13), 61–70.
- Armstrong, M. & Baron, A. (2004). *Managing performance: performance management in action*. London: Chartered Institute of Personnel and Development.
- Armstrong, M. (2006). *Performance Management: Key Strategies and Practical guidelines*, 3rd ed. Bodmin, Cornwall: MPG Books Ltd.
- Armstrong, M. (2007) *Strategic Human Resource Management. A Guide to Action*, London: Kogan Page.
- Armstrong, M., & Baron, A. (2002). *Strategic HRM: The Key to Improved Business Performance*, London: CIPD Publishing.
- Ayesha, W. (2014): *Impact of Rewards on Employee Performance: With Special Reference to ElectriCo: Integrating Eco-Friendly and Ethical Practices*.
- Balogun, M. J. (2003). *Performance Management and Agency Governance for Africa Development: The search for common cause on Excellence in the Public Service*. Addis Ababa, UNCEA.

- Bangura, S. (2018). An exploration of the impact of a performance management system on employee motivation at an academic advisory centre in Pinetown. *Master of Management Science: Human Resources Management Thesis, Durban University of Technology, Durban, South Africa.*
- Barclays Africa (2017). *What works in elementary schools: Results based staff development.* Oxford, OH: National Staff Development Council.
- Bironga, M (2015). Determinants of parental involvement in pupil's education and academic achievement among primary school pupils in Nairobi County, Kenya. *Unpublished master's Thesis, Kenyatta University, Nairobi.*
- Bishop, M.A., Craven, J.D., Galer, Wilson, J.D. & Duggins-Clay, J.D. (2022) *Literature Review- School Discipline.* San Antonio, Texas: Intercultural Development Research Association.
- CAPAM. (2005). In Pursuit of Excellence: Developing and Maintaining a High-Quality Public Service. *A Report on a CAPAM High-Level Seminar on Commonwealth Training and Development Institutes*, October, 2005.
- Carnie, F. (2017). *Rebuilding our School from the Bottom Up: Listening to Teachers, Children and Parents.* London: Routledge.
- Chepkwony, W., Manduku, J., & Kibett, J.K. (2022). Relationship between the Perceived Effects of Implementation of Performance Contracting Process and Head Teachers' Performance in Public Day Primary Schools in Kericho County, Kenya, *The International Journal of Humanities & Social Studies*, Vol 10, Issue 1: 152-160.
- Chetty, S., Johanson, M., & Martin, O.M. (2014). Speed of internationalization: Conceptualization, measurement and validation, *Journal of World Business* Vol. 49(4).
- Chima, E.K. (2023) *Impact of reward system in students' academic achievement in government secondary schools in Gwagwalada area council FCT in Abuja, Nigeria,*
- Cohen, L., Manion, L., And Morrison, K. (2018). *Research Methods in Education*, (8th Ed). London, Routledge.
- Commonwealth Secretariat, (2008). *Commonwealth Strategies for Reform: Managing the Public Service for Improvement Series: No.1.* Commonwealth Secretariat. London: Rockefeller Institute Press.
- Cooper, D. R. & Schindler, P. S. (2016). *Business Research Methods. (9th ed.).* Boston USA: McGraw-Hill Irwin.
- Creswell, J.W. & Creswell, J.D. (2023). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches.* London: Sage Publications Ltd.
- Danielson, C. (2019). Enhancing Professional Practice: A framework for teaching: *Evaluation instrument.*

