RELATIONSHIP BETWEEN PRINCIPALS' STRATEGIC MANAGEMENT PRACTICES AND STUDENTS' ACADEMIC PERFORMANCE AT KENYA CERTIFICATE OF SECONDARY EDUCATION EXAMINATION IN MURANG'A COUNTY, KENYA

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DECLARATION AND APPROVAL

I hereby declare that this thesis is my original work and to the best of my knowledge, it hasn't been offered for a degree in any other university.

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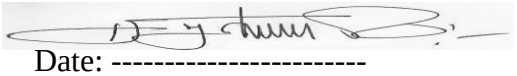

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DEDICATION

This thesis is dedicated to my beloved husband Luke Maina, my children Victor Njuguna, Liz Wangari, Mark Kamau, and Martin Gitogo. Their support, encouragement, and patience gave me the inspiration and determination to pursue this Doctorate degree.

ABSTRACT

The education sector is paramount in the development of economy in all parts of the world, Kenya included. This justifies the general global concern for students' academic performance from which the outputs are utilized towards economic growth. Related to this is that there has been introduction of various education reforms geared towards improvement of students' academic performance across the world. However, students' academic performance remains an issue of concern in many regions, including Kenya, where through the Ministry of Education; the government of has had the implementation of various educational policy interventions, including having a requirement that all secondary schools' principals adopt strategic management plans. This was a drive to emphasis the need for strategic management of schools as an avenue for improvement of students' learning outcomes. In this regard, different organizations, like Kenya Education Management Institute, have trained majority of secondary schools' principals through the MOE. Despite all these efforts, academic performance of students in most parts of the republic, particularly in the county of Murang'a, remains low. In relation to this, the main objective of the study was to investigate the relationship between Principal's Strategic Management Practices and students' academic performance at Kenya Certificate of Secondary Education examination in Murang'a County, Kenya. The study was guided by strategic management model by Garber (2006) theory. The study used correlational research design, The target population was 1000 and comprised of 250 secondary schools 'principals and 750 Heads of Departments from 250 public secondary schools in Murang'a County A sample of 50 principals and 150 Heads of Departments was obtained through stratified proportionate sampling. Research instruments included principals' and HODs' questionnaires and the researcher observation schedule. On reliability testing split-half technique was applied during which instruments pre-testing and a correlation coefficient of 0.7 and above between the two halves of the instruments made them deemed reliable. Descriptive statistics was used to analyze data that made up of means, percentages, pie chart and standard deviations, Additionally, inferential statistics was incorporated by using Pearson correlation coefficient statistics to analysis data with a focus to establish the relationship between the dependent and independent variables. The study established that principals' use of strategic plans, stakeholders' involvement in management practices, provision and maintenance of schools' facilities had a statistically significant relationship with students' academic performance at KCSE examination with Pearson correlation ranging between 0.523 to 0.84 and significance levels at $p< 0.001$ across the variables between which a statistically significant relationship was found. Conclusively, the more the schools' principals highly put SMP in place, the more the schools will post higher academic results. Organizations like MOE, TSC and KEMI may use these findings to improve management of schools for improvement of student' performance. This is related to recommendation that the MOE can regularly analyze schools' strategic plans and make training on SMP mandatory for anyone aspiring to become a school principal. Based on the findings and conclusions, the study gave suggestions for further studies on; Relationship between other SMP used by other education key players and students' academic performance, Relationship between SMP in other levels of education for instance, primary schools, and learners' academic performance and a study on SMP in other stages of strategic management, for example evaluation stage

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ABBREVIATIONS AND ACRONYMS

AU : African Union

BOM : Board of Management

CBE : Curriculum Based Establishment

CDM : Catholic Diocese of Murang'a

FDSE : Free Day Secondary Education

FPE : Free Primary Education

HODs : School Heads of Department

KCSE : Kenya Certificate of Secondary Education

KEMI : Kenya Education Management Institute

KIM : Kenya Institute of Management

MSS : Mean Standard Score

NCLB : No Child Left Behind

PTA : Parents Teachers Association

SMP : Strategic Management Practices

SWAP : Sector Wide Approaches to Planning

TSC : Teacher Service Commission

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1Overview

This chapter consists of the study background, problem statement, purpose, objectives, hypothesis, significance, limitations, delimitations, assumption of the study, operational definitions of terms and organization of the study.

1.2 Background to the Study

The education sector is paramount in the development of the economy in all parts of the world, Kenya included. For the education to drive the economy, there is need to utilize the principal's strategic management practices to enhance student academic performance whose output are utilized in economic development. Aba and Osasu (2020), defines students' academic performance as the level of performance in written works and exams. On the other hand, Brito and Sauan (2016) study in Brazil, view management practices as sets of general practices or capabilities adopted by organizations to achieve better outcomes and also revealed that management practices affect performance.

Study by IGI global (2020), emphasizes that there are different strategic management practices though in general all of them refers to the working processes and innovations applied by managers to maximize the efficiency of working organization's systems and structures. In schools' situation, the above definitions indicate an existence of interrelationships between secondary schools' principal's management practices and students' academic performance since none of these variables can work without the other. To this end the application of strategic

management practices by schools' principals is an attempt to. Ensure the achievement of the desired students' academic performance

Yabs (2010) traces evolution of strategic management practices to the time of the Roman Empire that ruled the Mediterranean countries between 500 and 1200 AD, Later, it was adopted by European small states, agriculture as well as industrial revolution. From 1916 when Henry Fayol introduced the functions of management, the field of strategic management has continued to grow. The interest and further adoption of strategic management practices is further noted in a study by Chavez et al. (2012) on manufacturing industries in the Republic of Ireland which established that particular supply chain management practices impact on performance. Though these studies included aspects related to strategic management, they were however not done on educational institutional.

On a global perspective, Holloway et al. (2006) investigated the influence of strategic management practices on university performance in Turkey. The study looked at whether or not strategic management procedures were implemented in Turkish universities, and if so, to what extent they were implemented, as well as the effects of these processes on university performance. Elaborate recommendations were made based on the findings of the study, which found that universities in Turkey did not closely follow changes and developments, particularly in higher education, and that universities around the world did not pay enough attention to the competitive conditions that would lead to the effective use of strategic management practices. According to the findings of the aforementioned study, there is a widespread concern and desire to enhance educational aims and objectives.

Zarifsanaiey et al. (2016) established that the performance level of students was largely increased by applying a blend of strategic management practices including training of tutors. Harray's (2008) study, examined management practices in three New Zealand secondary schools and attributed the success of the schools to the strategic management practices that were at the core of the schools' culture. Notably, the above studies were on general strategic management practices whereas this study was on the relationship between specific principals` strategic management practices and students' academic performance. These management practices were; principals' use of strategic management plans, involvement of stakeholders, provision of schools` facilities and maintenance of schools` facilities

Ahmadian (2018) strategic plans are useful in the management of performance since it provides a clear summary of the required resource. According to International Establishment for Educational Programme (IIEP) (2015), a strategic plan has clear goals and objectives hence is an administrative tool that assists an organization to improve its performance by ensuring that its individuals will continue to attempt similar goals and have them well accomplished. Pucci et al. (2018) noted that the engagement of stakeholders offers a powerful driver to create value. Additionally, Steinberg (2006) asserted that involving the community physically drew parents into the schools and this effectively improved learners' academics achievement

As a result, Akomolafe and Adesua (2016) discovered a strong correlation between physical amenities and student motivation and performance. Conclusively, students' academic performance documented in an educational institution is largely dependent on the adequacy of physical facilities Nicolas, Renata and John, (2014). Poor

maintenance and inefficient ventilation systems can contribute to ill health among students and instructors, resulting in poor academic performance and increased absenteeism. Omotere and colleagues (2016). According to Naigaga (2019), these characteristics may influence student behavior and lead to increased levels of dissatisfaction among teachers and a bad learning attitude among students. Though these studies pointed at a linkage between some of the components of strategic management practices and learners' outcomes, they were however done in a different contextual framework.

Despite the introduction of policies directed towards improvement of students' learning outcomes, majority of African countries have continued to record low students' academic performance hence failing to satisfy educational stakeholders (Kumi & Seidu, 2017). The concern for improvement of performance in educational institutions have triggered various governments to institute policies aimed at the adoption of strategic management in schools (Ng'ang'a & Ombui,2013). This has led to adoption of strategic management in educational institutions which on the other hand, has attracted attention of educational researchers. In local perspective, Okwako (2013) conducted research in Meru County, Kenya, on Strategic Planning and Performance of Public Secondary Schools. The goal of the study was to determine the impact of strategic values on enrolment, resources, quality, and efficiency. Strategic values had a significant effect on students' performance, according to the study. The researcher suggests that the institutional philosophy be aligned with the institutional strategic values in order to increase student performance. The above study focused on the formulation stage of strategic management, that is, strategic planning and performance whereas the interest of this

study was on the implementation stage. That is, principals' strategic management practices and students' academic performance.

Consequently, the objective of improving students' academic performance in Kenya has led to the implementation of various educational policy interventions, including having a prerequisite by the education ministry to all secondary schools' principals, needs to adopt strategic management plans by MOE (2012) On this note most secondary schools' principals were trained on strategic management through self-initiatives of different organizations including Kenya School of Management and Kenya Education Management Institute (KEMI) . However, Sije and Ochieng (2013) noted that very few schools adopted strategic management plans raising questions on the principals' strategies for strengthening students' academic performance. Furthermore, it is noted that in Kenya, students' academic achievement has not significantly improved (Republic of Kenya, 2012).

The above noted low academic performance in Kenya is more critical in Murang'a County whereby the persistent low KCSE examination performance is a major concern for this study. In 2018 Kenya Certificate of Secondary Education (KCSE), 90,377 (14.4%) of 627587 national entry candidature compared to 3,448 (13.6%) of 25,380 Murang'a County entry candidature, managed to get a mean score of C+ and above, the university admission. requirement KUCCPS and MOE (2019). Interestingly, in this same examination and also at a national level, Murang'a County produced the most improved candidate, Mwangi from Mioro secondary school, who attained a grade of A-minus as compared to 278 marks in KCPE as reported by Wanjohi (2018). This is an indication that existence of potentials for high academic performance in this region cannot be disputed. However,

the same examination results had Murang'a County outperformed by the neighboring Nairobi and Kiambu counties as demonstrated in Table 1 below:

Table 1: Distribution of A's Grade in Murang'a 2018 and 2017 KCSE Examination Candidature A's in Murang'a, Nairobi, and Kiambu Counties

	2018			2017		
County	**Male**	**Female**	**Total**	**Female**	**Male**	**Total**
Murang'a	12,476	12,910	25,386	12,075	12,558	24,633
	1.89%	1.95%	3.84%	1.97%	2.05%	4.03%
Grade As	**No. of Grade A's**		**6**	**No. of Grade A's**		**3**
Kiambu	14,796	15,856	30,652	14,070	15,333	29,403
	2.24%	2.40%	4.64%	2.30%	2.51%	4.81%
Grade As	**No. of Grade A's**		**82**	**No. of Grade A's**		**10**
Nairobi	14,008	13,314	27,322	13,684	12,934	26,618
	2.12%	2.01%	4.13%	2.24%	2.11%	4.35%
Grade As	**No. of Grade A's**		**60**	**No. of Grade A's**		**17**

Source: KNEC (2019)

Note that the KCSE performance of the above-indicated counties was compared since on average, these regions had almost the same entry candidature unlike those of Nyeri (16053), Kirinyaga (10130) and Nyandarua ((13143) counties in the same central region of Kenya MOE (2019). Notably and of concern is that as shown in table 1 above, Kiambu and Nairobi scored 82 and 60 grades A's respectively in 2018 as compared to 6 grades A's in Murang'a. The same table indicates more concern in that Kiambu county got 26,03 percent whilst Nairobi got 19.05 percent and relatively, Murang'a got, a low percentage of only 1.9 percent out of the 315mean grade A's achieved nationally. Similarly, in KCSE 2017, Murang'a

trailed Kiambu and Nairobi by 7 and 14 quality Grade A's yet they have a lot of similarities in terms of established schools and infrastructure for both boarding and day schools in addition to being neighbouring counties respectively.

Furthermore, the scenario for the high KCSE mean grades in this region is quite opposite. Notably, out of 25386 of 2018 KCSE examination Murang'a county candidature, 52% (13140) candidates got the lowest mean grades. At a national level, Murang'a again relatively posted high percentage (11.55%) of the lowest mean grade of E, D minus and D plain. Specifically, Murang'a had 3.894 percent of 30,840 national mean grade E's, 3.95 percent of 165,139 of national mean grade of D minus and 3.66 percent of 147918 of mean grade of D's nationally. MOE (2019). More issue is that in 2020 KCSE, Murang'a county had the lowest overall mean grade of 4.409, as compared to that of her central region neighbours with Kiambu county posting 4.443, Nyeri county having 4.619 whilst Kirinyaga county posting 4.64 MOE (2021).

In the period 2010 to 2014, Murang'a county KCSE mean scores ranged between 4.5 and 6.0, MoE (2014) so most of her candidates attained mean scores below 6.0 (C+), minimum qualification for university admission. This jeopardized their chances of pursuing careers that could promote their economic progression. Furthermore, nationally, this county relatively matched several counties in terms of student- teacher ratios Basic Education Statistical Booklet by MOE (2014). Interestingly, no research has been done as to whether there is a relationship between secondary school principals' strategic management practices and students' academic achievement in Murang'a County. Because of the aforementioned concern about academic performance in Murang'a County, the purpose of this

study was to fill a research gap by studying at the relationship between principals' strategic management practices and students' academic performance.

1.3 Statement of the Problem

In Kenya and also across the globe, students' academic performance is recognized as paramount and is viewed as a channel for the development of the much-needed economies. As a result, numerous educational changes have been implemented in various regions of the world in order to enhance student learning results. In Kenya, there has been a condition by the Ministry of Education that the secondary schools 'principals in the country to adopt strategic management in their schools as a way of improving students' learning outcomes. This led to most secondary schools' principals being taken on training by the MOE via the Kenya Education Management Institute (KEMI) which was based on strategic management particularly in the area of preparation and use of strategic plans. This exercise involved all public secondary schools therefore incurring the Kenyans government huge amount of money.

Despite all these efforts directed towards enhancement of better KCSE results, students' academic performance in most parts of the republic, including Murang'a County, remains low. The major concern is that relatively, Murang'a County have consistently been recording low KCSE results. This is evidenced in 2010 to 2020 whereby this region posted a mean standard score ranging between 4.1 and 6.0, which is below the minimum qualification for university education.

In 2018 KCSE examination results for instance, 14.4% of national entry candidature compared to 13.6% of Murang'a county entry candidature, realized a mean score of C+ and above. At the same time, Kiambu and Nairobi recorded 82 and 60 grades A's respectively in 2018 as compared to 6 grades A's in Murang'a.

Out of the 315mean grade A's achieved nationally, Kiambu county got 26,03 percent whilst Nairobi got 19.05 percent and relatively, Murang'a got, a low percentage of only 1.9 percent. The same trend was found in KCSE 2017 whereby Murang'a trailed Kiambu and Nairobi by 7 and 14 quality Grade As yet these counties had almost the same entry candidature unlike those of elsewhere.

The case for low grades is different in that the number of candidates with low KCSE mean grades in this region has been comparably higher. Notably, Murang'á county posted 52% (13140) of her 2018 KCSE examination candidature with the lowest mean grades. This was 11.55% of the national candidature which was relatively high. Specifically, Murang'a had 3.894 percent of 30,840 national mean grade E's 3.95 percent of 165,139 of national mean grade of D minus and 3.66 percent of 147918 of mean grade of Ds MOE (2019. In the same year. Murang'a county produced the most improved candidate in KCSE hence existence of potentials for high academic performance in this region cannot be disputed. More issue is that in 2020 KCSE, Murang'a county had the lowest overall mean grade of 4.409, as compared to that of her central region neighbours with Kiambu county posting 4.443, Nyeri county having 4.619 whilst Kirinyaga county posting 4.64 MOE (2021). Notably, in addition to being neighbours, these counties have a lot of similarities in terms of schools' establishments and infrastructure for both boarding and day schools. This is a major concern to various education stakeholders like schools BOMs, religious organizations, politicians, local community, government, researchers and so on.

Various studies on management practices addressing various areas including students' academic performance have been done. However, none of these studies was done to address the relationship between secondary schools' principals' specific strategic management practices, that is, use of strategic management plans, involvement of stakeholders, supply of school amenities, maintenance of school infrastructure, and pupils' academic achievement at the KCSE test in Murangá county, hence the significance of this research. To be more precise, there have been scanty studies on relationship between secondary schools' principals' strategic management practices and students' academic performance at KCSE examination in this County. This study sought to fill a contextual gap by examining the relationship between this research's independent and dependent variables in the county.

1.4 Purpose of the Study

The purpose of this study was to investigate whether there is a relationship between principal's strategic management practices and students' academic performance at KCSE examination in Murang'a County, Kenya.

1.5 Objectives of the Study

The study was guided by the following objectives:

i. To examine the relationship between principal's use of strategic management plans and students' academic performance at Kenya Certificate of Secondary Education (KCSE) examination in Murang'a county, Kenya.

ii. To find out the relationship between involvement of stakeholders in strategic management plans and students' academic performance at Kenya Certificate of Secondary Education (KCSE) in Murang'a county.

iii. To determine the relationship between strategic provision of schools' facilities and students' academic performance at Kenya Certificate of Secondary Education (KCSE) examination in Murang'a county Kenya.

iv. To establish the relationship between strategic maintenance of schools' facilities and students' academic performance at Kenya Certificate of Secondary Education (KCSE) examination in Murang'a county, Kenya.

1.6 Hypotheses of the Study

The study was guided by the following null hypotheses:

i. H_{01}: There is no statistically significant relationship between principal's use of strategic management plans and students' academic performance at KCSE examination in Murang'a County, Kenya.

ii. H_{02}: There is no statistically significant relationship between involvement of stakeholders in strategic management practices and students' academic performance at KCSE examination in Murang'a County, Kenya.

iii. H_{03}: There is no statistically significant relationship between strategic provision of schools' facilities and students' academic performance at KCSE examination in Murang'a County, Kenya.

iv. H_{04}: There is no statistically significant relationship between strategic maintenance of school facilities and students' academic performance at KCSE examination in Murang'a County, Kenya.

1.7 Significance of the Study

This study is important in a number of ways. Firstly, the findings of this study are expected to be helpful to Kenya Education Management Institute (KEMI) and Ministry of Education in that they contain enriching information that may be used in the improvement of training of principals on the formulation and use of strategic management plans in secondary schools in Kenya.

Secondly, the findings are expected to benefit the Ministry of Education by providing insights on the importance of regular assessment as well as doing the follow ups on training, making of strategic plans and the strategic management practices. To this end, the findings are pointing out to the Ministry of Education the importance of laying down a policy regarding the writing and use of strategic management plans for schools. The new knowledge can be utilized by the secondary schools' principals to support their respective BOMs to their greatest advantage not exclusively to give schools' facilities but additionally to give significant levels of related maintenance.

Furthermore, the findings are expected to benefit schools' BOMs and principals by shedding more light on the importance of having schools' strategic plans as well as embracing strategic management practices in schools. The results of this research are at the same expected to provide information to Schools' Boards of Management (BoMs) on the need of being more frequently involved in the management of schools. Findings are expected to shed light especially to education stakeholders on

the idea that although effects of the various principals' strategic management practices affect students' academic performance, their effectiveness differs. This knowledge would enable them to be more effective in prioritizing the different strategic management practices so that more priority is given to those with greater effects on students' academic performance.

The findings of this study are also expected to improve the management of secondary schools that are public in nature in Murang'a County. This will ultimately lead to the improvement of quality education provided to the secondary schools' learners in this county. Lastly the new knowledge generated by this study can be used as point of reference by different organizations, for instance KEMI, Catholic Diocese of Murang'a Kenya school of management during the seminars and in the in-service training of secondary schools' principals and the HoDs as well.

1.8 Limitations of the Study

The study encountered the following limitations.

Some of the information sought was deemed sensitive by some of the targeted respondents. This constraint was addressed by offering assurances and clarifications that the study's goal was entirely academic and not motivated by any other motives. Due to their hectic schedules, the researcher had difficulty reaching out to certain principals and HoDs. This restriction was overcome by scheduling an appointment before the surveys were distributed. Time constraints were a difficulty that had to be overcome in order to complete various activities. The researcher devised a study strategy that included allocating time to each job and ensuring that time was rigorously adhered to.

1.9 Delimitations of the Study

This study focused on principals and HoDs of public secondary schools in Murang'a County for homogeneity, leaving out private schools which, according to Dills, Angela, Mulholland and Sean (2010), mostly have smaller classes, different traditions and learning environment and are not evenly spread.

Information was sought from principals and HoDs because they play a key role in school management and curriculum supervision in secondary schools. Other stakeholders such as parents and students were left out because they may not have been be trained on strategic management practices. The focus of this study was on the relationship between the principals' strategic management practices and students' performance at KCSE examination in Murang'a County. Consequently, other factors influencing students' performance at KCSE examination in the county were left out since they were not strategic management practices nor the study variables.

1.10 Assumptions of the Study

The following were the assumptions of this study:

i. The principals and three HoDs of the sampled public secondary schools in Murang'a County were available and cooperative during the study visits.

ii. The respondents gave honest information relating to strategic management practices in their schools.

iii. That principals of public secondary schools in Murang'a County had undergone training on strategic management.

iv. That principals used strategic management plans in their schools.

v. Every public secondary school in Murang'a County has three HoDs, regardless of size.

1.11 Operational Definition of Terms

The following are definitions of terms as used in this study:

Academic performance: Refers to grades attained by students at Kenya Certificate of Secondary Education examination which is the terminal evaluation of the secondary school education cycle in Kenya.

Strategic plan: Refers to a List of steps carefully ordered to achieve specific targets resulting from internal and external source of variables that are likely to affect the school. For this study, it was expected that each school had a strategic plan that was in operation for five years.

High performing schools: Refer to secondary schools that consistently performed above average. For this study, these were secondary schools that had consistently attained mean standard scores of 6.0 and above at KCSE examination which translates to mean grade C+, the grade required for one to qualify for university admission

Low performing schools: Refer to secondary schools that consistently obtained mean standard scores below 6.0 at KCSE examination which

translates to a mean grade that is less than C+ which makes one to qualify to only tertiary or technical and vocational colleges.

Stakeholders: Persons, groups, organizations, or systems that can impact or be affected by an organization's actions are referred to as stakeholders. Teachers, students, parents, Stakeholders in this case included non-teaching personnel, government officials working with the Ministry of Education, local leaders, and the general public.

Stakeholders' involvement: Refers to the active involvement of the school's management board in decision-making processes and activities aimed at improving students' learning outcomes in the classroom.

Strategic leadership: Refers to the social impact method by which the principal can record the assistance and assistance of others in the school environment in order to complete a shared project. The principle, deputy principal, and department heads are educational leaders whose actions can have an impact on strategic plan management in this context.

Strategic management practices: Refer to decisions and actions made by schools' managers for the purpose of improving their schools' performance in every aspect of their functioning. For this study, strategic management practices include the preparation and use of strategic plans, stakeholders' involvement, and the strategic provision and of school facilities.

Strategic planning: Refers to the approach of ascertaining the long-standing future of a school.

Management practices: Refers to a measure of how often principals practiced a number of aspects related to strategic management. For this study, the level of use was obtained by calculating the mean of how often these aspects were practiced in schools.

1.12 Organization of the Study

This study is organized into five chapters. Chapter One; Introduction comprises background to the study, statement of the problem, the purpose of the study, objectives of the study, research hypotheses, significance of the study, limitations of the study, delimitations of the study, basic assumptions, definition of terms and organization of the study. In Chapter Two, the literature review entails an introduction, followed by literature review under relevant heading as follows ; relationship between schools principals' use of strategic management plans and students' academic performance; relationship between involvement of stakeholders and students' academic performance; relationship between strategic provision of schools' facilities and the academic performance of the students; relationship between strategic maintenance of schools' facilities and students' academic performance; theoretical review and conceptual framework; and lastly a summary of literature review.

Chapter Three emphasizes on the research methodology which involves introduction, the location of the study, the study research design, the target population, the sampling design and the samples size, the research instruments,

instrument validity, reliability, and data the collection procedures. The chapter four of the study presents' findings, interpretations, and discussions of the research results. Finally, Chapter five of the study deals with a summary of the research findings, conclusions, recommendations, and proposals for additional research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter comprises of literature related to the study including; relationship between secondary schools' principals' use of strategic management plans and students' academic performance, relationship between stakeholders' involvement and students' academic performance, relationship between provision of schools' facilities and students' academic performance , relationship between schools' facilities maintenance and students' academic performance, theoretical and conceptual framework and finally a summary of literature review. It's worth noting that the main terminology and ideas are also explored and clarified inside the relevant section.