- Earthman, G.I. (2017). The relationship between school building conditions and student achievement: a critical examination of the literature. *Journal of Ethical education leadership* 4 (3) 1-16.
- Economic Commission for Africa (2009). *Annual Report 2009: Economic Commission for Africa. Official records. Supplement / Economic and Social Council. no. 18, vii, 88.* Addis Ababa, Economic Commission for Africa
- Ekal, C. S. & Mungai, J. G. (2024). Principals' motivation and problem-solving practices' influence on students' academic performance in public secondary schools in Turkana County, Kenya. *International Academic Journal of Social Sciences and Education (IAJSSE)*, 2(3), 515-540.
- El Kalai, I., Kirmi, B., & Ait Lhassan, I. (2021). Investigating the effect of teacher commitment on student academic achievement: The case of Moroccan high schools in Tangier. *International Journal of Research in Business and Social Science* 10(8), 2147- 4478.
- Etikan,I., Musa, S.A., & Alkassim, R.S. (2015).Comparison of Convenience Sampling and Purposive Sampling, *American Journal of Theoretical and Applied Statistics*, Volume 5, Issue 1: Pages: 1-4.
- Fontana, D. (1985). *Classroom Control: Understanding and Guiding Classroom Behavior*. London: The British Psychological Society & Methuen.
- Fournier, S. (2019). L'implication des enseignants: une des clés possibles de la performance éducative. *Management international / International Management/ Gestión Internacional*, Vol. 23 (3), 45–55.
- Fraenkel, J.R. & Wallen, N. E. (2019). *How to Design and Evaluate Research in Education*. New York: McGraw- Hill Education.
- Gibbs, G., & Coffey, M. (2004). The Impact of Training of University Teachers on Their Teaching Skills, Their Approach to Teaching and the Approach to Learning of Their Students. *Active Learning in Higher Education*, 5, 87-100.
- Giovazolias, T., Syngelaki, E. M., & Papastylianou, A. (2019). Effectiveness of a teachers' training program on their core self-evaluations, relationship with students and work engagement. *Journal of Classroom Interaction*, 54(2), 4-23.
- Grapinet, N., Baloch, M.N., Jaiko, A.M., & Jadiel, A.A. (2019) People Management at work place application theory X and Theory y in public and private organizations sector in HYDERABAD, Sindh, Pakistan. *European Journal of business and social science*, 6,193-206.
- Hafeez, M. (2021). Impact of Teacher's Training on Interest and Academic Achievements of Students by Multiple Teaching Methods. *Pedagogical Research*, 6 (3).
- Izzyana, E. (2014) *Reward system and its impacts on employee motivation: Case study of a Malaysian*.

- Johnson D. W & Johnson F. (2016). *Joining together group theory and group skills (12th Edition)*. Manchester, Eaglewood Cliffs: Prentice Hall Publishers.
- Kasomo, D. (2015). *Research Methods in Humanities and Education*. Nairobi: Jomo Kenyatta Foundation.
- Kaupa, S., & Atiku, S. O. (2020). Challenges in the Implementation of Performance Management System in Namibian Public Sector. *International Journal of Innovation and Economic Development*, Vol. 6(2), 25-34.
- Kobia, M., & Mohammed, N., (2006) The Kenyan Experience with Performance Contracting. *Paper presented at 28th African Association for Public Administration and Management Annual Round-Table Conference, Arusha, Tanzania*.
- Krnet, R., Bjekić, D., Milošević, D. (2007). *Competencies of e-Teaching in the System of Teachers' Competence*, ETAI 2007, September, Ohrid- Macedonia,
- Kumar, K. & Wise B. J. (2016). School Social Systems and School and Student Achievement: *Schools can make a difference*. New York: Praeger.
- Kumar, R., & Deshmukh (2017). Descriptive Research Methodology: An Overview. *Journal of Business and Management*.
- Kwaslema, P. & Onyango, D. (2021). Effectiveness of the Strategic Planning and Academic Performance among the Public Secondary Schools in Babati District, Tanzania. *East African Journal of Education and Social Sciences*, Vol. 2, No. 1: pp. 82-86.
- Kwedho, O. (2015). Performance Contracts among Secondary School Teachers in Nairobi City County, Kenya, *Unpublished M.ed project UON Nairobi Kenya*.
- Leaver, R., Clare G; Ozier, M, Owen; Serneels, Pieter; Zeitlin, & Andrew.H. (2020). *Recruitment, Effort, and Retention Effects of Performance Contracts for Civil Servants: Experimental Evidence from Rwandan Primary Schools*, IZA Discussion Papers, No. 13696, Bonn. Institute of Labor Economics (IZA),
- Locke, E. A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior & Human Performance*, 3(2), 157–189.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. London, Prentice-Hall, Inc.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705–717.
- Locke, E. A., & Latham, G. P. (2006). New Directions in Goal-Setting Theory. *Current Directions in Psychological Science*, 15(5), 265–268.
- Locke, E.A., Latham, G.P., & Erez, M. (1988). The Determinants of Goal Commitment *Academy of Management Review* Vol. 13, No. 1

- Mabubi, P. O., Nyakundi, E.& Areba, G.N. (2020). The influence of performance contract implementation on innovations in public technical universities in Kenya. *International Journal of Current Research* Vol. 12, Issue, 09, pp.13912-13921.
- Manduku, J.G., Ngok, P. & Mauti, J. (2021). Impact of Instructional Supervision on Student Performance and Teacher Effectiveness in Public Secondary Schools in Nakuru County, Kenya, *Frontiers of Contemporary Education*, Vol. 2, No. 2: 55-66.
- Mbua, P., & Sarisar, J.O. (2013). Concept of performance contracting –Kenyan scenario/experience, *IISTE*, Vol.3, No.2, 101-113.
- Minja, D. (2009). Ethical Leadership Practices. *KCA Journal of Business Management*, Nairobi.
- Mnjokava, C. E. (2024). The influence of school heads’ motivation strategies on teachers’ performance in public secondary schools in Arusha Region, Tanzania. *Journal of Research Innovation and Implications in Education*, 8(1), 179 -189.
- Muraguri, C. W. (2018). Strategic management practices and entrepreneurial orientation among private universities in Kenya. *The Strategic Journal of Business & Change Management*, 5(4), 2156 - 2169.
- Muriithi, B. W. (2019). Factors influencing implementation of performance contract in public secondary schools: A case of Igembe South Sub County, Meru County, Kenya (*Doctoral dissertation, UoN*).
- Musyoki, N. Mulwa, J. & Mwanza, R. (2024). Principals’ Management of Teachers Motivation and Students’ Academic Performance in Public Day Secondary Schools in Kitui West Sub-County, *International Journal of Recent Research in Thesis and Dissertation (IJRRTD)*, Vol. 5, Issue 2, pp: 41-48.
- Mwakajitu, M. & Lekule, C. (2022). Contribution of Instructional Supervision on Teachers’ Professional Development: A Focus on Public Secondary Schools in Rombo District, Kilimanjaro-Tanzania. *Journal of Research Innovation and Implications in Education*, 6(4), 62 – 74.
- Nahid, S., Muzaffar, N., & Abbas, M. (2023). Impact of Teachers' Motivation on Students' Performance. *Global Educational Studies Review*, VIII(II), 444-453.
- Naigaga, P. (2019). School Facilities Maintenance and Students’ Academic Achievement in Government Aided Secondary Schools in Hoima District, Uganda, *Unpublished Masters Thesis*, Kyambogo University.
- Ngare P, (2008, July 22) *Ministry of Education blamed for deadlock of signing Performance contract*: Daily Nation Pg. 2
- Nicolescu, O. & Verboncu, I. (2008). *Management of Human Resource*. Buchares, Romania; University Publishing House.