2.2 Use of Strategic Management Plans and Academic Performance of Students

In Nigeria, Aba and Osasu (2020) investigated the usage of social media in libraries and its influence on students. The study concentrated on the benefits, impacts, and problems that social media use has on undergraduate students' academic performance. In general, the notions suggested that social media is the use of technology as the best medium for exploring a wide range of information in order to improve students' academic performance. There is a real correlation between students' use of social media and their academic achievement. The university and library should provide students with social media platform awareness programs; students should have access to social media resources and services provided by librarians; educational forums that facilitate group collaboration and discussion on academic performance should be promoted in universities; and connectivity to social media platforms should be

promoted in universities. There was a contextual gap that current study lined by carrying out this research in Kenya with specific focus on addressing academic performance through addressing staff development, motivating teachers and students.

Rowley and Sherman (2004) studied on implementing the strategic plans. Planning for higher education in Michigan US. Transferring the academic strategy plan from planning to execution is one of the main challenges in strategic planning, according to the study. According to the report, there are a variety of operational discharge techniques available, including leveraging participation and the budget, using force, and defining targets as well as key performance indicators. Faculty and staff development is also carried out inside the human resource management system and via the implementation of a reward system. At the same time, building on systems that are ready for or readily compliant to strategic change, working with institutional culture around their tradition, developing and employing change advocates, and working with institutional culture around their tradition. Therefore, there existed a methodological and contextual gap that the current study filled by incorporating strategic management plans in view of motivating teachers and students and addressing staff development.

Schram (2014) studied on Leadership, Strategic Planning and Strategic Management for Higher Education Institutions in Developing Countries. This was a case study of Ghana. According to the findings, it is critical to reintroduce strategy into strategic planning. It returns a feeling of ownership and agency to the strategy process, rather than forcing the organization to follow the country's long-term "strategic" objectives. The study emphasized the importance of reintroducing strategy into educational strategic planning in emerging nations. It emphasizes the importance of techniques

such as the Balanced Scorecard, which provides for a comprehensive set of execution quantifiers to offer an assessment and supervisory framework structure. This study did not focus on strategic plans revolving motivation of student, thus causing conceptual gap that the current study sought to fill by incorporating it.

The Effects of Primary School Quality on School Dropout among Kenyan Girls and Boys was investigated by Lloyd, Mensch, and Clark (2000). The research examined at the availability of additional curricula, helpful instructors and advisers, school orderliness, the amount and quality of student/teacher interactions, teacher gender views, school rules on sexual harassment, and students' experiences with harassment. Individual and family factors, as well as standard school effectiveness variables and a novel set of school-treatment variables, were also investigated, individual and family variables, traditional school effectiveness variables, and a new set of school-treatment variables, as well as gender differences in certain aspects of school experience, were used to develop a series of discrete-time hazard models of school dropout that successively measured the effect on the probability of dropout during the teenage years of individual and family variables, traditional school effectiveness variables, and a new set of school-treatment variables, as well as gender differences in certain aspects of school experience, were used to develop a series of discrete.

Few of these school-based indicators were found to be linked with performance on the national primary exam (KCPE), indicating the complexity of school quality and the inability of any one proxy to evaluate its varied effects, according to the study. The study finds that school effectiveness is more than the growth of academic competency, and that the quality of the school environment is more than time to learn, fundamental curricular materials, and pedagogical techniques. Various aspects

of schools, in addition to the conventional characteristics already mentioned in the literature, may help to either promote or discourage pupils from continuing. Therefore, there existed methodological in terms of the research design adopted in this study where the current study filled the gap by adopting cross-sectional research design.

The combined impacts of online planning and task structure on the complexity, correctness, and fluency of L2 speech were investigated by Ahmadian, Tavakoli, and Dastjerdi (2012). Sixty intermediate EFL respondents (n=15) were divided into four groups at random. Under two distinct planning circumstances, participants were expected to complete various activities with varying degrees of plot structure (structured and unstructured) (pressured online planning and careful online planning). The participants who completed the structured work under the meticulous online preparation condition generated more complex, correct, and fluent English, according to the analysis of the narratives and the findings of a series of one-way ANOVAs. Those who completed the unstructured assignment under the pressurized online planning condition, on the other hand, scored the lowest in all three domains of oral output. The findings support the theory that by selecting appropriate task-based operation settings and task design elements, language learners may enhance the complexity, accuracy, and fluency of their output. Therefore, based on this study there existed a conceptual gap where the strategic management plans in regard to addressing staff development was lacking which current study came to fill gap by incorporating it.

Brito and Sauan (2016) studied on the effect of Management Practices as Capabilities Leading to Superior Performance in Brazil. The research offered three

major contributions to the discussion of management techniques' worth. First, empirical evidence indicates a strong and substantial link between management practices and three main aspects of business performance (profitability, growth and productivity). This contribution's worth is based on a study of 124 firms conducted in a specific and deliberate context: the packaging sector in a growing country, Brazil. Second, our theoretical conception of management practices as capabilities responds to current criticisms of the Resource-based Theory, implying that a new theory such as the suggested Practice-based View is unnecessary. The third major contribution focuses on the elements that influence management practice development. Although the study found no evidence for the effect of another criterion, family ownership, it did find that larger businesses had greater levels of management practices. It was also discovered that managerial arrogance might be viewed as a new powerful element impeding the development of higher-level management techniques. Finally, the findings of this study might draw attention to management as a new, internal component of the so-called Custo Brasil (Brazilian Cost), as well as its practical impact on Brazilian businesses' competitiveness. As a result, a contextual research gap arose, which the current study sought to fill by concentrating on the Kenyan setting.

According to Abdalla (2015), companies need to accomplish the greatest training and performance development possible now more than ever. In today's competitive climate, employees must be able to not only learn quickly, but also to apply new knowledge to improve individual, team, and organizational performance. According to the source, thorough, efficient, and constructive assessment is at the heart of continuous improvement and is critical to unlocking the much-needed potential of

learning to enhance performance. As a result, the current study comes to address a contextual research gap by concentrating on the Kenyan setting.

Chepkwony (2016) argued that when the evaluation is held as sacred in an organization. The two studies agree on the fact that there is always the feeling that an individual needs to perform when there is a prospective evaluation than when there is none. For this reason, it is believed in both cases that strategy evaluation impacts performance as it drives up the urge to perform highly and impress during evaluation. However, the effect of evaluation can be separated into two aspects of formative and summative assessment. Therefore, there is a contextual research gap that this study came to fill by focusing on the Kenyan context.

Kumi and Seidu (2017) investigated the impact of a comparative evaluation of chosen educational policies in Ghana and Burkina Faso, as well as the United Kingdom and the United States. This article compares and contrasts some of Ghana's and Burkina Faso's educational policies with those of the United Kingdom and the United States. The goal of the study is to identify the similarities and variations in educational policies between developed (UK and US) and developing (Ghana and Burkina Faso) nations in order to learn from developed countries when appropriate and enhance African educational policies and practices. Document studies that incorporate an integrated literature review are included in the data gathering for the study. The approach for data analysis is content analysis. Managers that exemplify this type of management, according to the study, assist to decide the long-term viability and profitability of educational institutions. According to the research, the motivations for these reforms were to promote transparency, effective administration, and positive outcomes for all students. The findings demonstrate that some of the nations under consideration have educational policies that meet UN Educational

Policy requirements and may be implemented in a comparable setting in Africa. Therefore, the existed methodological gap where this study looked at content analysis whereas this study will the gap by looking at quantitative analysis.

Zarifsanaiey et al. (2016) compared two educational techniques for improving nursing students' critical thinking and performance: simulation-based training vs. integrated training (simulation and critical thinking strategies). The study examined the need for nursing education to shift away from traditional teacher-centered training programs and toward student-centered active techniques. Training programs will be more successful if the two active learning approaches are combined. The objective of this research is to compare the impact of integrated training (simulation and critical thinking methods) versus simulation-based training on nursing students' performance and critical thinking abilities. The current quasi-experimental study was conducted in 2014 on 40 students who were enrolled in a practical nursing principles and skills course at Shiraz University of Medical Sciences during the first half of the academic year. Students were randomly assigned to one of two groups: control (n = 20) or experimental (n = 20). Following simulation and integrated education (simulation and critical thinking strategies) training, students' critical thinking ability and performance were assessed using the California Critical Thinking Ability Questionnaire B (CCTST) and a 10-station Objective Structured Clinical Examination (OSCE). Case B. indicated that the external reliability of the California Critical Thinking questionnaire was between 0.78 and 0.80, and that the validity of OSCE was confirmed by 5 faculty members. Furthermore, the test's dependability was confirmed with a correlation value of 0.66 utilizing the Split Half technique (correlation between odd and even stations). The t-test and Mann–Whitney test were used to evaluate the data. It was determined that a significance level of 0.05 was

statistically significant. The experimental group's mean performance level scores were greater than the control group's mean performance level scores. This difference was statistically significant, with students in the experimental group performing considerably better at OSCE stations than students in the control group. The mean critical thinking scores, on the other hand, did not improve before or after the intervention. The implementation of integrated training enhanced the pupils' performance level, according to the study (simulation and critical thinking strategies).Therefore, existed both methodological and contextual gap that current study came to fill.

According to a study by Broadbent (2017) on university students' self-control and self-regulated learning in a blended course, self-control (as a dispositional personality trait) and self-regulated learning (students' ability to use effective strategies to achieve their learning goals) would predict the participants' course outcomes, as measured by their final course grades. The study's goal was to see how self-control and self-regulated learning affected the learning results of a group of tertiary students in a blended learning setting. 74 second-year students participating in a blended ICT in Education course completed a questionnaire survey on self-control and self-regulated learning abilities at the start of the course, as well as weekly updates on their learning experiences during the semester. It was also discovered that the impact of self-control on participants' learning outcomes was mediated by their self-regulated learning and course participation, emphasizing the relative importance of using elaboration strategies and time management while ignoring rehearsal strategies in terms of academic grades for all modes of study.

A study done by Mwangi (2017) on the efficiency of the strategic planning process for secondary school management in Nakuru County Kenya found that some stakeholders did not fully participate in the planning process and that the quality rates of high schools and KCSE results, as well as adequacy of the teaching and learning resources were influenced positive. In addition, the study revealed that strategic planning also affects students' discipline, access and continuing education. The goal of this study was to improve school strategic planning and evaluate its effectiveness in secondary school administration in Nakuru. All 33 public secondary schools in Nakuru North were included in the research, which employed a descriptive survey approach. From a population of 33 principals, 33 deputy principals, 425 instructors, and 12439 students, a sample size of 154 respondents was produced by randomly choosing 33 principals, 33 deputy principals, 425 teachers, and 12439 students.

Questionnaires were used to collect data from principals, heads of departments, teachers, and students. For the BoM and PTA chairpersons, an interview schedule was adopted. Documentary examination of important school records such as KCSE spread sheets and analyses, as well as school inventories, was also carried out. Prior to the actual data collection, a pilot study in three secondary schools was conducted to ensure the instruments' reliability and validity. Data was gathered in both quantitative and qualitative formats. The data was examined using descriptive statistics (frequency, percentages) and inferential statistics (chi-square and regression). Stakeholder engagement in strategic planning and implementation was also found to be critical in school management, according to the study. The process of strategic planning was faced by the challenges of resistance from stakeholders, inadequate finance, time limit and inabilities of some stakeholders to perform their duties.

Whereas this study was conclusive, the current study filled the contextual and geographical gap that existed.

Sang, Kindiki, Sang, Rotich and Kipruto (2015) studied on the challenges affecting the implementation of strategic plans in secondary schools in Otoucha education zone of Anambra state. They investigated the challenges affecting the implementation of strategic plans in secondary schools in Otoucha Education Zone of Anambra State. Two research questions guided the study and two hypotheses were tested at 0.05 level of significance. The study was a descriptive survey and the population of the study comprised 26 principals and 680 teachers in public secondary schools in Otoucha Education Zone of Anambra State. Through simple random sampling, the researcher sampled 30% of teachers in the Zone. The instrument of data collection was a structured questionnaire which was developed by the researcher and validated by three experts in education. Mean, standard deviation and t-test was used to analyze data for the study. Findings revealed that principals implement strategic plans in secondary schools in Otoucha Education Zone of Anambra State to a low extent. It was also revealed that non-availability of fund, poor institutional leadership, lack of qualified staff, lack of interest on the part of stakeholders, poor communication skills, poor knowledge of the strategy implementation plan, lack of teaching resources and lack of physical facilities are some of the challenges affecting the implementation of strategic plans in secondary schools in Otoucha Education Zone.

Furthermore, there was no substantial difference in principals' and teachers' perspectives on the scope of strategic plan execution and the difficulties that face secondary schools in the Zone. Based on the findings, it was suggested that the Ministry of Education and the Post Primary School Service Commission arrange training programs on a regular basis. (short courses, seminars, workshops and

conferences) where principals will be educated on strategic planning and its implementation process in schools. It was also Principals are encouraged to be innovative in their thinking through improving their collaborative initiatives with private experts in the area of resource provision and development of the human capacity in their schools. Therefore, there existed a conceptual and contextual gap that the current study had to fill.

Okwako (2013) conducted research in Meru County, Kenya, on strategic planning and performance of public secondary schools. The goal of this study was to see how strategic values affected enrolment, resources, quality, and efficiency. The cross-sectional descriptive survey research design was utilized in this study. The research included top, medium, and lower-level managers from Meru County's three technical training schools. Data was collected via questionnaires. The Cronbach's alpha was used to assess instrument reliability, yielding a correlation value of 0.75. Data was analyzed using descriptive and inferential statistics, and tables and figures were used to show the findings. The study discovered that strategic values had a substantial impact on technical training institution performance. The addition of a moderating variable to the government policy increased the model's strategic value. The researcher suggests that technical training institutions increase their performance by aligning their institutional philosophy with their strategic ideals. Therefore, there existed a conceptual gap which the current study came to fill the gap

There are various methods to improving leadership skills in human resource management, financial management, teaching, and generating teaching and learning opportunities for head teachers, according to Adenipekun (2016), in order to boost students' academic success. The study also revealed that managers, particularly instructors, have the capacity to develop and establish caring and polite learning

environments through the use of appropriate resources. If the display of friendliness and travail is demonstrated for them and placed to improved academic success, students would be better able to reciprocate true love; compassionate conduct and more focused learning. According to the literature reviewed thus far, management practices are now at the forefront in education literature, primarily as they relate to the classroom as an ecological environment in which students develop their understanding, attitudes, and feelings, as well as promote their mental abilities to seek higher levels of academic excellence. As a result, the prediction made in this paper goes beyond the idea of authoritarian regulation management in the name of school administration. It sees the classroom as a teacher-heavy environment with a large number of pupils charged with achieving the educational goal.

Patton, (2016) study that has written extensively on student academic achievement, emphasized the roles played by conscientious teachers and students rather than the principal's role in improving teaching and learning and producing successful learning performance. This work put more emphasis on the roles of responsible teachers and students than on the principal's role in improving teaching and learning needed for achieving excellent learning outcomes. However, in this study's meta-analysis on academic achievement, the study listed the importance of the school leader's educational position through the management of teachers and students. Teachers and students who are aware of their duties and who collaborate with the principal to improve teaching and learning were the focus of the study. The study indicated that excellent teachers are the single most important impact on development in industrialized nations such as the United States, based on studies on teachers' influence on students' learning and success. The study did not, however,

focus on staff development and how it affects academic achievement, which is the present study's emphasis.

In a study by Johnson et al. (2007), it was noted that strategic planning should be practiced in all organizations irrespective of their size and nature, in view of the fact that it reduces focus on operational details and enhances strategic ideas. They also stated that strategy should preferably be envisioned informally before being explicitly coded (strategic analysis). However, the formality of a strategy has its drawbacks. The author asserts Henry Mintzberg's concern that formal strategic planning systems might lead to a misunderstanding of the goals of planning, issues in the design and implementation of strategic planning systems, and the strategic planning system failing to take ownership of the strategy. Extensive formality in strategy planning might lead to a loss of originality and authenticity, as well as the conflation of rigid and time-consuming plans with strategy. The notion that there is an inherent knowledge gap in the link between strategic planning and business performance is therefore crucial.

Mulford and Silins (2011) provided new models and a reassessment of successful school leadership for better learning outcomes for students. According to the findings, principals that encourage capacity building as well as accountability and assessment mechanisms benefit student empowerment, social development, and academic achievement. This backs up the claim that strategic management practices and student achievement are correlated. However, the study not did not incorporate the principal of staff development which was the focus of the current study.

Misoloh (2011) research found that Interpersonal skills are quite useful when it comes to avoiding the issue of human resources. The head instructor must deal with the other

students. This ability is beneficial for team building and junior staff motivation. Members of any organization should have a pleasant-sounding connection in order for work to be organized and duties to be shared. According to the report, time that might have been better spent resolving member disputes is now being used for more important tasks. Authoritarian, democratic, and laissez-faire leadership styles all fall under the category of human relations abilities. An authoritarian leader utilizes oppressive command and authority to dominate and adversely control his or her subordinates. In a school setting, such a principal will be dismissive of the teachers' suggestions. This approach involves the danger of the teachers separating themselves from the leader, becoming disorderly, or undermining his efforts.

Teachers are inspired to participate in decision-making regarding school-related issues when their principal is democratic. He can also enlist the help of parents, students, and other stakeholders when making choices that will have an impact on the whole school community. The laissez-faire leadership style is one in which the leader just abdicates responsibilities. Rather than making a choice, the boss continuously passes everything back to others. This opens the door for the loudmouths to win. Head teachers increase student teaching and learning and, as a result, their academic achievements through impacting staff motivation, devotion, teaching techniques, and developing teachers' leadership qualities. Following the recognition that school leaders needed to be professionally trained, England recognised the need for approved training for head teachers to provide management skills not covered by teacher education. Whereas this study centered around the head teacher skills, the current study filled the gap by incorporating other skills attributable to staff development and motivation.

In a study conducted by Brito and Sauan (2016) on management practices as capabilities heading to superior performance, a relationship between management practices and higher performance was further confirmed. This was established in this two authors' study that examined whether management practices led to firms' superior performance. The study found that greater levels of management practices were related to better levels of organizational performance. The adoption of management techniques, according to the authors, also contributed to a firm's overall performance. The research also found that investing in management is a factor that can help a business become more productive. To this aim, the two writers argue that it is realistic to assume that implementing management techniques will improve a firm's overall performance. However, the study not did not incorporate the principal of staff development which was the focus of the current study.

Billman (2004) performed research on the strategies that principals believe are essential to the success of their schools, as well as the strategies' execution and the critical factors required for the strategies to succeed. The findings of this study showed that schools differed on the emphasis placed on how they use strategic process. They did, however, have a common goal of fostering a culture of continual improvement in teaching and learning. This was shown to be important to academic improvement's effectiveness, as well as the initial stage in the change process, according to the study. This clearly shows that there is no doubt about the link between principals' strategic management methods and student achievement. However, the study not did not incorporate the principal of staff development which was the focus of the current study.

Lezotte (2010) in the United States of America identified a number of characteristics that distinguish high performing schools. Good instructional supervision, a clear and focused objective, safe and orderly schools, a culture of high success standards, frequent monitoring of student growth, great home-school connections, and the opportunity to study are just a few examples. These are some of the outcomes of strategic management, and it's no surprise that the world is embracing it. However there existed a conceptual gap since the study did not include strategic management plans in respect of staff development which was the focus of the current study.

According to research done by Verspoor (2006), improving school effectiveness is a critical component of the ongoing drive for educational excellence. This suggests that much work has to be done to enhance school management if Africa's educational quality is to be improved. Inefficient and inefficient school administration may not result in improved learning outcomes, necessitating the adoption of strategic management techniques that will increase school efficiency and effectiveness, resulting in increased student success. However, the study did not include strategic management plans in respect of staff development which was the focus of the current study.

Verspoor (2006) found that enhancing school effectiveness is a crucial component of the continuous quest for educational excellence. This implies that if Africa's educational quality is to be enhanced, significant work must be done to improve school management. Inefficient and ineffective school administration may not lead to improved learning outcomes, necessitating the implementation of strategic management approaches that will enhance school efficiency and effectiveness, resulting in higher student achievement. The majority of the organizational restructuring revealed a new foundation upon which schools redesigned their

operations by implementing cost-effective procedures that emphasized quality, efficiency, and value. According to the research, adoption of technology, schooling system, corporate change, and process re-engineering had a significant influence on public secondary school performance in Awendo sub county, Migori county. Secondary schools in Migori County, Kenya, should continue to embrace new technology, according to this study, because it has been linked to increased performance. The management, on the other hand, should think about the ICT quality aspect, as well as the ease of use, durability, and disposal of technical help while using new technologies. However, the study did not integrate strategic management plans in relation staff development which was the emphasis of this study.

In Hong Kong's secondary schools, Lee, Walker, and Chui (2012) investigated the impact of several aspects of instructional leadership on student learning. Although the link between leadership behaviors and student learning has been proven, there is little understanding of the relationship between strategic management practices and student performance. As a result, the current study was designed to address a gap in the literature by concentrating on the relationship between strategic management practices and secondary school students' academic performance in Murang'a, Kenya.

In a study on management practices and students' academic performance in national examinations in public secondary schools in Kiambu County, Kenya, Waweru and Orodho (2014) investigated the extent to which school principals' management practices influence students' academic performance in national examinations in public secondary schools in Kiambu County, Kenya. This study utilized a descriptive correlation research approach. A mix of stratified and basic random selection techniques was used to choose 26 principals from public secondary schools in Kiambu County. Principals' semi-structured questionnaires were used to collect in-

depth data. In most of the county's best performing schools, most of the classified management elements, such as effective human and physical resource planning, organizational strategies, curriculum leadership, control measures, and students' academic success, were found to be connected. In the County's low-performing schools, these management strategies were rarely used. It is recommended that school principals' strategic management techniques be enhanced in all Kiambu County secondary schools through frequent retraining and overall professional development. As a result, the study did not take into account staff development as a motivator for academic achievement, which was the study's main emphasis.

Lumullas and Kimengi, (2007) indicated that studies carried out on the effects of strategic management practices on performance of organizations have ranged from international regional and national. In this current study the aim is to assess the effect of strategic management practices in improving academic performance of schools in Kenya. The Kenya Association of Educational Administration and Management conference in 2007 determined that educational leaders' responsibility in the design and implementation of educational principles is to combine theory and practice. If a job is to be completed properly, it must be specified who is responsible for what, how it should be completed, and when it should be completed. This research identifies who, when, and how activities should be completed in order to achieve the ultimate aim of secondary schooling, which is good performance. However, the study did not include strategic management plans in respect of staff development which was the focus of the current study.

Palladan and Adamu (2018) opined that strategy implementation consists of all the decisions and activities required to turn the strategic choices into reality. In general, the strategic management is a process that typically involves various stages from

evaluation, analytical assessment, identification of internal and external factors and making necessary changes for desired outcomes. Strategic management is the constant preparation, tracking, review and evaluation of all the criteria that an entity requires to achieve its goals and objectives. Changes often compel institutions to constantly assess their strategies for success. This is critical if they will be successful in deploying effective interventions following internal assessment of all risks and opportunities. From this discussion, it implies that strategic management sets a direction for the institution and its stakeholders. However, the study did not include strategic management plans in respect of staff development which was the focus of the current study.

According to Fuertes, Alfaro, Vargas, Gutierrez, Ternero, and Sabattin (2020), there are several schools of thought about how strategic leadership should be accomplished and various structures have been developed by scholars and managers to direct the strategic management process. One of the main roles of strategic management is to integrate a diverse functional area of the organization fully, as well as to warrant the functional area conforms and get together well. Another role of strategic management is to keep a constant view of the goals and objectives of the organization. However, the study did not include strategic management plans in respect of staff development which was the focus of the current study.

According to IGI global (2020), in general, management practices refer to the working processes and innovations used by managers to maximize the efficiency of work systems. The author reiterates that popular management activities include: encouraging employees, educating employees, introducing quality assurance programs and introducing different types of new technology. Organizations therefore

use common strategic strategies in the contemporary business environment to sustain their activities. This research focuses on teachers and administrators whose clients are kids and their parents, who regard school attendance as more of a habit than an investment. The importance of education in guaranteeing the survival of any nation in the global economic system has led to a focus on educational results of high quality. Strategic management practice is now an essential component of every organization's survival in today's competitive operating climate. However, the study did not include strategic management plans in respect of staff development which was the focus of the current study.

Heugens (2003) focused on the impact of strategic management activities on the performance of organizations. This was accomplished by studying the strategic actions of two food companies in the Netherlands during the early phases of the development of genetically modified components. According to the author, companies are considerably exposed to political and societal predicaments during the implementation of strategic management activities, which have a beneficial influence on organizational performance indicators. The research was restricted because it only looked at the food business. The present study focuses on education sector policies and how they impact academic achievement in Kenya, whereas the previous study focused on the food business.