- Nugraha, D., Reftyawati, D., & Sari, Y. (2020). The Effective School Strategic Innovative Plan Implementation: A Best Practice of School Improvement. *Attractive Education Journal*, 2(2). 9-19.
- Nuwagaba, S. (2021). Analysis of the causes for poor performance in implementation of performance contracts —Imihigol by districts: A case of Burera, Karongi, Nyagatare, Nyarugenge and Ruhango. *A dissertation submitted to the School of Governance in partial fulfillment of the requirements for the degree of Master of Social Sciences in Local Governance Studies*.
- Ochola, G.O. (2019). Can Performance Contracting Improve an Organizational Performance? A Review of Influence of Performance Contracting on Organizational Performance. *Research Article Volume 2 Issue 1*
- Odette, U., & Andala, H. O. (2022). Relationship between School Strategic Planning and Students' Academic Performance of Secondary Schools in Rwanda. *Journal of Education*, 5(4): 27–45.
- OECD (2016). *Education at Glance, OECD Indicators*, Paris: OECD Publishing.
- OECD (2018). *OECD Best Practices for Performance Budgeting*, OECD. Paris: OECD.
- Okello, I.K. (2023). Impact of Learning Environment on Academic Performances, *Eurasian Experiment Journal of Humanities and Social Science*, Vol 4, Issue 2, 38-42.
- Okendu, J. N. (2012). The influence of instructional process and supervision on academic performance of secondary school students of Rivers State, Nigeria. *Academic Research International*, 3(1), 332–339.
- Okode, G. O. (2013). Influence of Secondary Schools' Strategic Planning on Students' Academic Performance in Rachuonyo North District, Kenya. *Unpublished research master's degree. University of Nairobi*.
- Okumbe, J.A. (1999). *Education Management Theory and Practice*. Nairobi: Nairobi University Press.
- Olaide, B. & Adeola, A. (2014): Reward system and employees' performance in Lagos state (a study of selected public secondary schools). *Kuwait Chapter of Arabian Journal of Business and Management Review*; 3(8); P 14.
- Olsen, E. (2012) *Strategic Planning Kit for Dummies*, 2nd Edition John Wiley & Sons, Inc.
- Ong, C. (2018) *Seven reasons why schools need Strategic and operational Plan*. Retrieved from <https://www.envisio.com>.
- Onyango, M.A, Chelang'a, J.K., & Abiero, P.O. (2024). Customers' Perception of the Effectiveness of Performance Contracting in Improving Public Service Delivery at the Kenya School of Government, *The Educator*, Vol 4, No. 2: 81-97.

- Osborne, D. & Gaebler, T. (2002). *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector*. New York: Penguin.
- Oswago, B. (2005). *Calls for streamlining of Performance Contracting Policy*. *The Standard*, 15th September 2005 pp 23. Nairobi: The Standard Ltd.
- Padillo, G.G., Manguilimotan, R.P., Capuno, G.R. & Espina, R.C (2021). Professional development activities and teacher performance. *International Journal of Education and Practice*, Vol 9 (3): 497-506.
- Patrick Hakizayezu, P. & Andala, H.O (2022). The relationship between students' discipline and students' academic performance in secondary schools in the Gatsibo District. *International Journal of Advanced Scientific Research and Management*, Volume 7 Issue 8, 8-18.
- Perera, S., Zhou, L., Udejaja, C., Victoria, M., & Chen, Q. (2016). A Comparative Study of Construction Cost and Commercial Management Services in the UK and China.
- Peretomode, V. F. (ed). (2004). *Introduction to educational administration planning and supervision*. Lagos: Joja Educational Research and Publishers Limited.
- Phocas B. & Andala H. O. (2020). Teachers' Instructional Supervision and Students' Academic Performance in Rwanda: A Case of Core Sciences Subjects in Lower Secondary Schools in Kayonza District. *Journal of Education*. Vol 3(4) 21-36.
- Phocas, B. & Andala, H. O. (2020). Teachers' Instructional Supervision and Students' Academic Performance in Rwanda: A Case of Core Sciences Subjects in Lower Secondary Schools in Kayonza District. *Journal of Education*. Vol 3(4) pp. 21-36.
- Pinder, C.C. (2014). *Work Motivation in Organizational Behavior*, London: Psychology Press.
- Polidano, C. & David, H. (2009). Public Management Reform in Developing Countries: Issues and Outcomes'. *Public Management* 1 (1) 121-32.
- Republic of Kenya (2003). *Economic Recovery Strategy for Wealth and Employment Creation*, Nairobi. The Government Press.
- Ricker, K.J. (2018). Principal and Teacher Beliefs About the Impact of CBAs on School Performance: Five High Performing High Schools in Oregon. *PhD Dissertations and Theses Portland State University. Department of Educational Leadership and Policy* 4508.
- ROK. (2007). Results for Kenyans: *Capacity Building Programme for Transforming the Public Service, Public Service Reform and Development Secretariat*. Nairobi: Government Printer.
- ROK. (2010). *Office of the Prime Minister. Performance Contracting Department report on evaluation of the performance of public agencies for the financial year 2008/2009*. Nairobi: Government Printer.

- ROK. (2010). *The Constitution of Kenya 2010*. Nairobi: Government Printer
- Rummler, G.A. & Brache, A.P. (2012). *Improving Performance: How to Manage the White Space on the Organization Chart (Third Edition)*. New York USA: John Wiley & Sons.
- Rwamba, J. M. (2000). Disciplinary Problems Faced by Teacher in Primary Schools. A study of selected primary schools in south Imenti of Meru central, *unpublished: M.E.D Project*
- Saeed, A. & Akbar, R.A. (2021). Relationship of Teachers' Professional Skills and Students' Achievement in English at BA Level in India. *Bulletin of Education and Research*. Vol. 43, No.1: pp. 31-44.
- Sagimo O.P., (2002). *Management Dynamic*, Nairobi: East African Educational Publishers.
- Saira, Zafar, N., & Hafeez, M. (2021). A critical review on discussion and traditional teaching methods. *Psychology and Education Journal*, 58(1), 1871-1886.
- Salemi, M.K. (2009). Clickenomics: Using a Classroom Response System to Increase Student Engagement in a Large-Enrollment Principles of Economics Course, *Journal of Economic Education*, Vol 40 (4): 385-404.
- Saunders, M., Lewis, P. & Thornhill, A. (2019). *Research Methods for Business Students (8th Edition)*, New York: Pearson.
- Schwella, E. (1988). *The Relationship between Public Administration and Business Management and Administration: A Public Administration Viewpoint*. South African Administration: Past, Present and Future. Pinetow: Ower Burgess.
- Seje, S., Ombati, J. & Maithya, P. (2021). An Evaluation of the Implementation of Strategic Planning as a Tool for Improving Performance Management Practices by Principals of Public Secondary Schools in Nyamira County, Kenya, *International Journal of Innovative Research & Development*, Vo10 (6): 183-191.
- Shingiro, A. & Oniye, A.O. (2022). Effect of Teachers' Performance Contracts on Quality of Education. A Case of Selected Secondary Schools in Rwamagana District, Rwanda, *Global Science Journal: Volume 10, Issue 11*, 1892-1902.
- Silberman, M.L. & Biech, E. (2015). *Active Training: A Handbook of Techniques, Designs, Case Examples, and Tips*, New York USA: John Wiley & Sons.
- Sindayigaya, G.J.N.V., Ngarambe, P. & Nyamweya, M.N. (2020). Monitoring and Evaluation and Institutional Performance: A Case of Teacher Self Learning Academy Project on School's Academic performance in Bugesera District in Rwanda. *International Journal of Scientific and Research Publications*, Volume 10, Issue 11: pp 367-377.