Muogho (2013) investigated the impact of strategic management practices on an organization's development and growth in a group of Anambra manufacturing firms. The findings revealed that most manufacturing firms failed to use strategic management, that strategic management had a significant impact on the firm's competitiveness, that strategic management had a significant impact on employee

performance, that organizational productivity of the firms had increased dramatically as a result of strategic management, and that manufacturing firms' structural development was influenced by strategic management. Although most manufacturing businesses in Anambra State did not engage in strategic management, the study found that it was an effective technique for increasing performance, structural development, and competitiveness of most manufacturing Anambra State enterprises in Nigeria. Whereas this study focused on manufacturing firms in Nigeria, the current study focused on the education sector strategies and how they affect academic performance in Kenya.

Yunus (2010) conducted research on strategic management practice and organizational performance among small firms in Lagos. Strategic management affected the market share of small businesses, according to the findings of the study. Strategic management was also found to have a favorable relationship with the company's profitability. The research did, however, propose that for more strategic benefit, more relevant strategic situations, strategic planners, options, and strategic analyses be implemented. Whereas this study focused on manufacturing firms in Nigeria, the current study focused on the education sector strategies and how they affect academic performance in Kenya.

Njanja (2009) investigated the management techniques that influence the performance of Kenyan SMEs. Globalization and other business-related elements such as incentives, policy and regulation concerns, and infrastructure all had a major impact on management systems, structures, and other internal company characteristics, according to the findings. The study, however, fell short of its primary goal of demonstrating a link between management techniques and

performance. Thus, the current study focused on the education sector strategies and how they affect academic performance in Kenya.

Otieno (2013) used descriptive statistics to investigate at how SMEs in Mombasa County handle strategic management practices among SMEs. Data was gathered through the use of questionnaires. Profitability was found to be the most commonly utilized performance measure for SMEs, followed by market share, liquidity, and innovation. Furthermore, most businesses connected strategic problem management to the organization's future success, indicating that Mombasa County's SMEs were aware of the role of strategic issue management in achieving organizational objectives. The study also discovered that environmental and managerial variables impacted SMEs in Mombasa County's strategic problem management methods. This study focused of SMEs while the current study focused on strategies used in secondary schools and how they affect academic performance in Murang'a, Kenya.

Ofunya (2013) used the Post Bank of Kenya as a case study to investigate the effects of strategic management strategies on financial institution performance in Kenya. The study found that providing specialty products and services, improving operational efficiency, controlling product and service quality, intensive supervision of frontline personnel, developing brand or company name identification, targeting a specific market niche or segment, and developing brand or company name identification were all important. The researcher focused on financial organizations whose clients are motivated by a desire to build wealth by increasing their investments. This study focused of financial institutions while the current study focused on strategies used in secondary schools and how they affect

academic performance in Murang'a, Kenya.

According to Bovaird (2009) the emergence of the concept of strategic management has gained a sustained prominence in the management of public institutions for the last two decades. To this end, it is now becoming mandatory for all public organizations to adopt to the use of strategic management in their daily management practices. Strategic management has therefore become an attractive tool for enhancing management effectiveness in the public institutions. It should also be mentioned that companies without a plan are typically thought to be aimless and inept. It is not an exaggeration to claim that strategic management, especially in this period when public organizations are perceived to be failing and inefficient in their use of public resources, might assist to improve public organizations' image and legitimacy, among other things. It's worth noting that the common public perception is that government officials must accomplish more with less, a scenario that necessitates strategic thinking in order to eliminate waste. However, the study did not include strategic management plans in respect of staff development which was the focus of the current study.

Sifuna (2016) investigated Kenya Commercial Bank's strategic management and performance, finding that cost leadership, market focus, and distinctiveness had a significant impact on the organization's performance. A comparable study should be conducted on other organizations, according to the report. Due to variations in industry and institutional environment, the study is limited. Strategic management techniques in the context of Standard Group Limited and the effect of these practices on its performance are a knowledge gap that this study aims to fill. There has been no research into Standard Group Limited's strategic management methods and performance, and this study will fill that gap. This study focused of financial

institutions while the current study focused on strategies used in secondary schools and how they affect academic performance in Murang'a, Kenya.

2.3 Relationship between Involvement of Stakeholders and Students' Academic Performance

Nkundabanyanga, Tauringana, and Muhwezi (2015) conducted a study in Uganda on governing boards and perceived secondary school performance. According to preliminary evidence from a developing nation, board role performance, finance committee role performance, frequency of meetings, and governing board financial capacity all have a substantial impact on school achievements. The study stated that the board of management role on performance and finance had a significant effect on schools' performance. However, the study lamented that the majority of schools' BoM members did not participate in management of students' discipline nor implementation of democratic governance. The board of management members tries to set dates for going to schools saves for emergencies. Indeed, the BOM is mostly accused of majoring in disciplinary issues especially that of approving pupils' suspension and teachers' interdiction. It is necessary to investigate how school boards give priority to other matters affecting school management such as inadequate teaching and learning facilities. They also revealed that scant teaching and learning facilities hindered the board of management (BoM) roles of managing schools' resources. The study appears to have focused on the role of secondary school governing bodies in Uganda. The current study, on the other hand, concentrated on the school board of management and sought to determine the impact of the board's function, school environment, and teacher morale on students' academic achievement. Therefore, there existed a conceptual gap that the current study came to fill by

incorporating the board of management and also increasing the teaching and learning facilities.

According to Kabiaru (2013), the role of school management committees in facilitating the procurement of teaching and learning resources and promoting interpersonal relationships among parents, teachers, and pupils influenced the implementation of inclusive education in public primary schools in Kasarani, Kenya. The current study, on the other hand, focused on the role of the board of management, school climate, teacher morale, and student academic performance in order to bridge the conceptual gap.

In Nakuru Municipality, Kenya, Gichohi (2015) performed a research on stakeholder participation in schools in the twenty-first century for academic success in public elementary schools. The study's findings indicated that the involvement of school management committees in the decision-making process related to school administration boosted academic success. The current study increased the scope by incorporating stakeholder's involvement regarding supporting staff motivation and school activities and its influence on pupils' academic performance.

Sapungan and Mondragon (2014) show the significance, obstacles and the advantages of parental engagement in the educational process of a kid, and give numerous possibilities to enhance morals, attitudes, and academic success across all areas of the child, behavior and social adjustment. According to this study, the most frequent obstacles to parental engagement are parents' unfavorable views to maintain the school in which their children enroll and their attitude "we care not." It goes on to say that parental determination is consistently linked to greater levels of success, and the magnitude of parental effort has a significant impact. The current study further

incorporated the involvement of other stakeholders in supporting staff motivation and how they affect academic performance.

The impacts of parent engagement on academic achievement for your children were studied in 21 public schools in Kieni West Sub County, Kibaara and Ndirangu (2014). According to the findings of the study, the majority of parents surveyed participated in school events and activities and examined their children's homework. The parents thought that their participation would benefit the teachers in assisting their children's education. Furthermore, the majority of parents believe that structured parental engagement programs may help them strengthen their relationship with their children. The present study attempted to address many important suggestions, including identifying the type of parental involvement in place, parent awareness initiatives through seminars and workshops, and teacher-parent conferences.

Okoth (2016) examines the impact of stakeholder consultation during the planning of strategies and finds out that it has a significant effect on the performance of firms. According to the findings made in the research, the coefficient of determination (R2) was 0.461 (p=0.000, n=120). It implied that variation could explain 46.1% of the variation in performance of firms in stakeholder consultation during strategy formulation. It also means that 53.9% of the variation in organizational performance can only be explained by factors that are beyond the ones encompassed in the regression model in question. Beal (2000) cites this study in its study on the effect of stakeholder consultation and further posits those stakeholders are important to be consulted during formulation of strategies since some of them are responsible for implementing and evaluating them. Without their input, Okoth (2016) finds that such strategies might not receive adequate support to facilitate their success in later stages.

The role played by stakeholders, in this case, is to validate what has been deliberated on by strategic teams. The current study therefore determined the impact on academic achievement of all these included parties.

Lamas (2015) indicate that school performance is a problem that concerns not only students, parents, teachers and authorities in our country, but also in many other countries and continents in Latin America. This points out to the fact that planning for students' academic performance from the beginning has its own complexity that calls for strategic decisions. It is for this reason that this study focused on stakeholders' involvement in secondary schools' principals' management practices. Stakeholders' involvement towards students' performance means cooperation with individuals and using the assets in the prescribed manner while enabling to achieve the set goals

According to a study published by the Washington State School Directors' Association in the United States in 2015, School boards are responsible for creating vision, setting objectives, enforcing accountability, executing school rules, distributing resources, and defining vision. According to the Republic of Kenya's Basic Education Act No. 14 of 2013, school boards are responsible for advocating for quality education for all students in accordance with the Act's or any other written law's standards, certifying and ensuring the provision of proper and sufficient physical facilities for the institution, and establishing and reporting cases of pupil discipline; cater for the wellness of students, teachers, and non-teaching personnel at the institution; enable and assure the provision of advice and counseling to all learners; Ensure that the institution has a culture of dialogue and hands-on democratic governance; and manage and accomplish the institution's resources. As a result, the

current research looked into the effect of all of these stakeholders' involvement on academic success.

In a study conducted by Khama (2014) in Namibia's Caprivi educational region on board members' perspectives on school management, It was revealed that board members faced problems such as a lack of knowledge and awareness of educational acts, poor education credentials, preventing them from completely understanding their duties, inadequate resources to help in school administration, and a lack of capacity fostering program. However, in order to better understand the influence of school boards of management on students' academic success, the current study focused on them.

In a Hong Kong study of primary schools by Yau and Cheng (2011), The perspectives of principals and teachers of school policy as a major component of school-based management developed and clearly defined school policy that should be formed in order to achieve effective school-based management execution in elementary schools According to the findings, school board committees should make sure that all workers understand the school's vision and goals so that they can create yearly goals and plans with ease. The current study looked on the role of stakeholders as academic performance drivers for pupils.

Osei-Owusu and Sam (2012) performed research in Ghana's Ashanti Mampong Municipal basic schools to examine the impact of school management committees in promoting quality teaching and learning. The study found that school management committees were inefficient at monitoring and controlling the attendance of head teachers, instructors, and students. This research looked at the role of the school

management committee in providing high-quality teaching and learning, whereas the present research looked at how stakeholders affect students' academic achievement.

Opande (2013) studied the impact of school management committees' motivating methods on Kenya Certificate of Primary Education (KCPE) performance in public primary schools in Kenya's Suba-West division. The findings revealed that school management committees used prizes to incentivize teachers to improve KCPE performance in their schools. It was also shown that schools with positive relationships with teachers performed better than those with negative relationships. The current research looked at how stakeholders' involvement affects students' academic achievement.

Meiers and Marion (2007) found out that Teachers and college professionals are affected professionally by the degree of prerequisite knowledge students have obtained before reaching them. This calls for all stakeholders to embrace strategic processes. On the other hand, secondary stakeholders are the people who are indirectly affected by successes or failures in schools. Secondary stakeholders include parents and other family members, teachers, college professionals, police officers, and future employers. The families of students and future employers have a vested economic interest in the success of students. Students that stay in school and learn appropriate social skills are less likely to have negative interactions with police officers. While the effect of school decisions may not be as pronounced on the secondary stakeholders as it is on the primary stakeholders, this group of individuals is still profoundly affected by school outcomes.

Rout (2014) investigated the operation of a school management committee at a rural primary school in India's Balasore District. The study's findings revealed that the

school management committee played an active role in achieving universal enrollment by monitoring student attendance and absence, building school facilities, and wisely allocating finances for school development. The current study looked at the impact of the school board's function, the school climate, and teacher morale on student academic achievement.

In her study on the self-perceptions of head teachers of their role in management of school change in Western Kenya, Mabonga (2009) found that head teachers were positive about team building, personal motivation and initiative, leadership and efficient communication when initiating and implementing school-based educational change. The research examined the influence on academic achievements of students on the role of management board, the school environment and teacher morality, whereas Mabongan focused on the view of head teachers of their duties in the administration of schools.

The governing boards of secondary schools in Uganda were studied by Nkundabanyanga, Tauringana and Muhwezi (2015). The performance of the Board of Directors, role of finance committee and frequency of meetings and the governing board of finances, all of which have a significant influence on school achievement, is preliminary data from the developing country. The report appears to focus on the function of Uganda's secondary school bodies. In the present study, the primary school management board's function was concentrated in academic performance for students as well as the atmosphere of the school and moral teaching.

Kabiaru (2013) observed that school management committees were affected by the role of the public primary schools in Kasarani, Kenya in supporting the provision and promotion of teaching and learning resources as well as in the interpersonal

interaction among parents, teachers and children. The research, on the other hand, focused on the Board of Directors, the ambience of the school, instructor morals and the performance of the school's students.

In twenty-one public schools on Nyeri County's Kieni West Sub-County, Kibaara and Ndirangu (2014) investigated the impact of parents' involvement in their children's academic success. The majority of the parents questioned participated in school events and activities and checked their children's homework, according to the study's findings. The parents thought that their participation would benefit the instructors in assisting their children's education. Furthermore, the majority of parents believe that structured parental engagement programs may help them strengthen their relationship with their children. Identifying the sort of parental engagement in place, parent awareness programs through seminars and workshops, and teacher-parent conferences were among the major recommendations. Whereas this study focused on parental involvement, the current filled the gap by incorporating other stakeholders like teachers, pupils and the community.

Bryk and Schneider (2005) suggest that parents might be regarded as a "issue" for teachers. Since children in particular are frequently deemed to come from "low-income families," with a home atmosphere that is inhospitable to school and the educational process. Working-class parents, according to educationalists, do not adequately support their children and, in particular, do not enhance their educational performance (Cheng & Cheung, 2003). Whereas this study focused on parental involvement, the current filled the gap by incorporating other stakeholders like teachers, pupils and the community.

Research by Kiprop and Tikoko (2011) revealed that, while efforts are being made to integrate school policy perspectives of students, such efforts are essentially tokenistic and do not extend themselves in core questions of management. Students are only allowed to participate in student welfare but are regarded to be young and hence unable to participate in administrative problems such as the administration of money and budget, or in the problems of curricula like teaching techniques or number of examinations. Whereas this study focused on pupil's involvement, the current study filled the gap by incorporating other stakeholders like parents, teachers and the community.

Nongubo (2004) states that the problem of student engagement in governance and management, due to the lowest degree of participation in school administration, is lacking in self-decisions and in autocratic thinking between educators. The attendance at school refers to the participation of pupils in the collective decision-making process and discussion at school or class level. The participation of school decision makers, parents and society is often regarded as an issue. The decision-making of schools is an issue. Therefore, the engagement of children in decisions is typically limited to welfare concerns and not to core or important governance issues. The level of the participation of children in decision making is controversial, with views that are often diverging based on their background and vision of the world. Whereas this study focused on pupil's involvement, the current study filled the gap by incorporating other stakeholders like parents, teachers and the community.

In research carried out by Bisschov and Phakoa (2009), students are dissatisfied with their standing in the governing authorities and want to get the same status as all other parties concerned. The literature survey performed by Bisschoff and Phakoa (2009)

was based on the status of minors in governing bodies of public secondary schools in England, Japan and Kenya. Studies have shown that South African students tend to be unsatisfied with their representation. Nevertheless, the data from these schools show that South Africa is a distinct learners' educational path compared with England, Japan and Kenya. Whereas this study focused on pupil's involvement, the current study filled the gap by incorporating other stakeholders like parents, teachers and the community.

It is uncommon for children's voices in school management to be heard by Riley (2008). Riley argues further those youngsters have a lot to learn, a lot to learn, but they're not empty vessels and they have a lot to offer. He believes that the opinions of students need to be heard and that they can make a substantial contribution to establishing a dynamic school community of students. Recent research by South Africans on students' participation in school administration showed that many schools have yet to face this problem and that it has an influence on students' academic achievement. Whereas this study focused on pupil's involvement, the current study filled the gap by incorporating other stakeholders like parents, teachers and the community.

Cheruto and Kipkoech (2011) have shown that secondary school teachers participate, albeit they are lower levels, in management choices. Therefore, head teachers should assess and identify teachers' requirements for management decisions to support further education. This, in turn, would foster the involvement of teachers and improve the team spirit in decision-making, resulting in effective secondary school administration. Whereas this study focused on teacher involvement, the current study

filled the gap by incorporating other stakeholders like parents, pupils and the community.

Cheng and Cheung (2003) noted the involvement of stakeholders in the school's corporate governance as attempts to improve organization’s performance. This fosters the participation in issues analysis, strategy creation, and solution execution by stakeholders at all levels of an organization. In this situation, staff are asked to participate by taking part in activities such as establishment of objectives, working scheme and giving ideas in the decision-making process of the company. The participation in governance was regarded as an important aspect for the improvement of school performance. This applies to the participation of teachers, students, parents and school boards. This study exhibited the contextual gap that the current study filled by contextualizing the study in Kenya.

Gichohi (2015) performed a research on the involvement of stakeholders in public primary schools in Nakuru municipality, Kenya for academic success in 21st century schools. The study results showed that the engagement of school boards in decision-making in school administration has had a beneficial contribution to the academic success. The present study addressed the managerial function of the Board and its effect on the academic achievement of children and not on the participation of boards in decision-making.

According to Nsubuga (2009), principals may at times be faced with situations that may force them to make decisions right there and then. This may compel them not consult others and the decision that they make will just be announced to their subordinates. The subordinates are then expected to implement the stated policies on the ground. These sorts of leaders are normally viewed as tyrants that create a reign

of dread, intimidation and disgust among their followers. Subordinates of these bosses are often intimidated and their morality falls over time. The more authoritarian principles the leaders apply, the less academic achievements of the students are. Therefore, this study focused on only strategy used by principals whereas the current study focused on various strategies used by the principals.

Henderson and Mapp (2002) reviewed 31 studies that explicitly explored the relationship between the performance of pupils and various activities involving parents and the community. A number of results were found in this investigation. First, programs and interventions that involved families to promote child learning at home have led to greater accomplishment for students. Secondly, that the continuity of parental involvement at school appeared to have a positive influence on children as they progressed through the complex education system. Thirdly, that parents and community when involved to student learning had a stronger association with students' performance than any other form of involvement. Whereas this this study did not incorporate staff motivation as a factor, the current study included staff motivation a s a factor on students' academic performance.

The study by Miedel and Reynold (1999) looked at the link between parents' participation in an early intervention program and inner-city children's school success. The results of this study, which included 704 parents of children in the Chicago Longitudinal Study, showed that higher parental participation in pre-schools and kindergartens resulted in higher reading achievement, lower grade retention rates, and fewer years in special education for children under the age of 14. Parents are critical in helping children preserve the initial good benefits of early educational interventions, according to the findings of the study. Therefore, there existed the

contextual gap where this study looked at preschools and kindergartens pupils in Chicago but the current study focused on secondary schools' students in Kenya.

Lezotte and McKee (2014) state that cross-cultural viewpoints have been established that might impact school leadership and management activities in various cultural contexts. Lezotte and Mckee recognizes that school leadership and student achievement was affected by the community, its culture and values. This work revealed the socio-cultural impacts of East and Southeast Asia, the United States, the United Kingdom, and others on schooling and school performance has been proved. However, the study emphasized the need for circumspection when culturally appropriate successful leadership strategies are being implemented in another socio-cultural context. Based on the findings, the researchers, argued that the academic success of students in Aboriginal and minority communities in Western Australia relied on the focus and the role of the principal that harnessed the ideals of the school community and successfully engaged teachers and students as well. This confirms the idea that students' academic performance is an issue that attracts attention of many different stakeholders.

Rout (2014) conducted research on the operation of the rural elementary school management board in Balasore District, India. The findings of the study indicated that the school management committee played an active role by verifying the students' attendance and absence, improving school facilities and using judiciously allotted funds for school development, to attain universal enrolment. The present study examined the impact on academic performance of student stakeholders.

In his study of the role of head teachers in managing school change in western Kenya, According to Mabonga (2009), in beginning and executing educational

change in schools, lead teachers are favourably impressed by team building accounts, personal drive and initiative, significant influence on organizational, and good communication. While Mabonga focused on the role of senior teachers in school administration, the research evaluated effect on academic achievement by stakeholders.

Mulford and Silins (2011) presented revised model and a re-conceptualization of successful school headship management for improved students' learning outcomes. It was evidence that principal who involves parents and the community in capacity building, school systems and strategic management evaluation advance in areas such as social development and the performance of the students. This supports the assertion that strategic management practices and students' performance are related

2.4. Strategic Provision of School Facilities and Students' Academic Performance

Wunti, Hafsat, and Igbaji (2017) investigated the impact of schools on high school students' academic performance in the Nigerian state of Bauchi. The whole research population includes all the directors of high schools in the state of Bauchi (2011). Sixty-two principles were picked using basic random sample methods to account for the whole population, as Krejcie and Mogan pointed out (1970). The tool employed was to assess the status of school facilities at the public Senior School, with 42 subjects completed by the principal. Total Learning Environment Assessment (TLEA). The data gathered were evaluated inferentially by tabulating the frequency of the participants' replies by percentage and Spearman Rank Order Correlation. In the fields of educational plant and facilities and the academic achievements of pupils measured by TLEA to 0.05 levels, the main research results of the study did not discover a statistically significant relation.

The recommendations of the researchers based on this research are as follows: educational managers, planners and other stakeholders ought to support the government's work by preserving the schools and improvising these things locally from the immediate school location. In order to promote improvement and make full use of the learning process, an area of accomplishment and failure in the academic career of students needs assessment. Therefore, the current study filled the gap by focusing on whether educational administrators, planners and other stake-holders supplement the government effort by maintaining the school facilities to foster academic performance.

Pimtong, Hanqin, and Hailin (2012) looked at how competitive strategies and organizational structure affect hotel performance, as well as whether organizational structure may assist mitigate the relationship between competitive strategies and hotel performance. This study investigated the cause-and-effect relationships between competitive tactics, organizational structure, and hotel performance using a causal and descriptive research approach based on past research. The study employed a three-part, 28-question self-administered questionnaire. US hotel owners, general managers, and executive managers whose e-mail addresses were publicly available were the study's target population. A census was done, and all of the hoteliers on the database received e-mails. According to the findings, a competitive HR strategy has a direct impact on a hotel's behavioral performance, while a competitive IT strategy has a direct impact on a hotel's financial success. Organizational structure appears to influence the relationship between both of these methods and behavioral performance. However, the study was based in the hotel industry causing a contextual gap that the current study filled by looking at the education sector and utilizing the

relationship between strategic management practices and student academic performance.

Facilities, according to Hailu and Biyabeyen (2014), are one of the most powerful elements that influence academic success in the school system. The school buildings, classrooms, lodging, libraries, labs, furnishings, recreational equipment, apparatus, and other teaching resources are all included. Provision of these facilities and equipment are found to contribute to academic achievement of the learners.

Kimotho (2012) investigated the influence of competing tactics on CFC Stanbic Bank Limited's financial performance. The study's framework is the relationship between these competing strategies and commercial banks' financial performance. The influence of competitive tactics on the financial performance of commercial banks was investigated using a case study method, with a focus on CfC Stanbic Bank Ltd in Kenya. Content analysis was used to examine the information gathered in this study. The analysis and interpretations were presented in two parts, the first of which contained general information about those sampled and the second of which was divided into sections containing Segmentation Strategies, Price Strategies, Delivery and Distribution Strategies, Promotional Strategies, Risk Management Strategies, and Product and Service Differentiation Strategies. The findings demonstrate that in today's economic world, companies who can quickly bring innovative new products and services to market have a considerable competitive edge. As a consequence, the results ascribed the bank's improved financial performance to the competitive tactics it has pursued over the course of its existence. The previous study, however, was focused on the financial sector, leaving a contextual vacuum that was filled by the present study, which focused on the education sector and used the link between strategic management practices and student academic achievement.

School facilities, according to Nkechi (2016), are physical resources that primarily assist successful teaching and learning in secondary schools. In a nutshell, school facilities refer to any structure that is utilized for both academic and non-academic functions. In this regard, school facilities are considered as critical to the proper operation of the teaching and learning process.

In her paper on efficient school administration in Nigeria, Asiabaka (2008) observed that the government's inability to create policy directives on minimum requirements for school infrastructure has resulted in inequalities in acquisition. This is due to the fact that although some have well-equipped labs, libraries, and other facilities for efficient teaching and learning, others do not, or if they do, they are inadequately equipped. The previous study did not include athletic equipment facilities, thus the present study filled up the gaps by incorporating them and examining how they impact academic achievement.

In his study, Dada (2004) agrees that no profound teaching/learning activities can successfully take place in most secondary school classrooms in Nigeria, especially in Lagos State, even if the teachers are God-sent and the learners are a celestial pack of highly intelligent personalities. The problem is that where there are classrooms, they are congested. In this situation, neither the instructor nor the pupils in our secondary school classrooms can move around as freely as they should. As a result, many professors do not provide homework to a significant number of pupils on a regular basis. And this has had a significant impact on kids' academic achievement. This study did not include the effect of sporting equipment facilities on academic performance; thus, the current study came in to the research gap

According to Olarewaju (2004), just a few schools have science laboratories that are sufficiently prepared to conduct scientific experiments in biology, physics, and chemistry. Many schools treat biology and chemistry as non-science disciplines that do not need laboratory work. Other schools teach the three disciplines of science without laboratories in the hopes that students would utilize other schools' laboratories during exams or be forced to donate money to the Parent-Teachers Association for the acquisition of scientific equipment (PTA). The argument is that the country has been unjust not only to our secondary school kids, but also to herself. This is because no nation can grow technologically by the theoretical teaching of science topics, and no meaningful teaching and learning can take place in substandard educational facilities, and the common refrain in the educational circle is that everything is OK in our secondary schools. The influence of athletic equipment facilities on academic achievement was not included in this study, thus the current study filled the gap.

Mulinge (2017) investigated the impact of laboratory facilities on students' academic performance in scientific disciplines in Kenya's Machakos Sub-County public secondary schools. The objective of the study was to identify the availability of laboratories and equipment in public secondary schools, the use of laboratory facilities by scientific teachers in science subjects, the relationship between laboratories and academic performance of students in science subjects, and the challenges faced by science teachers. The study was prompted by the continuing low marking in scientific courses by students in Machakos Sub-County. The study was conducted using a descriptive survey approach. The study's target population included 75 principals, 350 instructors, and 4500 pupils in form three. To draw relevant findings, quantitative data was analyzed using the Statistical Package for Social Sciences, and the results were

presented in frequency tables, bar graphs, and percentages. According to the findings, there is a substantial correlation between laboratory facilities and students' academic achievement in science subjects. The utilization of laboratory facilities by teachers in teaching science topics had an impact on students' performance in science courses, and administrators had a problem in providing laboratory facilities in public secondary schools due to class numbers.

Principals should collaborate with parents, sponsors, and other stakeholders in education to prioritize the provision of suitable laboratory facilities, according to the study. Science instructors should also be given additional training to improve their ability to teach science topics. Students should be offered additional possibilities for scientific experience by exposing themselves to further laboratory practice, and the government should supply schools with certain laboratory equipment to support their expenditures. This study did not include the effect of sporting equipment facilities and teacher facilities on academic performance; thus, the current study came in to the research gap.

Nakhumicha (2014) who studied the benefits of school managers in implementing strategic plans in Kimilili sub-county public high schools noted that adequacy and quality of teaching and/learning facilities do not just influence implementation of strategic plans but also act as outcome of good strategic planning process. This study did not include the effect of sporting equipment facilities and teacher facilities on academic performance; thus, the current study came in to the research gap.

Olaniyonu (2000) explained that instructional facilities utilization facilitates and stimulates instructional delivery in secondary schools. Therefore, this scholar’s assertion is that the use of relevant instructional facilities ought to be subject-specific.

For example, teaching of science requires the use of equipped laboratories, while the teaching of English Language requires the use of instructional facilities like films, slides, video-tapes etcetera. This is necessary because there is a close relationship between utilization of appropriate instructional facilities and student's academic performance the scholar further explained. This study did not include the effect of sporting equipment facilities and teacher facilities on academic performance; thus, the current study came in to the research gap.

Bizimana and Orodho (2014) carried a study in Rwanda and indicates that in the sense of the heavy workload of teachers, lack of adequate and sufficient physical facilities can restrict smooth interaction between the learner and the learning process and threaten holistic development of education. This study did not include the effect of sporting equipment facilities and teacher facilities on academic performance; thus, the current study came in to the research gap.

Musyoka (2018) study has shown that the correlation between educational resources and the performance of KCSE pupils in Kathiani sub county, Machakos County, has been good and substantial. This suggests that the sufficiency of educational resources affects the academic achievement of pupils. Consequently, KCSE performance will increase if teaching resources are appropriate. This means that adequacy of instruction means that academic success has a good overall influence. The worse than average school performance may thus be linked to the insufficiency of the teaching resources. It can thus be argued. The study showed that adequacy of teaching resources, for instance, text books and academic performance have a positive significant relationship implying that that adequacy of teaching resources influences students' academic performance. Where there are no teaching facilities, the abilities of the

teacher are killed and this can go a long way to impede results, grow a negative attitude towards work and lose job satisfaction. The quality and quantity of educational facilities available in an education system is positively linked to the standards and quality of that education system. This therefore means that if teaching resources are adequate, KCSE performance will improve. The study concludes that provision of physical facilities and students' performance in KCSE in public secondary schools in Kathiani sub county Machakos county have a significant positive relationship. This suggests that academic performance can only improve when physical facilities that enhance learning are adequately provided. The study did not carry out a correlation analysis between actual KCSE scores and provision of school facilities. Instead, the analysis merely depended on responses from a common question that was asked to both the head teachers and head of department to rate their views on an ordinal scale with regard to the extent of influence. Therefore, there existed a methodological and conceptual gap that the current study went to fill and relating to academic performance.

Adanma (2019) studied the relationship between the use of educational facilities and the academic achievement of high school pupils in the River state of Nigeria. The study using a correlation design led to one topic and hypothesis of inquiry. The population's numerical strength in 261 high schools was 2350 instructors. The sample size was 342 respondents using a stratified random sampling method. Their internal consistencies were confirmed by the experts with the Cronbach Alpha technique, giving a reliability rating of 0.79 and 0.81, respectively. The study's findings revealed a correlation between effective instructional facility usage and students' academic achievement. The necessity for better use of given instructional facilities in River's

state public senior secondary schools to improve the teaching-learning process and, as a result, the students' academic performance, is one of the recommendations. Therefore, there existed a conceptual gap where the current study came to fill by incorporating sporting equipment facilities and they affect academic performance in Kenya.

According to Gidado (2010) made reference to a study carried out in Kano on secondary school administration revealed that most of the schools were devoid of necessary facilities among which are the teaching facilities. Textbooks in form of teachers guide and students ‘texts, his tasks are made difficult as he is expected to sue his initiative and creativity in planning his lessons. Teaching facilities are required for the various activities of the school program as well as for the extracurricular activities. The issue of school facilities has only been partially provided in some schools, but nothing has been done in many schools. Whereas this study focused on teaching facilities, there existed a conceptual gap that the current study came to fill by incorporating learning and sporting facilities.

According to Lemasters (2010), who analyzed fifty-three research on school facilities, student success, and student conduct, daylight promotes greater student accomplishment. The Heschong Mahone Group's (2008) study, which included almost 2000 classes in three school districts, is arguably the most widely referenced study on the impacts of daylight. According to the study, children who learnt in surroundings with the greatest natural light improved 20% quicker on arithmetic exams and 26% faster on reading tests over the course of a year than students who learned in conditions with the least amount of natural light. Some issues remained unanswered by the original Heschong research, such as whether the improved performance was

influenced at least in part by better teachers being allocated to the classrooms with more natural light. In a follow-up research, teachers in one of the districts were polled, and data on teacher characteristics was added to the analysis. The impact of day illumination was shown to be both favorable and substantial in this new study. Other research are presently being conducted in order to validate the findings. Whereas this study focused on learning facilities, there existed a conceptual gap that the current study came to fill by incorporating sporting facilities.

Adebanjo (2016) noted that the children learn best, when the school environment is enriched with adequate teaching learning materials. Provision of recreational facilities in the schools created several avenues whereby individual students can develop intellectually according to their potentials and abilities. Adebanjo however was the opinion that adequate supply of recreational facilities reduces students' unrest and vandalism, it also enhances smooth execution of educational programme for effective students' academic performance. Whereas this study focused on recreational facilities, there existed a conceptual gap that the current study came to fill by incorporating both learning and teaching facilities.

Coulon (2015) performed research in New York to investigate the influence of assistive technology in the classroom for students with impairments. The study found that when students used AT like the iPad, software, speech generators, electronic notebooks, and computer assisted teaching, they improved their academic performance in areas like spelling and writing. The prior study relied solely on analytic review to investigate the influence of AT, resulting in a lack of diverse responses from respondents. In terms of equipment, the present study employed mixed method methods to fill in the gaps left by the prior investigation. Furthermore,

the prior study was done in a developed nation, whereas the current study was undertaken in a developing country, Kenya, allowing for cross-cultural comparisons.

Figueroa, Lim, and Lee (2016) conducted research in the Philippines using regionally weighted regression to investigate the relationship between school amenities and academic success. The study found that schools with basic amenities fared better than schools with inadequate facilities, implying that basic facilities are critical. The earlier study focused on all students in schools, but the present study focused on secondary school students. Furthermore, the prior study was done in a developed nation, whereas the current study was undertaken in a developing country, Kenya, allowing for cross-cultural comparisons.

In southern Nigeria, Oluremi and Olubukola (2012) investigated the influence of facilities on academic achievement of students with special needs in mainstreamed public schools. The research found that there were no handrails, instructional materials, or accessible bathrooms, and that the few that were provided were in poor condition, such as typewriters, resource rooms, and wheelchairs. According to the findings, there is a relationship between facility availability and academic performance of students with special needs, and that inadequate provision of facilities and resources to mainstream public schools leads to low academic performance of students with special needs. Because each nation may have its own specific demands, the prior study was conducted in Nigeria, whereas the present study was conducted in Kenya.

Ibra, Umar, and Igbaji of Bauchi state, Nigeria, performed a research on the influence of school amenities on students' academic success (2017). According to the findings, there was no statistically significant link between school facilities and students'

academic success as evaluated by the TLEA at the 0.05 level. The prior study's sample size was lower, with only 84 principals engaged. The findings were restricted in their generalizability, and statistical mistakes were conceivable. To cover the gaps left by the previous study, the present study enlisted the participation of head teachers, teachers, and learners who are the end users of the services, with a larger sample size of 168 participants.

Tety (2016) used a cross-sectional design in Rombo District, Tanzania, to investigate the influence of instructional materials in academic achievement in community secondary schools. The findings of the study indicated that instructional materials are critical to both teachers' and students' academic success. The previous study employed a lower sample size, which may have an impact on the survey's reliability since it leads to increased variability, which can lead to bias due to non-response, as some participants may not be able to participate in the study. To fill up the gaps left by the prior study, the new study employed a larger sample.

Maingi (2016) performed research on variables impacting academic performance of students with special needs at institutions of higher learning in Machakos County Kenya's middle colleges. Physical amenities such as modified classrooms, additional notes, and handouts, among other things, were found to have an impact on academic achievement in the study. Because the previous research primarily utilized quantitative data, it lacked qualitative data that might capture attitudes, feelings, and actions, as well as urge individuals to expand on their replies and open up new topic areas that had not previously been addressed. As a result, the current study included qualitative research to fill in the gaps.

Muendo (2016) performed research in the Kobauni Division of Machakos County, Kenya, on the impact of school infrastructure on academic achievement in the Kenya Certificate of Secondary Education. According to the findings of the study, schools lack appropriate physical facilities such as classrooms, labs, libraries, and dormitories, among other things, which has a detrimental impact on academic achievement. The previous research was carried out in secondary schools, but this one was carried out in primary schools. The previous study did not use qualitative data, so it lacked a qualitative dimension that would have allowed respondents to express their thoughts or feelings, whereas the current study used interview schedules and an observation checklist to collect richer, in-depth, and detailed data for data analysis.

The quality of school facilities seems to have an indirect effect on learning, and it is of great concern to educators interested in improving teaching and learning process. School physical facilities may affect not only performance but also the overall physical health of children. They require proper planning in order to improve on learning and academic achievement among the students. Children in poor buildings have been found to exhibit clear signs of sensory irritation, skin rashes, mental fatigue and all other factors with the potential of decreasing the ability of students to perform (Culp, 2005).

The connection of school circumstances and school results was examined by McGowen (2007); Student academic achievement, attendance, discipline, completion rates, and teacher turnover). In connection to the circumstances of school, however, the student's performance, attendance and completion rate was not statistically significant. Sustainable schools were founded by Olson and Kellum (2003) to have adequate lighting, site design, decent air quality, and acoustic and utilized building

materials. The researchers also observed that schools that have recently been constructed or refurbished had a superior performance than older schools.

Buckley, Schneider and Shang (2004) reported that not only students suffer from low quality buildings. The quality of school facilities was also associated with teacher attitudes and behavior. The study indicated, notwithstanding control of a number of other factors, that teachers' attrition and retention were strongly connected to the quality of school amenities. Indoor air quality, temperature management, noise level and acoustic, insufficient lighting in classrooms 28 and natural sunshine are all factors that directly influenced Teacher's quality of working life (Buckley, 2004). Teachers who have seen a harmful impact on their health because of building conditions or who are worried by loud noise, bad acoustics and lack of thermal checks have a higher chance of finding a job elsewhere.

2.5. Maintenance of School Facilities and Students' Academic Performance

Takwate (2018) investigated the distribution, availability, and upkeep of school amenities as a predictor of academic achievement among Senior Secondary School students in Adamawa State, Nigeria. Correlational research was used in this study. The proportional sampling approach was used to choose 153 school administrators and 377 teachers from 248 senior secondary schools and 6,450 instructors, respectively. The study questions and hypotheses were addressed using mean scores, standard deviations, and the Pearson Product Moment Correlation Coefficient. School facility allocation and maintenance efficiency were determined to be inefficient and efficient, respectively. The degree of school facility availability was assessed as not available, while pupils' academic achievement in WAEC/SSCE May/June 2013 – 2015 was graded as low. In Adamawa State, Nigeria, the study

found a link between school facility allocative efficiency, availability, and maintenance efficiency and students' academic performance. The study recommended, among other things, that the government adequately equip all Senior Secondary Schools in the state using appropriate procedures for facilities planning and allocation, that school principals conduct comprehensive assessments of facilities in their schools on a regular basis to determine areas of need, and that the Ministry of Education provide funds for the maintenance of sc schools as soon as possible. The study did not look at the maintaining the equipment facilities which was the focus of the current study.

Wordu and Nlerenchi (2019) directed some work on school plant provision and academic performance of secondary school students in Tai and Eleme local government areas, River State in Nigeria. A survey design was adopted. The result of the analyses showed that a significant relationship exists between school plant provision and academic performance of students in the secondary schools. The study suggested that school buildings should be planned with sufficient space, ventilation, lighting, humidity and temperature. Instructional materials, library facilities and science laboratories should be adequately provided, the study further recommended that school administrators should take the contest of providing adequate school facilities to guarantee and sustain higher academic performance. However, the study did not look at the maintaining the equipment facilities which was the focus of the current study.

Akomolafe and Adesua (2016) opine that the study examined the relevance of physical plants in enhancing the level of motivation and the academic performance of senior secondary school students in south west Nigeria. The study adopted ex-post facto design; the population consists of all senior secondary students in south

west Nigeria. The sample size for the study was one thousand and fifty senior secondary school students from three states out of the six students in the south west geo-political zone. The researcher made use of a questionnaire and an inventory to collect data. The result showed that there was a significant relationship between physical plant and students' level of motivation and academic performance. The study did not look at the maintaining the equipment facilities which was the focus of the current study.

Central Washington University (2019) indicates that in order to avoid failure and/or deterioration, maintenance tasks include maintaining spaces, structures and facilities in proper operating condition in a normal, planned or expected manner. This requires one-to-one replacement of components and structures that do not require or authorize professional engineering. To this end, in space, classification or space use, maintenance operations do not require a transition. Examples of maintenance of facilities include: basic custodial services, regular exterior painting of buildings and interior painting of public and common areas, general repair of buildings, maintenance of life-safety and security alarm systems and systems such as heating, ventilation, air conditioning, plumbing, electrical and lighting systems, control of pests, care of trees, shrubs and lawns.

According to Earthman (2017) human beings instinctively believe that the physical environment influences their behavior as well their thinking and a building's physical structure can especially impact those within building. The study further reports respectable research has indicated that the condition of a school building can influence the performance of students and teachers since both students and teachers spend significant time within the school building. In his review the study found that a significant number of researchers have found a statistically significant difference in

students achievement scores between students in buildings assessed as being in good and poor condition. However, the study did not incorporate the maintenance of equipment facilities thus the current study came in to fill the conceptual research gap by incorporating the maintenance of equipment facilities.

The necessity of school buildings is an important factor in the educational environment, Ndiritu (1999) noted. Therefore, instructors in the classrooms with locked doors and windows may leave the teaching aids in the classroom without fear of damage or robbery, since this would improve the confidence needed by teachers for the efficiency of the service provided to students in their strong academic performance. On the other hand, those without lockable doors and windows experienced storage problems and this affects their use in the classroom setting of which the effects are quite opposite. However, the study did not incorporate the maintenance of equipment facilities thus the current study came in to fill the conceptual research gap by incorporating the maintenance of equipment facilities.

Olson and Kellum (2003) found that sustainable schools that have good qualities of lighting, site planning, indoor air quality, acoustics, healthy building materials, and the use of renewable energy benefit students' achievement. However, the study did not incorporate the maintenance of equipment facilities thus the current study came in to fill the conceptual research gap by incorporating the maintenance of equipment facilities.

Bullock (2007) found that students performed better in schools that were new or renovated recently than in older schools. Undoubtedly, the natures of school facilities have a direct effect on teaching and learning outcomes. It is unreasonable to expect positive results from students, teachers, and principals working in adverse

environments. The overall building condition, the age of the building, and the windows in the instructional areas were positively related to student achievement. However, the study did not incorporate the maintenance of equipment facilities thus the current study came in to fill the conceptual research gap by incorporating the maintenance of equipment facilities.

Naigaga (2019) noted that well maintained laboratories furnished with safety equipment like fire extinguishers and first aid tool kits enables students to learn subjects which enhances their performance. The study further showed that 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, particularly in a particular arrangement, is one of the most innovative ways for strategic improvement of performance. Normally, social, physical, mental, or social status may profoundly affect students' learning abilities. However, the study did not incorporate the maintenance of equipment facilities thus the current study came in to fill the conceptual research gap by incorporating the maintenance of equipment facilities.

UNICEF (2015) reported that many schools in Africa experience a number of sanitation challenges including poor and/or inadequate toilet facilities which emotionally and physically affect the students thus hampering their morale for learning. The report indicated that poor facilities hindered good learning environment to pupils in primary education level. However, the study did not incorporate the maintenance of equipment facilities thus the current study came in to fill the conceptual research gap by incorporating the maintenance of equipment facilities.

According to Akomorafe and Adesua (2016) performance of secondary school students could be traced not only on lack of physical facilities, but also on lack of motivating learning environment. However, the study found no evidence linking campus innovation that appears to have generated large improvements. The study did not incorporate the maintenance of equipment facilities thus the current study came in to fill the conceptual research gap by incorporating the maintenance of equipment facilities.

Afework and Asfaw (2014) have investigated physical and educational qualities. Twenty-four state elementary schools from Eastern Hararaghe and 12 primary schools from the state of Hariri were the population sample. The research sample was carefully selected on the random basis by school leaders, the district and regional heads of education. They utilized a questionnaire, a methodology for interviews and observations. They discovered a detrimental influence on teaching practice of inadequate physical facilities and school resources. They found that the provision of physical amenities in school contributes to both improving the quality of education and achieving educational objectives. The latest studies indicate that physical amenities at school should be maintained and repaired directly to the pupil's performance. The stakeholders, managers, supervisors, education workers and policymakers proposed that the quality of schools be maintained and repaired, which has a beneficial impact on school improvements at the district, provincial and national levels. The investigation was concentrated on the local setting.

The checklists for the facility survey utilized Bowers and Urick (2011) to verify the influence on mathematics at institutional level of facilities based on two level linear hierarchical model. They claimed the facilities do not have a direct influence on

student success in the field of mathematics. The research helps managers distribute cash to maintain the breakdown of facilities for school improvement. They suggested a mediated quality and performance paradigm for facilities. The characteristics given by school affect school leaders, headmasters, managers, instructors, students and the motivation and attitude of parents All this affects the university's general atmosphere and, in turn, affects student performance. The schools influence the process of education and learning. Further obstacles to the delivery and transmission of training for students include the provision of facilities with poor conditions. School facilities impact the health and career decisions of teachers directly. The schools undoubtedly contribute favorably to the schooling process. For student well-being and achievement, physical education as well as leisure activities are highly important. Teaching and learning are a complicated process, requiring cooperation, adaptability and co-learning. The current study focused on the local context.

Akhtar and Tariq (2015) assessed the level of secondary school pupils' infrastructure, amenities and success. Many schools have no basic amenities, little terrain and most have inadequate classrooms and furnishing. Many schools do not have scientific equipment and library. Most schools do not have multimedia and computers to use current teaching and learning approaches. Most schools do not have a tuck-shop and there are inadequate washing and playing facilities. Urban schools for men have greater facilities than rural schools for women. The outcomes of the women's schools are better than the men, but the advancement of urban and rural schools has been similar. Male schools do not have female schools. All schools, independently of their infrastructure, exhibit good outcomes. All head teachers and instructors have been responsible for good outcomes and stressed. Their emphasis on academics means that

female students get a higher result than male pupils. In male and urban schools with better facilities than others, co-curricular achievements are highly valued. The amenities do more than impact academic activity. The urban and masculine schools were better performed by coworkers. Academics and policymakers focus on quality teachers, school decision-making and curricular improvements to improve education performance. Physical amenities in schools impact the atmosphere for learning. The quality of noise, heat, cold, light and air affects the performance of students and teachers. Academic outcomes are ascribed by facilities. The current study focused on the local context.

Schneider (2002) classified the facilities into six basic types; interior air quality, ventilation system and lighting system, sound quality, access to fresh and clean water, school quality, school size and class size. A school need greater ventilation; poor ventilation affects student performance and learning ability. For optimal academic achievements, adequate acoustics are important. Good facilities have beneficial long-term impacts on academic performance. The investigation was concentrated on the local setting.

Earthman (2002) states that the conditions relating to school facilities tangibly affect the accomplishment and the efficacy of students' learning. Better conditions in schools improve the environment for education and learning. Overpopulation of school and classroom facilities poses obstacles in learning for children. The small size of a class also improves student performance by enhancing the contact of teacher students. In loud classrooms, students can't do better. Poor schools have had detrimental effects on the entire atmosphere, which have an impact on the academic performance of students and teachers. The school's infrastructure comprising the construction of a school and

classrooms are regarded to be a highly important element of the institution. These amenities have a key role in attracting, retaining and contributing students to schools. In schools, such as large classrooms, beautiful school buildings and improved amenities, stress, sadness, frustration and anxiety are reduced in physical surroundings. For the great performance of school students, the essential physical amenities of the school play a significant and beneficial role. The size of the school and physical infrastructure influences the attitude and the growth process of the kids' personality. Physical amenities enhance the degree of trust and potential of students. The investigation was concentrated on the local setting.

Nweneka (2016) opines that a well functional school building with a wide array of teaching and learning aids provide positively related to quality assurance in academic performance. The quality of education received by the students bears direct relevance to the availability or lack of physical facilities and the overall environment in which learning takes place. Availability of adequate and sufficient school plant is thus expected to positively reflect the academic performance of students. Proper maintenance culture is an alternative when compared to the financial implication and cost when available school building facilities are left to deteriorate. The school manager must engage in suitable maintenance practice to lengthen the life span or durability of school buildings. This will in turn safe lives, cost and also attract parents to school. Maintenance must satisfy some objectives which include prevention of school building deterioration (which include furniture as well) and ensure other contingencies such as broken windows, leaking roofs, and doors. There is actually a belief that the outward appearance of schools affects the learning and academic performance of students and teachers' efficiency. However, the study did not focus on

how the maintenance of sporting equipment can equally affect academic performance which is also the focus of the current study.

2.6Theoretical Framework

The study was guided by the Strategic Management Model This theory was pioneered by Garber in 2006. The theory from this model describes how strategic management process explains the targets of the organization. The strategic management in this scenario establishes goals for leaders and personnel to attain and defines broad methods to achieve these goals. Typically, the strategic management process begins through conversation, interviews, focus groups and other research methods with the knowledge gathered about the business and its surroundings.

Garber's study (2006) states that strategic management information is being utilized to identify key challenges that the company will need to solve in the following three to five years. The study found that an organizational planning team produces or evaluates organizational values, vision and purpose statements. Following this, the next stage is to define the objectives of the organization in each cycle and the general methods to attain. For each objective and plan, performance metrics are established. The research also indicates that the Managing Director and employees in most organizations, set annual objectives and strategies linked to the organization's programs and services. In addition, the Board establishes yearly targets for its governance objectives.

With the implementation of the plan, the Board analyzes indicators of performance to ensure that targets, plans, goals and approaches are suited to unforeseen occurrences and organizational and environmental changes. The organization may continue to operate strategically in this manner. The Board's role relates to overall

organizational governance and recognizes that members of the Board are voluntary workers with little understanding of the organisation's activities. The Board is dependent in the planning process to explain organizational values, to define an organization's vision and mission, to set medium- to long-term organizational objectives, and to choose strategies that enable the organization to achieve its goals while remaining true to the principles and beliefs that guide organization's behaviour. Management's duty is to promote short-term goals and implement plans. This process that includes yearly targets, budgets, service plans and performance measurements may be referred to as operational planning (Garber, 2006).