- Smith, W. C., & Kubacka, K. (2017). The emphasis of student test scores in teacher appraisal systems. *Education Policy Analysis Archives*, 25, 86, 25.288
- Takwate, K. T. (2018). Allocation, availability and Maintenance of School Facilities as Correlate oof Academic Performance of Senior Secondary Schools in Adamawa State, Nigeria: *Internal Journal of Scientific and Research Publications* Vol (8), 9: 2250-3153.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53.
- TSC (2012). Teachers Service Commission Act of 2012, Nairobi: TSC.
- TSC (2015). *Code of Conduct and Ethics of 2015*, Nairobi: TSC.
- TSC (2015). *Code of Regulation of Teachers of 2015*, Nairobi: TSC.
- TSC (2016). *Performance Management, Corporate Communication Division*, Nairobi: TSC.
- TSC (2016). *TPAD Tool*, Nairobi: TSC.
- Ulla, M. B. (2018). In-service teachers' training: The case of university teachers in Yangon, Myanmar. *Australian Journal of Teacher Education*, 43(1), 66-77.
- Ulla, M. B. (2018). In-service teachers' training: The case of university teachers in Yangon, Myanmar. *Australian Journal of Teacher Education*, 43(1), 66-77.
- Watene, D., Kodak, B., & Choge, R.J. (2020). Influence of Principals' Motivational Strategies on Performance in Kenya Certificate of Secondary Education in Secondary Schools in Nyandarua County, Kenya, *International Journal of Innovative Research and Advanced Studies (IJIRAS)*, Volume 7, Issue 6: 68-72.
- Wekesa, P.S (2023). Effect of Performance Contracting Strategic Elements on Implementation of Performance Appraisal Systems in Public Universities within Mount Kenya region, *Unpublished MBA Project of Meru University of Science and Technology*.
- Wheelan, C. (2014). *Naked Statistics: Stripping the dread from the data*. New York: W.W. Norton.
- World Bank (2017). *Senegal Tertiary Education Governance and Financing for Results*: Washington DC: World Bank.
- Wuryaningsih, W., Susilastuti, D., Darwin, M., & Pierewan, A. (2019). Effects of web-based learning and F2F learning on teachers' achievement in teacher training program in Indonesia. *International Journal of Emerging Technologies in Learning (iJET)*, 14(21), 123-147.
- Zhaohui, C. & Anning, A.S. (2020). Impact of teachers' professional development on students' academic performance in higher Education, *International Journal of Advanced Education and Research*, Volume 5; Issue No. 2: 50-57.

APPENDICES

Appendix I: Introductory Letter

Rhoda Vundi
Machakos University
P.O Box 136– 90100,
MACHAKOS.

8th March, 2024

Dear Participant,

**RE: PERMISSION TO CARRY OUT DATA COLLECTIONS IN THE
INSTITUTION**

My name is Rhoda Vundi. I am currently doing Master’s Degree in Education in Educational Administration at Machakos University. My research topic is **“Principals’ Performance Contracting and its Effect on Academic Performance of Secondary Schools in Kalama Sub County, Machakos County, Kenya”**.

The study will be carried out to help me in achieving an academic goal. I have identified you as one of the participants in the study and I am kindly requesting you to answer all questions in the provided questionnaire. All the information collected will be used for scholarly purpose only and will be treated with confidentiality. You are advised that upon request, the final copy of this study will be shared with your office. I am looking forward for a positive consideration. Thanks in advance for your support.

Yours faithfully

Rhoda Vundi

Reg. No. E55-9341-2021

Email: rhodakoki64@gmail.com

Appendix II: Questionnaire

This questionnaire is for collecting data from secondary schools in Kalama Sub County, Machakos Country, Kenya. The topic of the study is “Principal’s Performance Contracting and its Effects on Academic Performance of Students in Secondary Schools in Kalama Sub-County, Machakos County, Kenya”. You have been sampled to be a respondent by virtue of being principal of a public secondary school. You are requested to provide as accurate information as possible. You are advised that the data collected will be used to help researcher accomplish an academic goal and data collected will be treated with outmost respect and confidentiality. The questionnaire has six parts. Kindly fill all questions. Kindly don’t write your name or school.

Part A: Demographic Characteristics

Kindly chose the appropriate choice by ticking (✓)

1. Indicate your gender.

Male ☐ Female ☐

2. Indicate your age?

Below 35 years ☐ 35 to 44 years ☐

45to 54 years ☐ Above 55 years ☐

3. Indicate your education level?

Diploma certificate ☐ Bachelor’s Degree ☐

Master’s Degree ☐ PhD Degree ☐

Any others _____

4. Your working experience as principal?

1 to 5 years ☐

6 to 10years ☐

11 to 15 years ☐

Above 15 years ☐

Part B: Implementation of Work Plan by Principals

5. Please tick (✓) one box to indicate how as respondent you agree or disagree with the statement in the scale below where: 1 =Strongly Disagree 2 = Disagree 3 = Not sure 4 = Agree 5 = Strongly Agree

No.	Implementation of Work Plan by Principals	1	2	3	4	5
a	Operational Work Plan (OWP) There is operational work plan in this school					
	Operational work plan is uploaded online in this school					
	Operationalization of OWP is linked to school performance					
b	Involvement of stakeholders in OWP School stakeholders are involved in preparation of OWP in this school					
	School stakeholders are involved in implementation of OWP					
	Stakeholders' engagement is associated with improved performance					
c	Effectiveness in implementation of OWP I implement the OWP in our school effectively					
	I meet timelines set in the OWP in this school					
	Proper implementation of OWP is linked to school performance					
d	Alignment of OWP with school vision The OWP is aligned to vision of this school					
	I articulate vision of school well during implementation of OWP					
	Aligning OWP and school vision is linked to the academic performance of the school					

6. In your own opinion, how do you rate preparation of work plan by principal and its implementation in the school you head?

.....

7. How does implementation of work plan by principals affect the academic performance of the learners in your institution?

.....

.....

.....

.....

Part C: Principal's Supervision

8. Please tick (✓) one box to indicate how you agree or disagree with the statement in the scale below where: 1 =Strongly Disagree 2 = Disagree 3 = Not sure 4 = Agree 5 = Strongly Agree

No.	Principal's Supervision	1	2	3	4	5
a.	Supervision of teacher preparedness					
	There is internal supervision of preparation of professional documents					
	There is external M&E of teachers' preparedness in the school					
	M &E of teachers' preparedness is related to school performance					
b.	Supervision of classroom attendance					
	There is M&E of class attendance of teachers in the school					
	There is monitoring whether recovery lesson in this school					
	M&E of classroom attendance is linked to school performance					
c.	Monitoring of learner's discipline					
	There are systems to monitor discipline of learners in this school					
	Stakeholders are engaged in monitoring of learners in this school					
	M&E of discipline is related to school performance					
d.	Supervision of leadership practices					
	There are mechanisms to monitor leadership among teachers in this school					
	I monitor teachers when I delegate of duties to them					
	Supervision of leadership practices affect the academic performance					

9. What can you comment about of supervision of principals in relation to teacher preparedness, class attendance, learner's discipline and leadership practices in this school?

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10. How would you describe the relationship between supervision of principals and academic performance of this school?

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Part D: Principal's Training

11. Please tick (✓) one box to indicate how you agree or disagree with the statement in the scale below where: 1 =Strongly Disagree 2 = Disagree 3 = Not sure 4 = Agree 5 = Strongly Agree

No.	Principal's Training	1	2	3	4	5
a	In service training I attend in service training					
	In service training has helped improve my knowledge and skills					
	In service training has is linked to academic performance of student s					
b	Seminars and workshop attendance I attend seminars and workshops in this school					
	Seminars and workshop have improved my knowledge and skills					
	Attendance of workshop and seminars has improved school performance					
c	Professional mentorship and induction There are professional mentorship and induction program in school					
	Mentorship and induction have helped improve my professionalism					
	Professional mentorship and induction have helped improve performance of schools					
d	Teacher Professional Development (TPD) The principal has joined professional development programs					
	Your skills have been sharpened after joining TPD					
	TPD has improved performance of learners in school					

12. How do you describe the state of principal training?

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13. In your own opinion, how does principal trainings influence academic performance of learners in your school?