Garber's (2006) strategic management model is suited to the school environment through which the Board of Management (BoMs) is responsible for overall school governance and defends the values, vision, and purpose, including medium and short-term goals, which direct the school. The role of BoMs in Kenya is defined in the Fundamental Education Act (the Republic of Kenya, 2013). The Act specifies the subsequent duties of school governors: planning and maintenance for school learning/teaching physical facilities; receiving and administering school budgets, including collection of all student dues, public funds grants, school donations and all other school profits, and the distribution of all funds. On the other hand, the headmaster as the headmaster works closely with the heads of departments, instructors and students to set short-term targets and to implement the objectives established by the board. This theory guided the study in that it points out a relationship between organizations' management practices and academic performance. School is an organization like any other with systems and structures that are more or less similar to those found in other organizations.

The strategic management techniques in the context of this study are generated from school aims and objectives, and are connected directly to the achievement of organizations, the academic performance of the institutions. In this situation, monitoring and evaluating of the school academic performance is done using the students' exams which are the performance indicators. The study employed KCSE as a performance measure in the final analysis. This hypothesis therefore led the investigation by suggesting that there is a link between strategic management and academic achievement in pupils. This theory also explained about the monitoring and evaluation of performance using the identified indicators. In this study the schools' performance indicators are the student's examination mean scores. The theory was hence appropriate and relevant for guiding this study that sought to examine whether there is a relationship between strategic management practices and student's academic performance.

2.7 Conceptual Framework

The conceptual structure (2008) of Frankfort and Paound is a theoretical model that identifies the concepts and their connections in the study. A conceptual framework is a depiction of the hypotheses between independent and dependent research variables (Mugenda & Mugenda 2003).

The study examined the correlation between strategic management and academic performance of secondary schools. The conceptual framework is built on the assumption that strategic management practices can differ in implementation depending on the surrounding environment but do have implications on students' academic performances in schools. This assumption is based on policy provisions

in Education sector that vests the burden of students' performance on schools' governance.

Nzoka and Orodho (2014) clearly stress on the critical role of management practices. However, the study fails to clearly demonstrate how specific components such as provision of facilities directly influence students' performance. It is also important to establish how stakeholders' involvement influences students' academic performance given the unclear government policies on what staff motivation is all about.

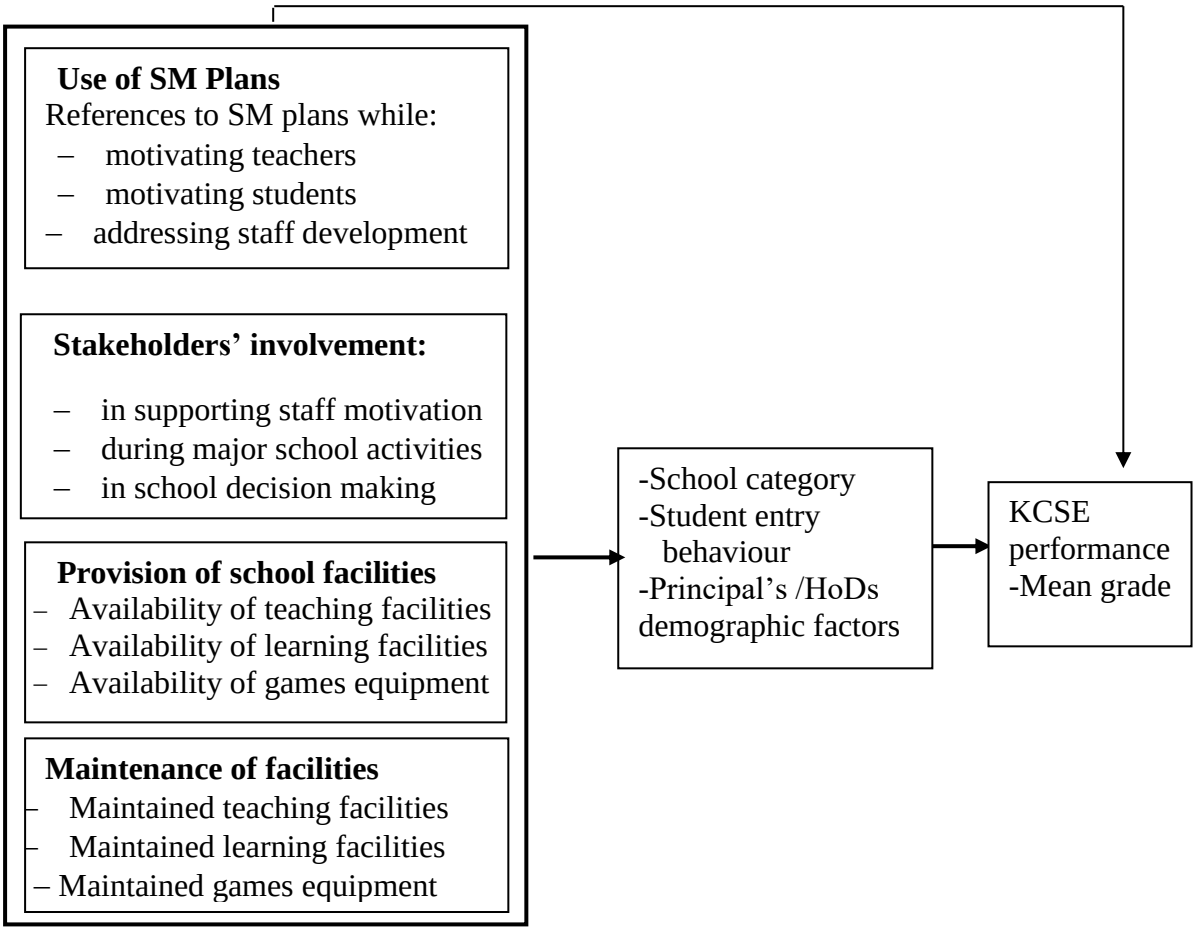
As indicated in The Kenya Education Master Plan 1997-2010 (Republic of Kenya, 1998), it was conceptualized those teachers require constant training to enhance quality and equip them with contemporary skills. Similar trainings have been offered in the past by Kenya Institute of Management (KIM), Kenya Education Management Institute (KEMI), Kenya Secondary School Heads Association (KSSHA), Ministry of Education, Science and Technology (MOEST) and the Catholic Diocese of Murang'a. Although various recommendations on strategic management practices have been made, there exists no clear framework on how such practices should interact to produce desired students' academic performance.

Literature review did not reveal a framework for evaluating how courses such as strategic management have impacted on academic performance. It is therefore important to assume that perhaps these training have never addressed existing gaps and hence no effect on students' academic performance.

In this study, it is envisaged that students may look to the school management for good academic performance. Teachers on the other hand, may attribute desired academic performance to factors such as availability of strategic plans, support from

stakeholders and provision of adequate facilities. At this juncture, it is important to conceptualize on how strategic management practices relates with students' academic performance. This is illustrated in figure 1 below.

Figure 1: Conceptual Framework



Source: Researcher (2020)

Independent variable **Moderating variable** **Dependent variable**

As demonstrated in the Figure 1 above, the study conceptualized that students' academic performance was linked to strategic management practices such as use of SMPs, stakeholder involvement, provision and maintenance of facilities. The framework acknowledges that the students' academic performance is directly related to strategic management practices but on the other hand recognizes the

existence of moderating variable that may have unintended effect on or influence the degree of how performance is as a result of strategic management practices in schools.

2.8 Summary of Literature Review

The researcher has reviewed literature on the relationship between secondary schools' principals' strategic management practices and students' academic performance. In relation to this, existing studies only addressed areas concerned with general education management. Although all the reviewed studies showed a relationship between strategic management practices and students' academic performance, there is a gap of knowledge in that these studies have not exhaustively addressed how principals' strategic management practices relate with students' academic achievement in KCSE hence the need for this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the study's research methodology. The research design, target population, sample size and sampling processes, data collecting tools, data collection protocols, and data analysis methodologies are all discussed in detail in this chapter.

3.2 Research Design

This study employed a correlation research design. This is a type of non-experimental research which involves collection of data from two or more variables and the statistical relationship between them is measured with little or no effort to control extraneous variables. Correlation studies are often used to determine whether two variables are associated (Friedman & Wyatt, 2006). Correlation design investigates existence of relationship between study variables as based on the premises that if a statistically significant relationship exists between two variables, then it is possible to predict one variable using the information available on another variable, (Mugenda, 2008).

According to Singh (2019), the basic limitation of correlation research is that correlation does not demonstrate causation. However, the study was alert to the possibility of spurious relationships, for correct interpretation of the findings. The study attempted to check whether participation in strategic management practices was correlated with students' academic performance. The main importance in a correlational study is to detect or verify the presence of a relationship, association, or interdependence between two or more aspects of a situation or phenomenon (Best & Khan, 2011). Correlational research designs, therefore, involve the systematic

investigation of the nature of relationships or associations between and among variables, rather than direct cause-effect relationships. This study sought to establish the relationship between strategic management practices and students' performance at KCSE examination in secondary schools in Murang'a County, Kenya. The strategic management practices were collected using quantified measures which were linked to student academic performance index for analysis. Therefore, this design was considered suitable for this study for it facilitated the researcher to accumulate data and express the scale of relationship between secondary schools' strategic management practices and students' academic performance at KCSE examination.

3.3Target Population of the Study

The number of real imaginary individuals, events, or things to which a researcher intends to generalize findings can be described as the target population (Borg & Gall, 2007). The study targeted public secondary schools' principals and Head of Departments in Murang'a County. According to the Ministry of Education (2018), there were 250 public secondary schools in this region that had presented candidates for KCSE before the period of the study. Therefore, the target population for this study was 1000 and it comprised of 250 principals and 750 head of departments. The decision to have the 250 principals as the target population was based on the understanding that it is only those principals in the schools that had presented candidates for KCSE who could give data that would reasonably inform the relationship between strategic management practice and students' performances in secondary schools in Murang'a County, Kenya. The reason behind the inclusion of HoDs as key participants in this study was based on the fact that HoDs are

principals' technical assistants in the management of academic programs in the departments (Mwangi, 2012)

It is necessary to point out that secondary schools in Murang'a County, like those in other parts of the republic, could be categorized into different stream-sizes such as; single stream, double stream, and three-streamed schools. These different stream-sizes results in schools having different Curriculum-Based Establishments (CBE) which guide staffing levels, including a number of HODs to serve in each school. In relation to this, it was therefore recognized that each school, regardless of size, had at least three HoDs.

3.4 Sample Size and Sampling Procedure

Sample size is the total number of units picked using criteria to represent the target population during the study Renscombe (2012). According to Wellington (2008), a sample can be said to be a small part of something which is intended to stand for or represent the whole. On the other hand, Kombo and Tromp (2006) emphasize that a sample size must represent the target population in all aspects. To this end, a sample is a representation of the population (Kumar, 2011). The bigger the sample the more accurate the results.

The Yamane (1967) formula was used to create a sample formulation for this research. The degree to which the chosen sample was illustrative of the study population was the major basis for assessing sample size. The sample size formula was expressed as follows: with a 95% confidence level and p=0.05, the sample size formula was stated as follows:

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

Where;

n=the sample size

N= the size of the population

e= Error margin or the precision level desired (0.0625)

The formula produces a sample size of $n = \frac{1000}{1+1000(0.0625^2)} = 200$

n= 200

As a result, the study's sample size was 200. The respondents were then chosen using a stratified sampling approach, which separated the sample into two homogeneous groups: principals and department heads. This guaranteed that all respondents in each group were represented, lowering the sample error. As indicated in table 2, the researcher further divided the schools into two categories: high and low performing schools. To minimize bias in the selection of respondents, respondents from each of these groups were chosen at random.

Table 2: Sample Size Determination

Category	**Target population**	**Sample size**	**high**	**Low**	**Sample size**
Principals	250	(250/1000) *200=50	25	25	50
HoDs	750	(750/1000) *200=150	75	75	150
Total	**1000**	**200**	**100**	**100**	**200**

Source: Researcher (2020)

The justification for this study sample size is based on the recommendation by Kombo and Trump (2006) that stated that a sample size of 10% to 20% is considered appropriate. Further to this, the sample size was also determined using recommendation given by Mugenda and Mugenda (2003) on the explanation that a sample size of 10per cent to 30per cent is good enough for the study if well-chosen and the elements in the sample size are more than 30. Therefore, the current study meets the said requirements and therefore good enough to be used for generalization.

Different approaches were employed to obtain a sample of 50 schools' principals and 150 HODs to be included in this study. First, all the schools that did KCSE during the period 2017-2018 were identified from the MOE analyzed KCSE examination results of 2018. It is usually a norm in KCSE results analysis at school and higher levels to compare performance in a particular year with results attained in several previous years hence identification of schools that had done KCSE in the previous years was easily done.

Secondly, all the schools that had presented candidates for KCSE in 2017-2018 were stratified into two strata with reference to the list ranking all secondary schools in Murang'a County on the basis of performance at KCSE examination in 2018. While stratifying the schools, the researcher carefully disregarded all schools that had not presented candidates for KCSE for five years before the study. The stratification process yielded two lists of schools that formed the two strata; highly performing and low performing schools. For purposes of this study, high performing schools included all those schools which posted mean standard scores (MSS) of 6.5 and above which translated to C+ which was the minimum university entry grade. The second stratum comprised low performing schools that posted MSS of 6.4 and below which did not meet the minimum university entry grade.

Stratification of the schools therefore was done on the basis of mean standard scores posted by each school in KCSE examination in 2018. The KCSE is a Kenya's standardized examination done by students at the end of four years. The results attained in this examination are used to place students in institutions of higher learning including university placements (Kenya National Examinations Council, 2019). This examination is also used to measure the educational success of each secondary school in Kenya. Therefore, KCSE results are taken seriously by students, teachers, school administrators, and educational planners in Kenya hence the researcher's choice of these results as the basis of stratification in this study.

Thirdly, simple random sampling technique was employed in selecting schools to be included in the sample from the two strata. In this process, the name of each school in the high performing category was written on a small piece of paper which was then folded and placed in a container. From this container, 25 folded papers were randomly drawn from the container. This way, the researcher obtained 25 randomly selected high performing secondary schools which formed the first part of the study sample. The same procedure was repeated for low performing schools, giving another set of 25 randomly selected low performing schools which formed the second part of the study sample. The sample selection processes yielded a randomly selected representative sample of 50 secondary schools from which the respective principals participated in the study.

The selection of the HODs to participate in the study was done during the researcher's first visit to each school. In this scenario, the principal identified for the researcher all the schools' departments by listing them down. In case the total number of departments in a school was three, all the HODs were included in the sample. On the other hand,

simple random sampling was employed to get a sample of the three HODs in all schools that had more than three departments with HODs. In order to do this, the principal assisted the researcher to write the name of each department on a small piece of paper. All these papers were then folded and mixed up in a container provided by the school and three papers were then randomly drawn from the container by the researcher. For each selected department, the HOD participated in the study. This way, the researcher obtained three HODs who participated in the study from the schools. Therefore, the principal and three HODs in each of the sampled secondary schools participated in this study giving a sample size of 50 principals and 150 HODs.

3.5 Research Instruments

According to Saunders, Lewis and Thormhill (2009) research instruments are devices used to gather data. Therefore, these instruments can be defined as tools designed to measure knowledge, attribute and skills. This study employed questionnaires and observation schedule as the research instruments since they are convenient, saves time, is inexpensive and offers great anonymity to the extent that respondents can answer sensitive questions in accurate way Kumar (2011). Therefore, questionnaires also ensure confidentiality and limits the danger of bias and the researcher could therefore expect to gather candid and objective responses. Additionally, the questionnaire method of data collection is regarded as suitable because it allows the researcher to reach the different respondents within limited time, Wood and Ross-Kerr (2006). Additionally, researchers have found out that self-reported data are accurate when individuals understand the questions and when there is a strong sense of anonymity and little fear of reprisal. More so is that the use of questionnaires allowed the researcher to administer a standard instrument to all the respondents and

therefore was able to expect comparable responses. Therefore, the use of questionnaires as research instruments was found to be suitable by this study. Observation schedule on the other hand, was seen as appropriate instrument in this study since it not only directed but also guided as well as enabled the researcher to easily observe and collect the data.

In this study, the researcher had the principals' questionnaire (PQ), HODs' questionnaires (HoDQ), and also the Observation Schedule (OS) as research instruments. The use of three instruments ensured that there was a triangulation of data and this ensured reliability of the study findings. Principals' questionnaires collected data relating to the school and principals' strategic management practices. Heads of Departments' questionnaires collected data from the HoDs regarding their views on strategic management practices witnessed in their schools. Observation schedules collected data relating to availability, and maintenance of school facilities being part of the management functions of principals likely to impact on students' academic performance. Details of each of these questionnaires are provided here below

3.5.1 Principals' Questionnaire (PQ)

Principals' questionnaires had three parts. Part A had 13 items collecting background information relating to the principals' gender, teaching and administrative experience as well as professional qualifications of the schools' principals. The gender scenario would reveal whether there was a representation of each gender in each of the sampled school. This was important in order to establish whether the responses would be valid and could therefore be used for purposes of inference. Another implication of this to the study is that it would be possible to determine

whether the data collected would be viable for generalization to the findings. In addition to this, information on principals' professional qualification would make researcher establish whether the respondents understood the expected professional practices hence be able to respond to the variables of the study from a professional point of view. On the other hand, responses on principals' experience would indicate whether public secondary schools in Murang'a County were managed by well experienced principals. More so, the demographic information would also be used in assessing the respondents' suitability in participating in the study in terms of having had an opportunity to interact with the variables under the study. Therefore, principals' demographic information was considered important to the study for it provided a better understanding of these respondents hence, assisted in interpretation of their responses Such understanding gave the researcher the necessary confidence in the data collected from the respondents Conclusively, principals' strategic management practices in schools may depend on demographic factors hence, the need for this information. It is necessary to note that the principals' questionnaire also had some items that collected data on schools' type, enrolment, number of teachers under the TSC and BOM, and number of non-teaching staff in the school.

Part B of principals' questionnaire comprised of 13 items that collected data on the level of use of strategic management plans in secondary schools. The level of use of strategic management plans was measured through thirteen Likert scale items with three options; Nil, Much, and Very Much. For each item, the respondent was to tick one option which measured the level of use of different aspects of strategic management practices. Part C collected data on stakeholders' involvement in strategic management. This part had eight items that sought to measure principals'

involvement of educational stakeholders in the school strategic management process. The principals' questionnaire was the Appendix 2.

3.5.2 Heads of Departments' Questionnaire (HoDs)

The questionnaire had three parts. Part A had 3 items that collected background information relating to the HODs' gender, professional qualifications and the administrative experience as a school HoDs. This questionnaire helped to examine whether the schools' principals had well experienced and qualified technical assistants that had the expected capacity to enable them play their roles. Generally, the basis for principals' and HODs demographic information was more or less the same.

The last three items of part A of HoDs questionnaire sought information relating to strategic management practices as witnessed in the school. Part B and C of this questionnaire comprised thirteen and eight number of items respectively and they were quite similar to those in Part B and C of the principals' questionnaire. The responses to the items in these parts corroborated the information obtained from the principals and this approach strengthened this study. HoDs' questionnaire was the appendix 3.

3.5.3 Observation Schedule

The observation schedule used in this study had three parts that was specially designed to aid in observing and collecting information on availability and maintenance of schools' facilities and also in KCSE mean scores. Part A had fifteen items that were used in order to observe data on availability and adequacy of the school facilities. Part B also had fifteen items that aided in observing data on

maintenance of school facilities. Part C had a section that enabled the observation for schools' KCSE means scores which were filled using data from the Ministry of Education. The information collected using the observation schedule was then compared with the data collected from the principals' and HoDs questionnaire.

The facilities observed for adequacy and maintenance included computer and science laboratories, libraries, textbooks, dining halls, games equipment, and also sanitation facilities. Other facilities of interest in this study included students' and teachers' furniture, teachers' staff quarters, school transport, students' dormitories, boarding facilities water and lighting sources. Availability and adequacy of these facilities was assessed using five options; not available, very poorly adequate, poorly adequate, well adequate and very well adequate. The level of maintenance was measured using fifteen items that required observation on the options very poorly maintained, poorly maintained, well maintained or very well maintained. This was the basis for descriptive analysis used to corroborate the findings on strategic provision of schools' facilities and students' academic performance at KCSE. Observation schedule was the Appendix 4.

3.6 Piloting of the Study

The study instruments were piloted in order to improve their validity and reliability. This also gave the researcher the opportunity to become acquainted with the research tools. Piloting is necessary since it allows the researcher to spot any gaps in the surveys (Mugenda & Mugenda, 1999). The researcher dealt with any shortfalls that developed prior to the actual distribution of the surveys. More so the piloting is done to assure lawfulness, steadfastness and effectiveness of tools to be used (Merriam, 2014). Additionally, the significance of documented piloting cannot be

overemphasized for consistently, there are questions that individuals neglect to comprehend or perceive differently. Piloting hence gives data that add to the accomplishment of the examination (Bird & Dominey-Howes, 2008). In this regard, piloting helped in identifying instruments' loopholes. Therefore, items with weaknesses were either modified or discarded completely and new ones added. This ensured the improvement of the instruments and the researcher's confidence in generating the expected data.

The study adopted the formula used by Viechtbauer, (2015) for determining the sample size to be used for pilot testing.

$$n = \frac{\ln(1-\Upsilon)}{\ln(1-\Pi)}$$

Where;

n= Pilot sample size

Π=Problem probability (0.15)

Υ= Confidence level (95%)

N=the size of population

$$n = \frac{\ln(1-0.95)}{\ln(1-0.15)} = 20$$

Connelly (2008) suggests a pilot study to be 10% of the sample size. Thus, this study meets the threshold of Connelly (2008). In regard to this, the researcher carried out the pilot study in both high and low five public secondary schools in Murang'a County that were randomly selected. The included Njiiri School, Kahuhia girls, Kiriti, Kariguini and Kiru secondary schools. During piloting, each principal and three HoDs from each of the five schools filled out questionnaires as part of the study. This formed a sample size for pilot study to be 20

respondents. The researcher used the observation schedule to collect data on the availability, adequacy, maintenance of facilities and schools' KCSE mean sores. The schools that participated in piloting were not used thereafter during the study data collection. The basis for this is that the study piloting respondents had already been exposed to the study instruments and this would thereafter easily influence their responses (peat *et al.* 2002)

3.7 Validity of Data Collection Instruments

A study by Roberta, Heale and Twycross (2015) attempted to define validity as the extent to which a concept is accurately measured in a quantitative study. According to Kothari (2011), validity can be viewed as a more critical criterion that indicates the degree to which an instrument measures what it is supposed to measure. On the other hand, an instrument is said to have met validity if it produces accurate results (Miller, 2012). Furthermore, according to Mugenda and Mugenda (1999), validity is defined as the correctness and significance of conclusions drawn from study findings. The degree to which results produced from data analysis generally represent the phenomena under research is known as instrument validity (Orodho, 2004). It refers to how well the instruments cover the study objectives and if they provide answers to the research questions (Borg & Gall, 2007).

The instrument validity was determined using both concept and content validity in this study. The questionnaire was separated into many sections for construct validity to ensure that each component gathered information for a specific purpose and was also firmly connected to the study's conceptual framework. To guarantee that the questions established or measured what they were meant to, the researcher sought the opinions of the study supervisors and two additional specialists in the field of the study. The supervisors are educational management specialists, therefore their input

aided in the development of the questionnaires. The instrument was modified properly based on their review before being subjected to the final data collecting exercise.

3.8 Reliability of the Instruments

Instrument reliability is a solid evaluation of the degree to which research instruments produce consistent results following repeated trials (Kothari, 2011). Instrument reliability relates to whether a study's measurements assess the qualities of interest in a consistent or trustworthy manner (Joseph, William, Barry, & Rolph, 2012). The degree to which an evaluation instrument delivers steady and consistent findings is also known as reliability. As a result, reliability is a measure of how consistent a test's results are (Kombo & Tromp, 2010). According to Lyons (2010), who cites Latham and Wexley (1981), dependability refers to an instrument's capacity to provide consistent results regardless of when and by whom it is administered. On the other side, Hamed (2020) quoted Hinton et al. (2004), who propose four reliability cut-off points: good reliability (0.90 and above), high reliability (0.70-0.90), moderate reliability (0.50-0.70), and low reliability (0.50 and below) (0.50 and below). Furthermore, according to Angell (2015), Cronbach's alpha scores above 0.7 are typically regarded acceptable.

Finally, reliability refers to the consistency with which an experiment, test, or other measuring technique produces the same findings on several trials. It's usually thought of as a metric for how well a research instrument produces consistent results. During the pre-testing of the questionnaires, the Split-half approach of reliability testing was used. The instruments are divided in half and a correlation coefficient for the two halves is determined using this method. Instruments with a correlation value of 0.7 or higher were judged reliable and hence appropriate for data collection. Therefore, the

study employed split half techniques as per Falagan (2015) formula as shown below.

$$r_{xx} = 2\left\{1 - \frac{\partial_a^2 + \partial_b^2}{\partial_x^2}\right\}$$

Where;

$r_{xx=reliability\ coefficient\ of\ the\ whole\ test}$

∂_a^2=variance of first half

∂_a^2=variance of first half

$\partial_x^2 = variance\ of\ total\ scores$

3.9 Data Collection Procedures

From Maasai Mara University, the researcher obtained a study permission from the National Commission for Science, Technology, and Information after receiving approval of the research proposal and clearance from graduate school to proceed to the data collecting stage (NACOSTI). Following that, the researcher went to the office of the Murang'a County Director of Education (CDE) for an introduction and authorization to perform the study in the region. Following that, the researcher went to each of the sampled schools for an introduction and to schedule a data collecting appointment.

On the agreed day for data collection in each school, the researcher had a brief session with the principal. During this session, the principal identified all the departments with HODs from which the researcher selected those that participated in study. The researcher then informed the principal on the schools' facilities and the KCSE results to be observed during the data collection process.

The HoDs of the departments selected were then introduced by the principal to the researcher after which explanation on the PQ and HoDQ was done to the principal and HoDs respectively, by the researcher. Before filling in the questionnaires, the researcher explained the nature of the research to the principals and the HoDs. They also were assured that the information being solicited was for the academic purposes only. It was stressed to them that they should not write their names on any part of the data collection instruments. These above steps were taken to assure respondents of the confidentiality of information given and also ensure that they gave honest responses that relates to principals' strategic management and students' academic performance in their schools.

Once assured of confidentiality of their identities and sensitized on the nature of the research, they were given chance for filling their respective questionnaires as the researcher observed the KCSE results and schools' facilities. This procedure was followed in all the sampled schools. After observing the schools' facilities and KCSE results, the researcher then picked the filled in questionnaires and made arrangements on when to pick those others where respondents were not able to fill immediately due to other urgent engagements. In each school, the researcher did not leave the school without courteously informing the principal about the progress of data collection in that particular school, appreciating the principal, HoDs and school staff for facilitating data collection and then agreeing on any further arrangements in cases where questionnaires were not ready by the time of exiting.

3.10 Data Analysis

Upon the accomplishment of data collection, the researcher evaluated the questionnaires so as to establish whether they were all well filled in terms of completeness. Following data cleaning and processing, the data was analyzed using

both qualitative and quantitative approaches. For analysis, the replies from respondents and the data gathered from the observation schedule were first categorized and summarized. Thematic analysis was used to examine the data obtained from the open-ended questions. By use of descriptive statistics, the data was analyzed using frequencies, means, percentages and pie chart in order to make and get meaningful information that could be easy to interpret. Descriptive statistics was used because it allowed the researcher to describe, analyze and interpret the data. Maddalla (2009) defined data analysis as a mechanism for decreasing and uniting data to produce findings that need clarification by the researcher. Data processing is converting a questionnaire's responses into a format that can be modified to produce statistics.

On the other hand, the researcher used Pearson correlation coefficient inferential statistics in the testing of the study hypotheses. The study sought to establish whether there is a relationship between strategic management practices and students' academic performance. According to Murray and Larry (2011), one of the commonest statistics which combine two or more data sets to answer various relevant questions on relationship and strength of the relationship is correlation. Correlation analysis addresses itself to the relationship between variables and the strengths of these relationships. On the basis of this, the study used correlational statistics to examine the relationship between the principals' strategic management practices and students' academic performance at KCSE examinations. In addition to this, the process of data analysis was executed with the assist of the Statistical Package for Social Sciences (SPSS) Version 20 computer software.

3.11 Ethical Considerations

According to Kerrige, Lowe and Mchphael (2008) ethics involves making decision about right and wrong behaviors. The researcher was particularly careful with ethical issues during data collection. Consequently, the purpose of the study was clearly explained to the respondents. The researcher assured the respondents that the information given would only be used for academic purposes. This assurance was captured in the introductory part of the questionnaires. They were also made aware not to write their names or the name of their school in the questionnaires. These measures ensured the confidentiality of respondents' identities and the responses that each respondent gave.

CHAPTER FOUR

FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter displays the findings of the study and study discussion. For this circumstance, the explanation, interpretation and discussion of the findings are presented as well as the report of the analyzed findings. The first part consists of the response rate followed by the schools' categories and the respondents' demographic factors' report. Availability of strategic management plans and the duration of their use in schools' is stipulated. Finally, a focus is given on the findings and discussed in the sequence of each of the study null hypothesis. All this was based on the main study focus which was seeking to investigate the relationship between strategic management practices and students' academic performance at KCSE examination in Murang'a County

This study was to find solutions to the following study hypotheses; on the first hypothesis that there is no statistically significant relationship between principal's use of strategic management plans and students' academic performance at KCSE examination in Murang'a county, Kenya, there is no statistically significant relationship between involvement of stakeholders in strategic management practices and students' academic performance at KCSE examination in Murang'a county, Kenya, there is no statistically significant relationship between strategic provision of schools' facilities and students' academic performance at KCSE examination in Murang'a county, Kenya and there is no statistically significant relationship between strategic maintenance of school facilities and students' academic performance at KCSE examination in Murang'a county, Kenya.

4.2 Response Rate.

This study targeted 250 principals and 750 HoDs from 250 public secondary schools in Murang'a County, Kenya. Whereas that of students' academic performance at KCSE examination was done in all the 50 sampled public secondary schools. It is important to point out that this study realized a response rate of 100 per cent for the principals and HoDs. On the other hand, the response rate for observation schedules on facilities' availability and maintenance section was 98.0per cent and within acceptable success rate after key laboratory facilities in one school were locked to allow for inter- school symposiums events during the week whereas on students' academic performance at KCSE examination, it was 100 per cent. This high percentage return rate was attributed to researchers' initiative of distributing and collecting the questionnaires as well as using the observation schedule in one visit in all the sampled schools. For those school principals that happened to be absent, their respective deputies represented them whereas the schools' subjects' heads did the same for any absent HoDs.

These results show that this study achieved a high response rate hence data collected from these instruments helped achieve the purpose of this study which was to investigate the relationship between strategic management practices and students' academic performance at KCSE examination in Murang'a County, Kenya. Walonick (1993) indicated that a good response rate meant that the respondents were willing to complete the questionnaire of which this applied to this study. Thus, the response rate was excellent enough to be used for generalization.

4.3 Principals' and HoDs' Background Information

This study strived to determine the relationship between strategic management practices and students' performance at KCSE in Murang'a County, Kenya. This section presents information of respondents' demographic characteristics. It was noted that strategic management practices in schools may depend on factors such as professional qualifications, administrative experience, training in strategic management, and also the capacity of their technical assistants who are HoDs. Therefore, demographic information is considered important to the study because of delivering a better awareness of the respondents thus assisting in interpretation of the respondents' responses. On the other hand, the results of the demographic information findings would be utilized to assess the respondents' eligibility for participation in the research in terms of having had a chance to interact with the variables under investigation. To this end, the gender scenario would reveal whether there was a representation of each gender in each of the sampled school. This was important in order to ensure that the responses would be valid and could therefore be used for purposes of inference. Another implication of this to the study is that it would be possible to determine whether the data collected would be viable for generalization to the findings. Information relating to demographic aspects was sought and analyzed.

The responses on principals' and HoDs' experience would not only indicate whether public secondary schools in Murang'a county were managed by well experienced principals but also whether the principals had experienced technical assistants (HoDs) as well. This was critical since the information would enable the researcher to discover whether respondents could be expected to easily give viable responses to the

items on study. Finally, knowing the respondents' professional qualifications would allow the researcher to determine if the respondents were aware of the anticipated professional procedures and therefore able to react to the study's variables from a professional standpoint. This connotes that such understanding would give researcher the necessary confidence in the data collected from the respondents.

4.3.1 Distribution of Respondents by Gender

Fifty principals participated in this study. With reference to principals' gender, it was established that slightly more than half of the principals (54.0 per cent) were male. This classification was necessary for the study to report any significant difference in responses that may lower the strength of the study. Female principals accounted for 46.0 per cent. These results show that though males and females were adequately represented in the study, slightly more male principals participated in this study compared to the females. These results agree with the pronouncements of Nzoka and Orodho's (2014) study which observed that gender of principals was skewed in favour of males. Nzoka and Orodho observed that males dominated top school management in the study region. The study was also in line with the findings by Uwizeyimana, Dominique, Mathevula and Navela (2014) who conducted a study in South Africa and ascribed such gender-based differences on factors such as lack of support from male colleagues, gender stereotyping, female educators' uncertainty about their own abilities to manage.

Information on HoDs' gender was sought from which careful analysis of the information collected from the HoDs was done. From this analysis, it was found that out of the 150 HoDs sampled in this study, 58.7 per cent were males while 41.3 per

cent were females. Though male and female HoDs were adequately represented in the study sample, there were more males than females. These results disagree with the results of Nzoka and Orodho's (2014) study which had an equal representation of gender amongst HoDs at 50per cent. The description is further represented in Table 3 below.

Table 3: Distribution of Respondents by Gender.

Respondent	Female	Male	Total
HoDs	62	88	**150**
Principal	23	27	**50**
Total	85	115	**200**

Source: Study data (2020)

4.3.2 Principals' Professional Qualifications

Principals' professional qualifications ranged from Diploma in Education to Master's degree in Education. Further analysis of principals' professional qualifications in Table 8 herein below shows that 44per cent of the principals had a Master of Education degree. Additionally, 52per cent of the principals had a Bachelor of Education degree. Only four percent of the principals had Diplomas in Education. The information is summarized in Table 4 below.

Table 4 Distribution of Principals by Professional Qualifications

Qualifications	No. of Principals	Per cent
Master of Education Degree	22	44.0
Bachelor of Education	26	52.0
Diploma in Education	2	4.0
Total	50	100.0

Source: Study data (2020)

From the above table 4 the results indicates that, the principals' professional qualifications showed that all the principals were professionally qualified teachers with varying levels of academic credentials. These results concur with the finding by Mwangi (2012) found that principals in the research sample had attained high levels of knowledge, allowing them to separate and disperse the challenges that school administrators face in implementing strategic management in schools. The study also agrees with the findings by Vernez, Karam, and Marshall (2012) asserted that principals with higher levels of education may be better placed to make decisions and articulate their preferences with a greater force. The majority of the sampled principals are thus, capable of making informed strategic decisions that enhance the competitiveness of their schools (Dess, Lumpkin, Eisner & McNamara, 2014).

4.3.3 HoDs' Professional Qualifications

Information relating to HoDs' professional qualifications was collected from the HoDs. This information was necessary to corroborate the information collected from the principals. The strategy helped improve the reliability of the study. This information is summarized in Table 5 below.

Table 5: Professional qualification of HoDs

Highest professional qualifications	No. of HoDs	Percent
Masters of Education	15	10.0
Bachelor of. Education (Science)	29	19.3
Bachelor of Education	73	48.7
(Arts) Diploma in Education	14	9.3
(Science) Diploma in	9	6.0
Education (Arts)	5	3.3
Postgraduate Diploma	5	3.3
Others	**150**	**100.0**

Source: Study Data (2020)

Table 5 above shows that majority of the HoDs that were represented by 48.7 percent had a Bachelor of Education (Arts) degree while 10.0 percent had a Master of Education degree. Only 6.0 percent had a Diploma in Education and 3.3 percent had postgraduate diploma whilst 3.3 had not acquired professional qualifications. It can, therefore, be seen from this data that the majority of the HoDs had the necessary professional qualifications. They were therefore qualified to be appointed to be HoDs in their schools. The office of the HoDs in every school is very important because HoDs play a key role in curriculum implementation. The input of HoDs in as far as school management is concerned has a direct impact on students' performance.

4.3.4 Principals' Administrative Experience

Information relating to principals' administrative experience was sought and analyzed. Aziz (2010) identified teaching and administrative experience as one of the factors influencing students' performance in secondary schools. This indicates the relevance of this information to this study

Table 6: Principals' Administrative Experience

Experience	No. of Head teachers	Per cent
5 years and below	26	52.0
6- 10 years	6	12.0
11 – 15 years	8	16.0
16 – 20 years	7	14.0
More than 20 years	3	6.0

Source: Study data (2020)

As indicated in table 6 above, it was found out that slightly less than half of the principals (42per cent) had been secondary school principals for 6 to 20 years as represented in categories 6-10 years (12per cent), 11 – 15 years (16per cent), and 16 – 20 years (14per cent). Only 6per cent of principals had served for more than 20 years while the majority of them (52.0per cent) had served for five years and below. The table shows that principals in the study area had different administrative experience depending on the different dates of their appointments. The inclusion of principals with varying administrative experience was necessary because analysis of this data would show how principals' administrative experience relates to the use of strategic management practices in the objectives of this study.

4.4 Distribution of Schools by Categories

Prior to the promulgation of the Kenya's New Constitution (2010) which gave rise to 47 counties, secondary schools were categorized as national, provincial and district schools. However, this classification was traded to national, extra county, county and sub-county schools. Extra County schools are the former well established provincial schools though some of these schools were relegated to be county schools. Extra county schools admit students from other counties whereas county schools cater for students from within the county. The former district schools are now classified as sub-county schools. The sampled schools were from categories mentioned above. This was necessary so as to give a picture of stimulus of management practices on students' academic performance in all categories of schools found in the Murang'a County. Table 7 below summarizes the findings.

Table 7: Categories of Schools

Schools' category	No. of schools	Per cent
National	1	2.0
Extra County	10	20.0
County	11	22.0
Sub-county	28	56.0
Total	**50**	**100.0**

Source: Study data (2020)

Majority (56.0 per cent) of the schools that participated in the study were sub county schools, 22.0 per cent were county schools whereas 20.0 per cent were extra county schools. Only 2.0 per cent were sampled from the national school category because Murang'a County had only one national school. This data shows that all categories of schools in Murang'a County were represented in the study sample.

4.5 Measures for Principals to Use Strategic Management Plans in Schools

4.5.1 Principals' Attendance of Strategic Management Training

Research has suggested a relationship between strategic leadership and the academic success of schools (Lezotte, 2010). Consequently, principals' attendance of strategic management training is crucial because this would prepare principals for strategic management in their schools. Table 8 below shows the number of strategic management courses attended by the principals

Table 8: Number of Strategic Management Courses Attended by Principals

No of courses	No. of principals	Percent
None	8	16.0
One	16	32.0
Two	8	16.0
Three	6	12.0
More than three	12	24.0
Total	**50**	**100.0**

Source: Study data (2020)

Table 8 above of the study reveals that 16per cent of respondents had not attended any strategic management course, 32per cent had attended only one course and only 16.0 percent had attended two courses. The principals who indicated that they had attended three courses were 12.0 per cent. However, 24.0per cent had attended more than three strategic management courses. Principals in the study region attended varying numbers of strategic management courses and this raised questions about the implementation and coordination of principals' training on strategic management in Kenyan secondary schools. These questions were bolstered by the responses given by the principals in relation to organizations that conducted the training of strategic management courses in the study region.

4.5.2 Number of Strategic Management Courses Attended by HoDs

Academic Heads of Department in secondary schools occupy an important position in the hierarchy of school administration. According to an article by the University of Sheffield (2014), HoDs as academic leaders are required to not only lead and manage the department but also develop the department to ensure that it achieves the highest possible standards of excellence in all its activities. Consequently, HoDs who

are trained in strategic management may contribute to the effective use of strategic management practices which may in turn enhance students' performance. Information on HoDs' attendance of strategic management courses was sought from the HoDs. Table 9 below summarizes the number of strategic management courses attended by HoDs.

Table 9: Number of Strategic Management Courses Attended by HoDs

No. of Strategic Management Courses	No. of HoDs	Per cent
One	26	17.3
Two	12	8.0
Three	3	2.0
Four	1	0.7
Five	1	0.7
Eight	1	0.7
Nil	106	70.7
Total	**150**	**100.0**

Source: Study data (2020)

It was established from the analysis of HoDs attendance of strategic management courses that 17.3 percent of them had attended only one strategic management course. Eight percent of the HoDs had attended two courses whereas 70.7per cent had never attended any strategic management courses. It can, therefore, be seen that the majority of the HoDs had poorly been prepared for strategic management in their schools yet they are key implementers of academic strategies captured in their schools' strategic plans. The prime role of the HoD is to provide strong academic leadership in a school (University of Sheffield, 2014).

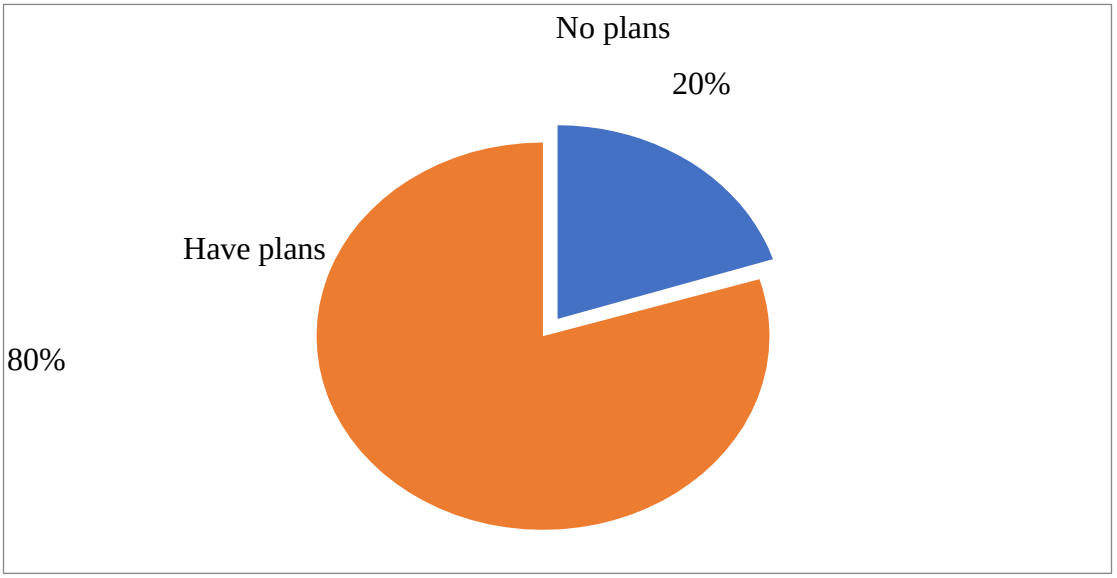
The study sought information relating to organizations that conducted strategic management courses attended by HoDs. The sampled HoDs indicated that the courses that they attended were organized by the local District Education Office,

Boards of Management, church-based organizations, Kenya Education Management Institute, Ministry of Education, and also Non-Governmental Organizations such as Decentralized Education Management Activities (DEMA).

4.5.3 Availability of Strategic Plans in Schools

When the principals were asked if they had strategic management plans for their schools, 80 per cent of them indicated that they had such plans while 20 per cent did not have those plans as represented in the figure 2 below.

Figure 2: Presence of Strategic Plans in Schools



Source: Study data (2020)

Although 80 per cent of the principals had strategic management plans as shown by Figure 2 above, there was variation of principals' references to these plans in the course of their relevant managerial duties. This may be explained by the observation that those principals who did not have plans attributed their failure to a lack of personnel to prepare the plans for them. So, it seems as if principals in the study region heavily relied on experts to formulate strategic plans for their schools

and this may describe the separation between principals' level of use of strategic plans and students' performance. This argument is supported by the observation made on the uncoordinated training of principals on strategic management in the study region. It was established that very many organizations were involved in the training of principals on strategic management in the study region. This raised questions on how the training by these organizations, for instance, KIM, KEMI, CDM and so on, were coordinated and harmonized to the best interests of the schools. Perhaps these training did not address any educational gaps but may have served the other interests hence they had no effect on students' academic performance.

One reason given by the principals as to why they did not have strategic plans was that they did not have enough personnel to prepare them. However, it was expected that the strategic management courses that principals attended prepared them to make their schools' strategic plans in collaboration with other players in their schools without hiring other people to do it for them. These players were teachers, members of the Boards of Management and Parents' Associations, for they are the key stakeholders in touch with their school's vision and mission hence could work in line with that which would enhance the achievement of school's goals and objectives. Principals' reliance on experts outside the scope of the school to prepare strategic plans was never envisaged by the Ministry of Education.

4.6. Schools Academic Performance.

The researcher wanted to know how students' performance in KCSE is affected or related to principals' strategic management practices. Performance at KCSE was the dependent variable whereas principals' strategic management practices were the independent variable for this study. Consequently, data relating to 2017 and 2018

KCSE results were sought from the sampled schools. These results are shown in table 10 below.

Table 10: Summary of Years 2017 and 2018 KCSE Mean Scores of Sampled Schools

	MG2017	MG2018
Valid	50	50
Missing	0	0
Mean	4.947	5.335
Std. deviation	1.346	1.157
Minimum	2.845	3.236
Maximum	7.95	8.211

Source: Study data (2020)

As indicated from Table 10 above, the standard deviations for KCSE examination for 2017 and 2018 respectively were 1.346 and 1.157. On the same note the lowest and highest KCSE mean scores for the sampled schools in 2017 were 2.845 and 7.95 respectively whereas in 2018, the lowest was 3.236 and the highest was 8.211.

4.7 Principals' Use of Strategic Management Plans and Students` Performance at KCSE

4.7.1. Duration in which Strategic Management Plans have been Used

The duration of strategic management plans use may have an effect on the achievement of the planned objectives. In this study, it was important to ascertain the duration of the use of strategic plans by principals in the study region. Consequently, principals were asked to state the duration in which they had used strategic plans in their schools and their responses was summarized in Table 11 below.

Table 11: Duration of Use of Strategic Management Plans by Principals

Duration (Years)	No. of Principals (N = 50)	Percent
1 or less	12	24.0
2 – 4	23	46.0
5 – 10	2	4.0
Above 10	1	2.0
None committal	12	24.0
Total	**50**	**100.0**

Source: Study data (2020)

Table 11 above shows the highest number of principals (70.0 per cent) had used strategic management plans for a period of up to four years. Four percent of the principals had used the plans between five and 10 years while 2.0 per cent stated that they had used strategic management plans for over 10 years. Twenty-four percent were non- committal, meaning that they were not sure for how long they had used strategic plans in their schools.

The study compared the duration the principals used the strategic plans and respective mean grades in 2018 and 2017 KCSE examinations results. The analysis is described here below in Table 12.

Table 12: Analysis of 2018 and 2017 KCSE Results against Duration of use of SPs

KCSE		Duration of use of strategic plans				
		1	**2-4 years**	**5-10 years**	**Above 10 years**	**Non-committal**
KCSE 2018	Valid	12	23	2	1	12
	Missing	0	0	0	0	0
	Mean	4.83	5.034	4.274	6.834	6.617
	Std. Deviation	1.068	2.889	1.923	N/A	1.464
	Minimum	1.882	2.889	2.914	6.834	4.406
	Maximum	6.12	6.578	5.634	6.834	8.475
KCSE 2017	Valid	12	23	2	1	12
	Missing	0	0	0	0	0
	Mean	4.404	4.619	3.85	6.13	6.332
	Std. Deviation	0.923	0.976	1.697	N/A	1.61
	Minimum	1.93	2.83	2.65	6.13	4.06
	Maximum	5.67	6.38	5.05	6.13	8.64

Source: Study data (2020)

From Table 12 above, the analysis of 2018 KCSE results showed a spread of standard deviation between 1.068 and 2.889 over different durations of use of strategic plans. Nevertheless, a standard deviation in KCSE of 1.464 was recorded in responses by those who skipped the question without answering. The mean scores 2018 KCSE results ranged between 4.274 and 6.834. Similarly, the analysis of 2017 KCSE results showed a spread of standard deviation between 0.923 and 1.697 over different durations of use of strategic plans. A standard deviation

in KCSE of 1.61 was recorded in responses by those who the skipped question without answering. From the Table, the 2017 KCSE results ranged between 3.85 and 6.332. mean scores.

Table 12 above indicate that the selected schools in Murang'a had the lowest mean score of 1.882 in 2018 KCSE results and the highest mean score of 8.64 in 2017KCSE results. The same tabular analysis was analyzed against the duration the principals had used strategic plans.

The data given above on the duration of use of strategic plans shows that the longer the period the plans are used, the better the students' academic performance. To this end, the study established that the minimum KCSE mean scores corresponded with the minimum duration of use of the strategic plans, this points out that the longer the period the strategic plans are used, the better the students' academic performance hence the use of strategic plans have positive impact on performance.

4.7.2. Principals' Administrative Tasks in Reference to the Use of Strategic Management Plans

In addition to the information given on the presence of strategic management plans in the schools, principals were asked to indicate the extent to which they referred to their strategic plans when undertaking various administrative tasks; The results of the analysis pointed to the extent to which principals relied on strategic plans in their schools' management as the results shows in Table 13 below shows.