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Part E: Motivation of Principals

14. Please tick (✓) one box to indicate how you agree or disagree with the statement in the scale below where: 1 =Strongly Disagree 2 = Disagree 3 = Not sure 4 = Agree 5 = Strongly Agree

No.	Motivation of principals	1	2	3	4	5
a	Principal of Year Awards (POYA)					
	I participate in the POYA awards competition in the sub county					
	Winning POYA improves morale and motivates principals in their work					
	POYA awards is linked to performance of schools					
b	Promotion to higher job group					
	I have been promoted to higher job group since I become principal					
	Promotion to higher job group improves job morale					
	Promotion to higher job group is linked to performance of schools					
c	Certification and recognition					
	I have been recognized for outstanding performance in the Sub County					

	Certification and recognition improve principals' job morale					
	Certification and recognition are associated with performance of schools					
d	Improvement of terms of service Terms of service have improved after becoming principal of this school					
	Good terms of service have motivated the principals in their work					
	Improved term of service is linked to academic performance of schools					

15. What is the state of motivation of principals in schools?

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16. How does motivation of principals affect academic performance of your school?

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Part H: Academic Performance in Secondary Schools

16. Please tick (✓) one box to indicate how you agree or disagree with the statement in the scale below where: 1 =Strongly Disagree 2 = Disagree 3 = Not sure 4 = Agree 5 = Strongly Agree

No.	Academic performance in secondary schools	1	2	3	4	5
a	Students attaining quality marks in KCSE					
	Most of learners attain mean grade above C+					
	Most of learners have attained quality marks since introduction of PC for principals					
b.	Students attaining entry grade to university					
	Most students who did their KCSE in 2023 gained entry to university					

	The number of students attaining entry grade to university has improved after introduction of PC for principals					
c.	Cases attended per term on poor academic performance					
	The school cases per term related to school performance have reduced in 2023					
	When cases related to performance reduce it leads to improved school performance					

THANK YOU

Appendix III: Secondary Schools in Kalama Sub County

1. Muumandu secondary school
2. Kitonyini secondary school
3. Iiyuni secondary school
4. Baraka kavyuni secondary school
5. Kwa kavoo secondary school
6. Konza secondary school
7. Kimutwa secondary school
8. Katanga secondary school
9. Mbuani secondary school
10. Nyayo girl's secondary school
11. Kivandini secondary school
12. Kikumbo secondary school
13. Kinoi secondary school
14. Kyaviti secondary school
15. Kyandili secondary school
16. Mulaani secondary school
17. Kyanzasu secondary school
18. Kamweleni secondary school
19. Makakoi secondary school
20. Mang'auni secondary school
21. Miwani secondary school
22. Mbukuni secondary school
23. Masaani secondary school
24. Mbembani secondary school
25. Kanyongo secondary school
26. Kiatuni secondary school
27. Nzaini secondary school
28. Kyangala girl's secondary school
29. Kyangala boy's secondary school
30. Kalama secondary school
31. Mutuyu secondary school

32. Kiuu secondary school

33. Katumani secondary school

Source: Kalama Sub County Education Office, (2024)

Appendix IV: Research Permit

 REPUBLIC OF KENYA National Commission for Science, Technology and Innovation	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 979704	Date of Issue: 14/July/2025
RESEARCH LICENSE	
	
This is to Certify that Miss. RHODA KOKI VUNDI of Machakos University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Machakos on the topic: PRINCIPALS' PERFORMANCE CONTRACTING AND ITS EFFECTS ON ACADEMIC PERFORMANCE OF STUDENTS IN PUBLIC SECONDARY SCHOOLS IN KALAMA SUB-COUNTY, MACHAKOS COUNTY, KENYA for the period ending : 14/July/2026.	
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Appendix V: Map of Machakos County