Table 13: Summary of Principals' Administrative Tasks in Reference to the Use of Strategic Management Plans

STATEMENT	N-1	M-2	VM-3	MEAN	STD
-Provision of staff motivation	5(10.0%)	39 (78%)	6(12.0%)	2.06	0.43
-Provision of student motivation	5(10.0%)	33(66.0%)	12(24.0%)	2.21	0.51
-Provision of enough teaching, and learning	4(8%)	20(40.0%)	26(52.0%)	2.50	0.58
-Regular staff development, and refresher courses	9(18.0%)	33(66.0%)	8 (16.0%)	2.02	0.56
-Addressing student's welfare	4 (8.0%)	25(50.0%)	21(42.0%)	2.40	0.57
-Effective resource, and financial management	3 (6.0%)	25(50.0%)	22(44.0%)	2.44	0.54
-Provision of enough qualified, and well experienced personnel	3 (6.0%)	36(72.0%)	11(22.0%)	2.21	0.46
-Setting of school KCSE performance target	3 (6.0%)	20(40.0%)	27(54.0%)	2.54	0.54
-Addressing financial, and facility management	3 (6.0%)	32(64.0%)	15(30.0%)	2.29	0.50

Source: Study data (2020)

Key: N-Nil, M-Much, VM-Very Much

Table 13 above shows that most of the principals relied on their strategic plans when undertaking most of their administrative tasks. They relied heavily on those plans when providing teaching and learning resources (Mean = 2.50) and when setting the schools' academic performance targets (Mean = 2.54). More than half of the principals (52.0 per cent) indicated that they heavily relied on the strategic plans when making decisions concerning teaching and learning facilities and resources. Fifty-four percent (54 per cent) of the principals very much referred to the strategic plans when setting the school academic performance targets. These

tasks are directly related to academic performance pointing to the importance that principals attach to the strategic plans in relation to academic excellence.

On the other hand, analysis in Table 13 shows that only a few principals did not refer to their strategic plans when discharging their administrative duties. For instance, the highest number of principals who did not refer to strategic plans in the course of their duties was 18 per cent of the principals and the tasks affected were those relating to decisions on staff development and also refresher courses. The explanation for this could be that schools' strategic plans in the study area did not adequately address staff development or that principals ignored the issue of staff development in their schools.

It is clear from Table 13 that 10 per cent of the principals did not refer to the strategic plans when deciding about the staff and student motivation. Perhaps strategic plans in these schools did not address staff and student motivation and if this is the case, those strategic plans failed to address some of the key factors that may be affecting students' performance.

4.8 Testing of the Relationship between Use of Strategic Management Plans (SMPs) and Students' academic performance at KCSE

The first objective of this study sought to find out whether there was statistically significant relationship between principals' use of strategic management plans and students' academic performance at KCSE in Murang'a County, Kenya. In order to achieve this objective, the first study null hypothesis was formulated and tested using Pearson Correlation Coefficient. The hypothesis was stated as follows; there is no statistically significant relationship between principals' use of strategic management plans and students' academic performance at KCSE in Murang'a county, Kenya. The

independent variable in relation to the first objective of this study was the mean of use of strategic plans calculated from items relating to principals' use of strategic management plans whereas the dependent variable was the school mean standard score at KCSE 2017 and 2018. Pearson correlation coefficient analysis was done to establish the relationship between principals' use of strategic management plans and students' performance at KCSE. Table 14 below shows the results of the Pearson correlation coefficient analysis of the relationship between the two variables.

Table 14: Results of Analysis of Relationship between Principals' Use of SMP and Students' Performance

Variable		**KCSE2018**	**KCSE2017**
KCSE 2018	Pearson's r	-	-
	p-value	-	-
KCSE 2017	Pearson's r	0.957	-
	p-value	< 0.001	-
Use of SPs	Pearson's r	0.523	0.545
	p-value	<0 .001	<0 .001

Source: Study data (2020)

Table 14 above shows that the Pearson Correlation Coefficient analysis of the statistical relationship between principals' use of strategic management plans and students' academic performance in KCSE examination yielded a strong and significant relationship. The two variables posted correlation statistics as ($r = 0.545$; $p<0.001$) in 2017 and ($r=0.523$; $p< 0.001$) in 2018, with a strong correlation or $r= 0.957$ of between KCSE results of 2017 and that of 2018. These results show that Ho1 should be rejected at $p = 0.001$ level of significance which imply that there is a statistically significant relationship between principals' use of strategic

management plans and students' performance at KCSE. These data suggested that schools with principals who used strategic plans more frequently (that is, very frequently) had higher mean KCSE scores than schools with leaders who used them less frequently or not at all. This study leads to the conclusion that the more strategic management plans used by school administrators, the higher the academic success of students. This indicates that principals should not only utilize these plans, but should use them extensively for maximum impact. This might be explained by the fact that strategic plans guide and focus principals' attention on overall school goals and objectives. Thus, strategic plans assist principals to carry out actions and activities which impact on students' learning. Therefore, principals should not only ensure that their schools have strategic plans but they should ensure that they use strategic plans in the overall school management.

The strong statistically significant and positive relationship between principals' use of strategic management plans and students' performance established in this study is consistent with the findings of Eldrigde (2001) quoted in Sije and Ochieng (2013). Eldridge noted that strategic plans implemented at 70per cent and above level resulted in improved performance. These findings also agree with the findings of Brito and Saunan (2016). Strategic planning, according to these writers, has a favorable impact on organizational performance. In addition, Gitau, Gituma, and Aden (2013) agree with the findings, claiming that strategic planning is one of the most important techniques for improving secondary schools in Kenya. Robbins (2003) and Sedisa (2008) highlight tis more by saying that effective managers are those who have learned fundamental abilities to cope up with the demands of their management duties. The adoption of strategic management plans is part of this fundamental competence.

4.9 Stakeholders' Involvement in SMP and Students' Performance at KCSE

The second objective of this study sought to find out whether there was statistically significant relationship between schools' principals' involvement of stakeholders in strategic management and students' academic performance at KCSE examination in Murang'a County, Kenya. In order to achieve this objective, the second study null hypothesis was formulated and tested using Pearson Correlation Coefficient. The hypothesis was stated as follows; there is no statistically significant relationship between principals' involvement of stakeholders and students' academic performance at KCSE in Murang'a county, Kenya .The independent variable in relation to the second objective of this study was the mean of principals' involvement of stakeholders in strategic management calculated from items relating to principals' involvement of stakeholders in the management of schools whereas the dependent variable was the schools' mean standard score at KCSE 2017 and 2018. Information relating to principals' involvement of stakeholders in the schools' strategic management practices was established by asking principals to state how often they carried out a set of eight activities relating to stakeholders. Using a Likert scale of 1–5, (1-Always, 2-Often, 3-Sometimes, 4- Rarely, 5 –Never), mean rating values were calculated on the eight items tested to find out the overall involvement of the stakeholders in school management. Table 15 below summarizes the results.

Table 15: Summary of Principals' Involvement of Stakeholders in School Management

Statement	Always	Often	Sometimes	Rarely	Never	Mean	Standard Deviation
Stakeholders assists students to choose elective subjects appropriately	31 (62.0%)	11 (22.0%)	4 (8.0%)	2 (4.0%)	2 (4.0%)	1.66	1.06
Stakeholders gets consulted on the school decision making process	25 (50.0%)	18 (36.0%)	6 (12.0%)	1 (2.0%)	-	1.66	0.77
Stakeholders participates in planning school's major activities	19 (38.0%)	22 (44.0%)	8 (16.0%)	1 (2%)	-	1.82	0.77
Stakeholders provides school's funds and facilities effectively	12 (24.0%)	15 (30.0%)	15 (30.0%)	7 (14.0%)	1 (2.0%)	2.40	1.06
Stakeholders effectively provides school needed personnel	15 (30.0%)	18 (36.0%)	15 (30.0%)	2 (4.0%)	-	2.08	0.88
Stakeholders provides Staff's' welfare effectively	5 (10.0%)	22 (44.0%)	15 (30.0%)	7 (14.0%)	1 (2.0%)	2.54	0.93
Stakeholders participates in schools' major activities	3 (6.0%)	15 (30.0%)	20 (40.0%)	9 (18.0%)	3 (6.0%)	2.88	0.98

Source: Study data (2020)

According to Table 15 above, the majority of the principals who took part in this survey (50.0 percent) indicated that they always contact parents when making decisions. Only 2.0 percent said they seldom contact parents in the decision-making process at their schools. Further, another 38.0 percent of principals indicated that they always involved parents in the schools' activities while 44.0 percent did so often. Only 24 percent of the principals indicated that the stakeholders always provided funds and facilities in their schools. These results show that parents, as key educational stakeholders, were actively involved in the management of schools in the study region

4.10 Testing of the Relationship between Stakeholders' Involvement and Students' Academic Performance at KCSE

From the second objective, the second null hypothesis (Ho2) was tested against the responses as in Table 15 above. This null hypothesis stated that there is no statistically significant relationship between principals' involvement of stakeholders in the strategic management of the schools and students' performance at KCSE in Murang'a County. The relationship between stakeholders' involvement and students' performance was analyzed using Pearson Correlation Coefficient. The independent variable for this analysis was a mean calculated from all the items relating to stakeholders' involvement in the management of schools while the dependent variable was the schools' KCSE mean scores in 2017 and 2018. Table 16 below shows the results of this analysis.

Table 16: Analysis of Relationship between Principals' Involvement of Stakeholders and students' academic performance

VARIABLE		KCSE2018	KCSE2017
1. KCSE2018	Pearson's r	-	-
	p-value	-	-
2. KCSE2017	Pearson's r	0.957	-
	p-value	< 0.001	-
3.Stakeholders	Pearson's r	0.700	0.715
	p-value	< 0.001	< 0.001

Source: Study Data (2020)

Pearson correlation coefficient analysis of principals' involvement of stakeholders in strategic management of secondary schools and students' performance yielded a very strong and statistically significant relationship between the two variables (r=0.700;

$p<0.001$ for KCSE 2018 and $r= 0.715$; $p< 0.001$ for KCSE 2017). Consequently, there was a very strong correlation between KCSE results of 2017 and that of 2018, giving the basis for a valid correlation test. On the basis of these results, Ho2 was rejected at $p =0.001$ level of significance. This means that principals' involvement of stakeholders in the strategic management of schools was significantly related to students' performance at KCSE. This implies that schools whose principals frequently involved stakeholders in school management performed better than those whereby stakeholders were largely left out. These results may be explained by the fact that stakeholders may not only enlist support for school programs and activities to the benefit of students' academic success but they can also help in the acquisition of teaching and learning materials that directly impact students' performance. There are many stakeholders in a school set up. These stakeholders include parents, the neighboring community, religious leaders as well as members of school boards of management.

The findings in relation to the second objective of this study agree with the findings of a study by Henderson and Mapp (2002) which found out that parents and community involvement is linked to student learning and achievement. The same views were shared by Miedel and Reynold (1999) who investigated the relationship between parents' involvement in an early intervention program and school achievement. The findings of their study indicated that higher participation of parents in pre-schools and kindergartens resulted in higher reading achievements, lower rates of grade retention, and fewer years in special education among children. Miedel and Reynold concluded that parents' involvement in the learning of their children is crucial in helping to sustain the immediate positive effects of early educational interventions.

Cotton (2001) also found that when parents participate in their children's school activities, academic success improves. Steinberg (2006) backed up this claim, finding that direct parental engagement in school events had a significant influence on kids' academic achievement. Community participation, according to Steinberg, physically pulled parents into schools, which was proven to be highly beneficial in increasing academic achievement because it reinforced the child's perception that school and home are related and that school is an essential part of the complete family's life. These views are supported by Eagle (1989) who concluded that community involvement in a school had a significant positive impact on students' achievement Furthermore one of the key factors affecting the success of strategic planning in schools is stakeholder participation. According to Mwangi (2012), the amount of engagement of all individuals entrusted with the strategic plan implementation process determines the effectiveness of any strategic plan. Stakeholder engagement, according to Mwangi, provides significant benefits in terms of creating the circumstances essential for the successful execution of strategic objectives. Participation fosters awareness, capability, consensus, and support, all of which are necessary for effective management.

4.11 Strategic Provision of Schools' Facilities and Students' Academic Performance at KCSE

The provision of education involves huge investments in physical facilities. It was therefore important for this study to establish the relationship between the provision of school facilities and students' performance. The third objective of this study sought to find out whether there was statistically significant relationship between strategic provision of schools' facilities and students' academic performance at KCSE examination in Murang'a County, Kenya. In order to achieve this objective, the

third study null hypothesis was formulated and tested using Pearson Correlation Coefficient. The hypothesis was stated as follows; there is no statistically significant relationship between strategic provision of schools' facilities and students' academic performance at KCSE in Murang'a county, Kenya .The independent variable in relation to the third objective of this study was the mean calculated from strategic provision of schools' facilities items relating to provision of facilities of schools whereas the dependent variable was the schools' mean standard score at KCSE 2017 and 2018. To achieve the third objective of this study, observations were done on the school facilities in the sampled schools. These observations were done to establish the availability and adequacy levels of the facilities. Table 1 7 below summarizes the availability of the facilities.

Table 17: Availability of Selected Facilities in Secondary Schools in Murang'a County

Facilities	Schools with facilities	Schools without
Computer Laboratory	33 (66.0%)	17 (34.0%)
Science laboratory	46 (92.0%)	4 (8.0%)
Library	32 (64.0%)	18 (36.0%)
Text books	50 (100.0%)	-
Dining Hall	32 (64.0%)	18 (36.0%)
Game equipment's	50 (100.0%)	-
Sanitation facilities	50 (100.0%)	-
Students furniture	50 (100.0%)	-
Teachers' furniture	50 (100.0%)	-
Teachers 'staff quarters	33 (66.0%)	17 (34.0%)
School transport	26 (52.0%)	24 (48.0%)
Students dorm	28 (56.0%)	22 (44.0%)
Students boarding facilities	28 (56.0%)	22 (44.0%)
Water supply	49 (98.0%)	1 (2.0%)
Lighting facilities	46 (92.0%)	4 (8.0%)

N = 50 schools.

Source: Study data (2020)

In the sampled schools, games equipment, text books, sanitation facilities, students' and teachers' furniture were available. Over 90 per cent of the schools had water supply and lighting facilities as well as science laboratory. More than 30percent of the schools did not have computer laboratory, library, dining hall, staff quarters, school transport and students' boarding facilities. Analysis was also done to establish the adequacy of the facilities as shown in Table 18 below.

Table 18: Adequacy of the Facilities in Sampled Schools

Facilities	Very poorly adequate	Poorly adequate	Well adequate	Very well adequate
Computer laboratory	3 (6.0%)	21 (42.0%)	8 (16.0%)	18 (36.0%)
Science laboratory	5 (10.0%)	34 (68.0%)	6 (12.0%)	5 (10.0%)
Library	9 (18.0%)	18 (36.0%)	5 (10.0%)	18 (36.0%)
Text books	4 (8.0%)	36 (72.0%)	8 (16.0%)	2 (4.0%)
Dining Hall	2 (4.0%)	16 (32.0%)	13 (26.0%)	19 (38.0%)
Game equipment	7 (14.0%)	37 (74.0%)	4 (8.0%)	2 (4.0%)
Sanitation facilities	-	33 (66.0%)	13 (26.0%)	4 (8.0%)
Students' furniture	3 (6.0%)	39 (78.0%)	6 (12.0%)	2 (4.0%)
Teachers' furniture	2 (4.0%)	37 (74.0%)	8 (16.0%)	3 (6.0%)
Teachers' staff quarters	9 (18.0%)	17 (34.0%)	5 (10.0%)	19 (38.0%)
School transport	3 (6.0%)	14 (28.0%)	9 (18.0%)	24 (48.0%)
Students' dormitories	4 (8.0%)	18 (36.0%)	6 (12.0%)	22 (44.0%)
Students' boarding Facilities	3 (6.0%)	20 (40.0%)	5 (10.0%)	22 (44.0%)
Water supply	2 (4.0%)	36 (72.0%)	11 (22.0%)	1 (2.0%)
Lighting facilities	1(2.0%)	23(46.0%)	21 (42.0%)	5 (10.0%)

Source: Study data (2020)

In some of the schools, the facilities were available but were poorly adequate. This was found in more than 50% of the schools concerning science laboratories and sanitation facilities, whereas the scenario was the same in 72.0per cent of the schools regarding textbooks and water supply. On the same note, 74.0 per cent of the schools reflected a similar image on teachers' furniture and in games equipment. Only 42% of schools had well adequate lighting facilities. Lastly, some facilities were very poorly adequate and others very well adequate in less than 20% of the schools.

4.12 Testing of the Relationship between Provision of School Facilities and Academic Performance

To achieve the third objective of this study which sought to establish the relationship between strategic provision of school facilities and students' performance at KCSE, Pearson correlation coefficient analysis was done. The independent variable for this analysis was the mean calculated from ratings of the availability of selected school facilities whereas the dependent variable was the schools KCSE mean scores for years 2017 and 2018. Table19 below shows the results.

Table 19: Analysis and interpretation of Relationship between Strategic Provision of Schools' Facilities and Students Performance

VARIABLE		KCSE2018	KCSE2017
1. KCSE2018	Pearson's r	-	-
	p-value	-	-
2. KCSE2017	Pearson's r	0.957	—
	p-value	< 0.001	—
3.Provision of	Pearson's r	0.792	0.750
	p-value	<0 001	< 0.001

Source: Study data (2020)

Pearson correlation coefficient analysis of the relationship between the provision of school facilities and students' performance showed that there was a statistically significant relationship between availability of selected school facilities and students' KCSE performance in 2017($r = 0.75$; $p<0.001$) and in 2018 ($r=0.792$; $p< 0.001$). These results showed that the availability of the selected schools' facilities

had a significant relationship with students' academic performance at KCSE. This observation may be explained by the fact that school facilities support learning. For instance, computers enhance students' research activities while science laboratories help students carry out science practical's in their schools. Further, libraries do not only promote a reading culture in a school but also expose students to many sources of information.

The findings of this study, which looked at the link between school facilities and students' performance at KCSE, show that it is critical to emphasize the significance of school facilities in achieving high academic performance for students. Furthermore, the study found that the availability, relevance, and appropriateness of a school's facilities influences academic success. Based on the findings of the study, it is clear that more emphasis is required for the provision of sufficient educational infrastructure. In other words, the above findings imply that provision of school facilities should be a priority in all schools if students' performance is to be enhanced. This information is critical particularly for those in the management of education since they can use it in order to appropriately provide solution to educational problems. The findings of this study indicated that school facilities are connected to students' academic performance, and that a lack of them might be a key factor leading to low academic performance among kids.

The supply of all school facilities, it is accurate to say, plays a critical role in efficiently supporting the strategic management techniques required in schools. This study supports Hailu and Biyabeyen's (2014) findings, which claim that school amenities assist teachers to do their tasks and, more crucially, help students learn and succeed effectively. This means that having access to and making good use of school

facilities boosts a teacher's motivation to educate well, which in turn leads to increased student academic achievement.

4.13 Relationship between Maintenance of Schools' Facilities and Students' Academic Performance

The fourth objective of this study sought to find out whether there was statistically significant relationship between strategic maintenance of schools' facilities and students' academic performance at KCSE, in Murang'a County, Kenya. In order to achieve this objective, the fourth study null hypothesis was formulated and tested using Pearson Correlation Coefficient. The hypothesis was stated as follows; there is no statistically significant relationship between strategic maintenance of schools' facilities and students' academic performance at KCSE in Murang'a county, Kenya .The independent variable in relation to the third objective of this study was the mean calculated from strategic maintenance of schools' facilities items relating to maintenance of facilities of schools whereas the dependent variable was the schools' mean standard score at KCSE 2017 and 2018. To achieve the fourth objective of this study, observations were done on the school facilities in the sampled schools. These observations were done to establish the maintenance levels of the facilities. Table 20 below summarizes the maintenance of the facilities.

The available facilities were therefore further observed, scrutinized and analyzed in order to establish the maintenance levels. In connection to the process of establishing the maintenance of the facilities, three levels Likert scale of 1–3 was used (1-poorly maintained, 2-well maintained, 3-very well maintained). Results of the analysis of the maintenance of the available facilities are shown here below in Table 20.

Table 20: Strategic Maintenance of School Facilities

Facilities	Very poorly maintained	Poorly maintained	Well maintained	Very well maintained	Mean	Std
Computer laboratory	3 (6.0%)	21 (42.0%)	8 (16.0%)	18 (36.0%)	2.16	0.57
Science laboratory	5 (10.0%)	34 (68.0%)	6 (12.0%)	5 (10.0%)	2.02	0.49
Library	9 (18.0%)	18 (36.0%)	5 (10.0%)	18 (36.0%)	1.88	0.65
Text books	4 (8.0%)	37 (74.0%)	8 (16.0%)	1 (2.0%)	2.08	0.49
Dining Hall	2 (4.0%)	16 (32.0%)	13 (26.0%)	19 (38.0%)	2.35	0.61
Games equipment	7 (14.0%)	38 (76.0%)	4 (8.0%)	1 (2.0%)	1.94	0.48
Sanitation facilities	-	34 (68.0%)	13 (26.0%)	3 (6.0%)	2.28	0.46
Students' furniture	3 (6.0%)	40 (80.0%)	6 (12.0%)	1 (2.0%)	2.06	0.43
Teachers' furniture	2 (4.0%)	37 (74.0%)	8 (16.0%)	3 (6.0%)	2.13	0.44
School transport	3 (6.0%)	16 (32.0%)	10 (20.0%)	21 (42.0%)	2.24	0.64
Students' dormitories	4 (8.0%)	19 (38.0%)	6 (12.0%)	21 (42.0%)	2.07	0.59
Students' boarding facilities	3 (6.0%)	21 (42.0%)	5 (10.0%)	21 (42.0%)	2.07	0.53
Water supply	1 (2.0%)	37 (74.0%)	11 (22.0%)	1 (2.0%)	2.21	0.46
Lighting facilities	1 (2.0%)	24 (48.0s%)	21 (42.0%)	4 (8.0%)	2.44	0.55

Source: Study data (2020)

The study found that 42% of the schools very well-maintained schools' transport, students' dorms and boarding facilities However, in more than 65% of the schools, science laboratories, sanitation facilities, students' and teachers' furniture, textbooks, water supply and games equipment were poorly maintained. Lighting facilities were well maintained in 42% of schools whereas only 26.0 % of schools had dining halls and sanitation facilities being well maintained. The study further

utilized Pearson correlation coefficient to test the relationship between maintenance of school facilities and students' performance as illustrated in Table 21 below.

Table 21: Analysis of Relationship between Maintenance of School Facilities and Students' performance

Variable		KCSE 2018	KCSE 2017
1. KCSE 2018	Pearson's r	-	
	p-value	-	
2. KCSE 2017	Pearson's r	0.957	-
	p-value	< 0.001	-
3. Maintenance	Pearson's r p-value	0.84 < 0.001	0.78 <0.001

Source: Study data (2020)

The study did a Pearson correlation coefficient analysis to test of the relationship between the maintenance of school facilities and students' performance. The findings showed that there was a statistically significant relationship between maintenance of schools' facilities and students' KCSE performance in 2017 ($r = 0.78$; $p < 0.001$) and in 2018 ($r = 0.84$; $p < 0.001$). These results indicated that maintenance of school facilities had a positive impact on students' KCSE performance.

The findings on the investigation of a relationship between maintenance of schools' facilities and students' performance revealed an existence of a relationship. This implies that provision of facilities is not enough for without their continuous maintenance then their usefulness to the schools would easily fade away. From this observation, it is necessary for schools to have facilities

maintenance programmes in order to give this strategic management practice the required focus. Conclusively, as schools' conditions improve from one category to the next, so is the students' academic performance and the reverse of this is necessarily true. The findings of this study are supported by other researchers' views. Bullock (2007) discovered that children performed better in new or recently renovated schools than in older institutions. The general building conditions, the age of the building, and the windows in the teaching spaces were also found to be favorably associated to student success in this study. These ideas are consistent with research that shows a link between student achievement and school building conditions (Lewis, 2000). Students in classrooms with wide windows, natural lighting, and well-designed skylights fared better than their classmates in classes lacking these characteristics, according to Hale (2002). The study discovered that school environmental factors, such as a broken heating system, insufficient ventilation, and bad lighting, had an impact on students' and teachers' health and learning, as well as their morale. This is in agreement with Hailu and Biyabeyen (2014), who hurriedly added that unpleasant school buildings and congested classrooms among others contribute to poor academic attainment. These findings imply that maintenance of schools' facilities should be taken seriously for good students' academic performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provide information on the summary of the study, the conclusions made from the findings and recommendations of the study on the relationship between principals' strategic management practices and students' academic performance at KCSE in Murang'a County, Kenya.

5.2 Summary of the Study

The study interest was to find out if there was a relationship between strategic management practices and students' academic performance at KCSE examination in Murang'a County, Kenya. In view of this, the study was driven by the succeeding objectives:

To determine the relationship between strategic management plans and students' academic achievement on the Kenya Certificate of Secondary Education (KCSE) test in Murang'a County, Kenya; to find relationship between involvement of stakeholders in strategic management and students' performance at Kenya Certificate of Secondary Education (KCSE) examination in Murang'a county; to determine the relationship between strategic provision of schools' facilities and students' academic performance at Kenya Certificate of Secondary Education (KCSE) examination in Murang'a county Kenya.; to establish whether there is a relationship between strategic maintenance of schools' facilities and students' performance at Kenya Certificate of Secondary Education (KCSE) examination in Murang'a county. Four null hypotheses were derived from the respective study objectives.

Related literature review presented the study background and the framework. Research design was correlational and public secondary schools' principals and HODs were the target population. Stratification and simple random sampling were employed whilst the research instruments were questionnaires as well as observation schedule. The descriptive and inferential statistics were used to examine the research data. The null hypotheses were tested using Pearson correlation coefficient, which was derived from inferential statistics. The study established that there was a statistically significant relationship between principals' use of strategic management plans and students' performance at KCSE examination; there was a statistically significant relationship between principals' involvement of stakeholders in strategic management practices and students' academic performance at KCSE examination; there was a statistically significant relationship between the provision of school facilities and students' performance at KCSE examination and lastly, there was a strong statistically significant relationship between the maintenance of schools' facilities and students' academic performance at KCSE examination.

5.3 Conclusions of the study

The focus of this research was to see if there was a link between principals' strategic management methods and pupils' academic achievement in Murang'a during the KCSE test. The study looked at whether there was a link between principals' adoption of strategic management plans and students' academic achievement on the Kenya Certificate of Secondary Education (KCSE) test. Based on this, the study found that that there was a statistically significant relationship between principals' use of strategic management plans and students' performance at KCSE examination. Conclusion made from these findings was that schools whose principals made higher use of strategic plans relatively declared better mean scores at KCSE examination

since strategic plans direct and focus principals' concentration towards overall schools' goals and objectives. Additionally, strategic plans help the principals to carry out activities and events which impact on students' learning. Presence and use of strategic management plans are critical ingredients for schools' high academic performance.

The study attempted to find out whether there is a relationship between principals' involvement of stakeholders in strategic management and students' performance. In regard to this, the study established a statistically significant relationship between principals' commitment of stakeholders in strategic management practices and students' academic performance at KCSE examination. Based on this finding, the study concluded that schools whose principals mostly involved stakeholders in schools' management performed better than those that largely left them out. Related to this is the fact that stakeholders can easily enlist support for schools' programs and activities to the benefit of students' academic achievement as well as help in the acquisition of teaching and learning materials that directly or indirectly positively influence learners' performance. On this note, the involvement of stakeholders in school's management is necessary as it brings considerable support and benefits which are critical for successful schools' management that leads to high students' academic performance

Further, the study attempted to establish whether there is a relationship between strategic provision of schools' facilities and students' academic performance at Kenya Certificate of Secondary Education (KCSE) examination. To this end, this research found a statistically significant relationship between strategic provision of schools'

facilities and students' academic performance. From this finding, the study concluded that provision of needed schools' facilities directly or indirectly influences teaching and learning process which leads to high learners' academic achievement in schools.

Further conclusion is that schools' facilities contribute to the interest of the teachers and motivates them to teach more effectively and in turn this boosts student's academic achievement. As a result, school facilities enable teachers to meet their instructional objectives while also assisting students in learning and achieving their goals. In general, school facilities promote and improve learning, and these are critical factors in ensuring that teaching and learning processes operate smoothly, resulting in excellent academic achievement among students. This points out that the provision of schools' facilities needs a proper attention since the importance attached to it in regard to boosting academic performance cannot be over emphasize Conclusively, the provision of schools' facilities is a must if students' performance is to be enhanced. The study also investigated if there was a relationship between strategic maintenance of schools' facilities and students' performance at Kenya Certificate of Secondary Education (KCSE) examination. On this note, the study found that there was a strong statistically significant relationship between the maintenance of schools' facilities and students' academic performance at KCSE. These findings led to the conclusion that school facility upkeep had a beneficial influence on students' KCSE exam performance. As a result, the better the school facilities are maintained, the higher the academic achievement of the student is likely to be, but the opposite is not necessarily true.

In connection to this is a conclusion that although the provision of the schools' facilities is so important continuous maintenance is critical so as to ensure that the

condition of such facilities remains good for their usefulness to the school to remain. The better the school facilities are maintained, the better the academic achievement of the pupils is likely to be, but the opposite is not always true. The overall conclusion is that school environmental conditions are linked to student health and learning, as well as staff morale, and that this is related to students' academic achievement directly or indirectly.

5.4. Recommendations of the study

Based on the findings and conclusions of the study on the relationship between secondary schools' strategic management practices and students' academic performance, the subsequent recommendations were voiced out:

i. Schools' principals should have and effectively use schools' strategic management plans. On this note, the MOE should formulate follow ups and use of strategic plans guidelines by the secondary school principals. More so, the MOE should have a policy of ensuring that the training on preparation and use of strategic plans is mandatory for anyone aspiring to become a secondary school principal.

ii. MOE should have good tracking records and annual calendars regarding secondary schools' principals training on preparation and use of strategic management plans so that there will be no disconnections on status regarding this. This would result to a point of reference which can be a constant reminder necessary for effective training of all schools' principal.

iii. Principals' strategic management training should be improved so that they may take the lead in developing strategic plans for their schools rather of

relying on others to do it for them. All of the many groups are involved in this, for example, KEMI, CDM, involved with the training of strategic management practices to the secondary school principals should give it a high priority and at the same time do it in coordination with each other to avoid unnecessary gaps or overlaps.

iv. Schools' principals should develop a culture of serious involvement of stakeholders in management of schools as this would enhance the support needed from them leading to students' academic performance improvement.

v. Further to this, schools' BoMs should endeavor not only to provide adequate schools' facilities, but should develop and adapt a sustainable effective maintenance programme as well for this is related and greatly determines student's academic performance,

vi. Schools' principals should be highly encouraged to appreciate that strategic management practices are a crucial facet for students' academic performance for these practices greatly contributes towards high students' academic performance.

vii. A procedure for managing secondary schools' and other institutions' strategies can be developed. This can greatly assist the relevant institution constitute sound decisions and promote fresh goals rapidly to keep steps with evolving technology in the present and future conditions in the learning environment resulting to high academic achievement.

5.5 Suggestions on Further Research

On the basis of the findings of this study, it is important to consider the following suggestions for advance studies:

i. It is suggested that a further study could be done on the relationship between other different strategic management practices used by other different education key players and learners' academic performance.

ii. A further study can be done on relationship between strategic management practices in other institutions of learning for instance, institutions for higher learning, primary schools and learners' academic performance. This could widen the scope of knowledge regarding strategic management of education institutions.

iii. Finally, another study suggested was on relationship between other stages, apart from implementation of schools' strategic management plans, for instance on formulation and evaluation stages of SMP in order to determine the relationship between them and students' academic performance.

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APPENDICES

APPENDIX 1: INTRODUCTION LETTER

ANNE NYAMBURA KAMAU
MAASAI MARA UNIVERSITY
P.O.BOX 861-20500
NAROK
DATE

THE PRINCIPAL
---------- SECONDARY SCHOOL
P.O.BOX ----------

Dear Sir/ Madam

REF: REQUEST TO CONDUCT RESEARCH STUDY IN YOUR SCHOOL

I am a PhD student at Maasai Mara University, School of Education, Department of Curriculum Instruction and Education Management. My study is on the relationship between Principals' Strategic Management Practices and Students' academic Performance at Kenya Certificate of Secondary Education in Murang'a County.

The purpose of this letter is to kindly seek your permission to administer the questionnaire on yourself and Heads of Departments in your school. I take this opportunity to inform you that the information collected will only be used for the purpose of this study and will be treated with great confidentiality. In this regard, names of schools and or persons will be excluded in the report.

Yours response and support towards this exercise will be extremely appreciated.

Thank you

Yours Faithfully

ANNE N KAMAU

APPENDIX 2: PRINCIPALS' QUESTIONNAIRE (PQ) INSTRUCTIONS

The purpose of this survey is to learn more about the relationship between strategic management practices and student performance at KCSE in Murang'a county. All of the data you provide will be used solely for academic reasons. Please tick () the appropriate response or briefly explain your reaction to all items in the questionnaire.

Part A: Background information

1. Indicate your gender? Male [ ] Female [ ]

2. What are your highest professional qualifications?

Doctor of Philosophy [ ] Master of Education [ ] Bachelor of Education/Science [ ] Bachelor of Education/Arts [ ]

Diploma in Education/Science [ ] Diploma in Education/Arts [ ]

3. How long have you been a school principal? ..... years.

4 . How long have you been a teacher at your present institution?

5. How long have you been a principal at your present institution?

6. Which of the following categories does your school belong to?

National [ ] Extra-county [ ] County [ ]

District [ ] Others (Specify)

…….

6. What is your schools' enrolment?.....

7. How many teachers do you have in your school?

Under TSC ……. Under B.O.G ……

8. How many supportive staff do you have?.....

9. How many subordinate staff do you have?.....

10. Are there strategic management plans set forward for your school?.....

Yes ( ) No ( )

If no, why?…….....

11.How many strategic management courses have you ever attended? --

None [ ] One [ ] Two [ ] Three [ ] More than three [ ]

12.Who or which organization organized or conducted those courses? .....

13 How long have you used strategic management plans in your current school?..... years.

Part B: Use of Strategic Management Plans

Indicate the extent to which you refer to your work by ticking (v) on the key below.

strategic management plan when undertaking the following activities in your school.

Key: N-1 Nil; M_2 Much; VM-3 Very Much

NO	STATEMENTS	N-1	M-2	VM-3
14	Provision of staff motivation			
15	Provision of students' motivation			
16	Provision of enough teaching facilities			
17	Regular staff development.			
18	Addressing student's welfare			
10	Effective resource management			
20	Provision of enough needed personnel.			
21	Assessment of school resources			
22	Setting of school KCSE performance target			
23	Addressing students' entry behavior			
24	Assessment of the schools' program.			
25	Addressing school needed facilities			
26	Reviewing elective subjects.			

Part C: Stakeholders' Involvement

Using the key below, indicate by ticking (√) how often you do the following things.

Key: N –1Never, R-2Rarely, S_ 3Sometimes, O- 4Often, A-5Always

	STATEMENTS	N-1	R-2	S-3	0-4	A-5
27	Asking stakeholders to assist students in choosing elective subjects appropriately.					
28	Consulting stakeholders on the school decision making process					
29	Encouraging stakeholders to participate in planning school's major activities					
30	Ensuring stakeholders provide schools' resources effectively					
31	Making stakeholders to support schools' staff motivation.					
32	Asking stakeholders to cater for schools' staff welfare					
33	Inviting stakeholders to be part of the schools' major activities					
34	Involving stakeholders in students' academic issues					

Thank you for participating

APPENDIX 3: HoDs' QUESTIONNAIRE (HoDs) INSTRUCTIONS

This survey aims to learn more about the relationship between strategic management practices and academic achievement at KCSE in Murang'a County. All of the data you provide will be used solely for academic reasons. Please tick () the appropriate response or briefly explain your reaction to all items in the questionnaire.

Part A: Background Information

1. What is your gender? Male [ ] Female [ ]

2. What are your highest professional qualifications?

Doctor of Philosophy [ ] Master of Education [ ]

Bachelor of Education/Science [ ] Bachelor of Education/Arts [ ]

Diploma in Education/Science [ ] Diploma in Education/Arts [ ]

Post Graduate Diploma [ ]

Others (Specify) …… .....

3. How long have you been a Head of Department at the current school? .....years

4. Do you have strategic management plans in your current school?

Yes [ ] No [ ] Do not know [ ]

If no, Why?…….....

5.How many strategic management courses have you ever attended? -

6. Who/which organization organized/conducted those courses?.....

Part B: Level of Use of Strategic Management Plans

Indicate the extent to which the strategic management plan is referenced to when the following practices are carried out at your school by checking () on the key below.

Key: N-1 Nil; M- 2 Much; VM-3 Very Much

NO	STATEMENTS	N-1	M-2	VM-3
7.	Provision of staff motivation			
8.	Provision of students' motivation			
9.	Provision of enough teaching facilities			
10.	Regular staff development			
11.	Addressing student's welfare			
12.	Effective resource management			
13.	Provision of enough needed personnel.			
14.	Assessment of school resources			
15.	Setting of school KCSE performance target			
16.	Addressing student's entry behavior			
17	Assessment of the school programme			
18	Addressing school needed facility			
19	Reviewing the elective subjects			

Part C: Stakeholders' Involvement

Using the key below, indicate by ticking (√) how often your principal does the following things.

Key: N- 1 Never, R- 2Rarely, S-3 Sometimes, O-4 Often, A-5 Always

NO	STATEMENTS	N-1	R-2	S-3	O-4	A-5
20	Asking stakeholders to assist students in choosing elective subjects appropriately					
21	Consulting stakeholders in the school decision making process					
22	Encouraging stakeholders to participate in planning school ' major activities school's activities					
23	Ensuring stakeholders provide schools' funds and facilities effectively					
24	Ensuring stakeholders provides for schools' needed personnel Motivation					
25	Encouraging stakeholders to cater for schools' staff Welfare					
26	Inviting stakeholders to be part of the schools' major activities					
27	Involving stakeholders in students' academic Issues					

Thank you for participating

APPENDIX 4: OBSERVATION SCHEDULE

Part A. Using the key below, the researcher to indicate by ticking (√) the rate of the availability and adequacy of the schools' facilities

Key; (NA) Not available, VPA (Very poorly adequate) PA (poorly adequate), WA (well adequate) VWA (very well adequate)

	Facilities	NA	VPA	PA	WA	VWA
1	Computer laboratory					
2	Science laboratory					
3	Library					
4	Text books					
5	Dining hall					
6	Games equipment's					
7	Sanitation facilities					
8	Students' furniture					
9	Teachers' furniture					
10	Teachers' staff quarters					
11	School transport					
12	Students' dormitories					
13	Students' boarding facilities					
14	Water supply					
15	Lighting facilities					

Part B The researcher to rate the level of maintenance of the schools' facilities Key; VPM 1 (Very Poorly Maintained), PM, (Poorly Maintained), WM, (Well maintained), VWM (Very Well maintained)

	Facilities	**VPM**	**PM**	**WM**	**VWM**
16	Computer laboratory				
17	Science laboratory				
18	Library				
19	Text books				
20	Dining hall				
21	Games equipment's				
22	Sanitation facilities				
23	Students' furniture				
24	Teachers' furniture				
25	Teachers' staff quarters				
26	Schools' transport				
27	Students' dormitory				
28	Students' boarding facilities				
29	Water supply				
30	Lighting facilities				

Part C The researcher to indicate each schools' KCSE examination mean scores for the two years as indicated

	YEAR	2017	2018
31	KCSE mean scores		

The End

APPENDIX 5: **LIST OF SECONDARY SCHOOLS IN MURANG'A COUNTY**

NO.	School
1	Murang'a high
2	Njiiri school
3	Kahuhia Girls
4	Mogoiri High
5	Njumbi sec.
6	Gaichanjiru high
7	Mumbi girls
8	Nyagatugu
9	Kangema high
10	Kiria-ini Girls
11	Ruchu girls
12	Kamahuha girls
13	Githumu high
14	Gatanga girls
15	Githunguri girls
16	Naaro high school
17	Karega
18	Ng'araria girls
19	Gitugi girls sec.
20	Muthithi
21	Kigumo girls
22	Kirwara
23	Nginda girls
24	St.charles lwanga
25	Ichagaki boys
26	Gituru sec
27	Kibutha girls
28	Igikiro boys
29	Kigumo bendera
30	Makuyu girls
31	Kiru sec.
32	Ndugamano
33	Kirirwa sec
34	Kiruri
35	Chomo
36	Mioro sec.
37	Gatunyu
38	Kiangunyi
39	Mugeka
40	Ngurwe-ini sec
41	Gatanga ccm.
42	Ndaka-ini
43	Gatura girls
44	Kirigithu sec

45	Karigu-ini sec
46	Rwegetha
47	Iyego
48	Ithanga
49	Kiria-ini Mixed
50	St. Teresas
51	Ng'araria mixed
52	Gitugi sec.
53	Rarakwa
54	St fransis mukuyu-ini
55	Gitugu
56	Delmonte
57	Githunguri mixed
58	Makuyu boys
59	Mutitu sec
60	Kaharo girls
61	Turuturu
62	Vidhuramji
63	Muruka sec
64	Wahundura sec.
65	Runyeki sec.
66	Mukerenju sec
67	Mukurwe wa nyagathanga

68	Kiriti sec.
69	Muguru
70	Rwathia girls
71	Karugia sec
72	Kiangari sec
73	Kimathi
74	Kariti sec
75	Nginda mixed
76	Mananga sec.
77	Kianjiru-ini
78	Itaaga
79	Kiamwathi
80	Gathera sec
81	Gikoe sec.
82	Gakui sec
83	Mirira
84	St catherine gaturi
85	Kiambuthia sec.
86	Matu
87	Mwarano
88	Kiranga sec
89	Kanderendu
90	Mbugiti
91	Peter Kariuki

92	Kambiti
93	Giachuki
94	St pauls boys
95	Wangai sec
96	Kimandi
97	Kiawambogo
98	Ikumbi
99	Kaharo boys
100	Kihumbu-ini
101	Kiairathe
102	St augustine gikindu
103	Gituamba
104	Gacharaigu
105	Saba saba sec
106	Kamune sec.
107	Ihiga
108	St paul kamukabi
109	Karung'e sec.
110	Kibage sec
111	Watuha
112	Nguku
113	Ichichi
114	Nyakihai
115	Mwanawikio

116	Kigio
117	Philadelphia
118	Muiri-ini
119	Iruri sec.
120	Dr. Kiano
121	Mutunguru
122	Thuita sec.
123	Mwangaza
124	Ichagaki mixed
125	Mariira
126	Maragi
127	Kanyenyaini
128	Kiunyu
129	Gacharage sec
130	Muchungucha
131	Maragua sec
132	Maganjo
133	Jogoo kimakia
134	Gakurwe
135	Ititu
136	Mwagu
137	Kirunguru sec
138	Kanorero
139	Kibutha mixed

140	Kiamuturi sec.
141	Kiriko sec.
142	Githembe
143	Gititu
144	Thangira umoja
145	Kariua sec
146	Gathanji
147	Kihuro sec.
148	Gatitu sec
149	St.joseph
150	Matunda
151	Kenyoho sec
152	Kiarutara
153	Kariani
154	Ngatho
155	St mathew kianyingi
156	Ngelelya
157	B.m.a
158	Gaichanjiru mixed
159	New nyaga
160	Kangui sec
161	Gatumbi
162	Kamacharia girls.
163	Kiangochi

164	Kambara sec.
165	Ndunyu chege
166	Wamahiga
167	Mumbu
168	Mugecha sec
169	Njora
170	Githumu mixed
171	Manjuu sec
172	Gathugururu
173	Kihoya
174	Mung'aria sec
175	Matuto sec.
176	Joseph muraya
177	Maragua ridge
178	Ngamba sec.
179	Scholars boys
180	Githambia
181	Nguthuru sec
182	Mihuti sec.
183	Gakurari
184	Gichagi-ini sec
185	Thaara
186	Githanga mixed
187	Muti

188	St.philip Gikindu
189	Giathiya
190	Gat./ kariara
191	Githigia sec
192	Mununga high
193	Githima
194	High level
195	Karungangi sec
196	Muchagara
197	Mutheru sec
198	Gituru day sec
199	St. Augustine
200	Kangangu
201	Gatiiguru
202	Kirimiri sec
203	Mungu-ini
204	Rurii
205	Rwathia mixed
206	Gikandu
207	Kinyona
208	Karuri gakure
209	Kiamuri
210	Gaitheri
211	Kaguthi sec

212	Kaharati
213	Makomboki
214	Mukoiri
215	Mathare-ini
216	Kagira sec
217	Nyakahura
218	Karurumo
219	Kahuhia
220	P.c.e.a mahutia
221	Gikomora
222	Mutithi
223	Ithang'arari
224	Gathage sec
225	St michael gathukiini
226	Kanunga
227	Kihuru-ini sec
228	Gatunduini
229	Gatituini
230	Swani
231	Kabati sec
232	Gatunguru sec.
233	Karinga
234	Mithini sec
235	Mugumo-ini

236	Gikigie
237	Githigi sec
238	Thungururu
239	Mugumo
240	Kigetuini
241	Kahumbu
242	Mweru
243	Kigumo mixed
244	Kigongo
245	Marumi
246	Mukuria sec
247	O.l.f wanjerere
248	Naaro mixed day sec
249	Thamara
250	Kigoro

APPENDIX 6: SUMMARY OF 2020 KCSE EXAMINATION GRADES IN CENTRAL REGION, KENYA

C/N	COUNTY	ENTRY			A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	X	Y	U	P	W	MEAN SCORE 2020
		BOYS	GIRLS	TOTAL																		
1.	KIRINYAGA	5876	6276	12152	15	163	300	452	682	1015	1389	1748	1724	1997	2304	298	125	2	10	16	0	4.6468894
2.	NYERI	9239	9141	18380	25	220	509	838	1064	1491	2032	2331	2298	2660	3663	969	124	0	5	12	0	4.619
3.	KIAMBU	13470	14382	32378	210	765	1005	1293	1567	2104	2982	3698	3671	4664	7545	2597	422	8	8	11	5	4.443
4.	MURANGA	13605	13944	27549	41	239	576	956	1349	2007	2944	3494	3709	4647	6012	1136	397	0	20	2	0	4.404
5.	NYANDARUA	7212	7878	15090	7	104	244	396	646	959	1467	1866	2033	2480	3959	879	247	0	4	8	2	4.153
	TOTAL	49402	51621	105549	298	1491	2634	3935	5308	7576	10184	13137	13435	16448	23483	5879	1315	10	47	49	7	4.45317788

APPENDIX 7: RESEARCH CLEARANCE PERMIT FROM NACOSTI

CONDITIONS

1. **You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit**
2. **Government Officers will not be interviewed without prior appointment.**
3. **No questionnaire will be used unless it has been approved.**
4. **Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.**
5. **You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.**
6. **The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice**

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No. A 03022

CONDITIONS: see back page

PAGE 2

THIS IS TO CERTIFY THAT:
Prof./Dr./Mr./Mrs./Miss/Institution
Ann Nyambura Maina
of (Address) Maasai Mara University
P.O.Box 861-20500, Narok.
has been permitted to conduct research in
Location
Murang'a
District
County
on the topic: Relationship between strategic management practices and students' performance at Kenya Certificate of Secondary Education in Murang'a County, Kenya.
for a period ending: 31st December, 2014.

PAGE 3

Research Permit No. NCST/RCD/14/013/1441
Date of issue 22nd August, 2013
Fee received KSH. 2000

Applicant's Signature

For: Secretary
National Commission for Science
Technology & Innovation

APPENDIX 8: AUTHORIZATION LETTER FROM NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349, 254-020-2673550
Mobile: 0713 788 787 , 0735 404 245
Fax: 254-020-2213215
When replying please quote
secretary@ncst.go.ke

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RCD/14/013/1441**

Date: **22nd August, 2013**

Ann Nyambura Maina
Maasai Mara University
P.O.Box 861-20500
Narok.

RE: RESEARCH AUTHORIZATION

Following your application dated *2nd August, 2013* for authority to carry out research on *"Relationship between strategic management practices and students' performance at Kenya Certificate of Secondary Education in Murang'a County, Kenya,"* I am pleased to inform you that you have been authorized to undertake research in **Murang'a County** for a period ending **31st December, 2014.**

You are advised to report to **the County Commissioner and the County Director of Education, Murang'a County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

DR. M. K. RUGUTT, PHD, HSC.
DEPUTY COMMISSION SECRETARY
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Copy to:

The County Commissioner
The County Director of Education
Murang'a County.

APPENDIX 9: RESEARCH AUTHORIZATION LETTER

MINISTRY OF EDUCATION SCIENCE AND TECHNOLOGY

Telegrams: "SCHOOLING", Murang'a
Telephone: Murang'a 060-2030227
When replying please quote

REPUBLIC OF KENYA

COUNTY DIRECTOR OF EDUCATION
MURANG'A COUNTY
P.O.BOX 118 - 10200
MURANG'A

REF: MGA/CTY/GEN/64/VOL. I/22 **1st October, 2013**

Ann Nyambura Maina,
Masai Mara University,
P.O. Box 861-20500.
NAROK.

RE: RESEARCH AUTHORIZATION

The County Education Office is in receipt of your request for authority to carry on research "***Relationship between strategic management practices and students' performance at Kenya Certificate of Secondary Education in Murang'a County, Kenya.***"

Authority is hereby granted to conduct the research in **Murang'a County** for the period ending **31st December, 2014**.

KARIUKI MWANGI
FOR: COUNTY DIRECTOR OF EDUCATION
MURANG'A COUNTY

APPENDIX 10: MAP SHOWING MURANGA COUNTY