INFLUENCE OF STRATEGIC MANAGEMENT PRACTICES ON STUDENTS' ACADEMIC PERFORMANCE IN SECONDARY SCHOOLS IN MAKUENI, KENYA.

By

Mwaura Harun Kamau

This dissertation is submitted in partial fulfillment of the requirements for the award of a Master Degree of Business Administration (MBA) from St. Paul's University.

May 2019

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May 2019

DECLARATION

This dissertation is a product of own work and not because of anything done in collaboration. It has not been previously presented to any other institution. I agree that this dissertation may be available for reference and photocopying at the discretion of the college.

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Supervisors' report

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Thanks to God for His immeasurable grace and enablement. Sincere gratitude to my family for standing with me through the time of writing the dissertation.

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ABSTRACT

This study aimed at finding out the influence of strategic management practices on students' academic performance in secondary schools in Kenya. Strategic management practices are a set of activities designed to bring about that desired superior performance. In school management, strategic practices are geared towards improvement of learning abilities that leads to better results in national examinations. Although studies have been carried out to link various internal and external factors to academic performance in secondary schools, few studies have been done on influence of strategic management practices key in improvement of academic performance. This study aimed at finding out the influence of leadership behaviour of principals, quality management practices, and adoption of innovations to academic performance. The study was carried out in Makueni Sub-county. The study targeted principals and teachers. A total of 17 Principals, and 72 teachers responded representing about 67.93% of the targeted sample population. Descriptive research was used with stratified sampling being adopted to ensure that schools at all levels were well captured in the study. Primary data was collected by use of closed ended questionnaires. Secondary data was obtained from the ministry of education offices. Quantitative data was analyzed using descriptive statistics and correlations done using Pearson's moment correlation coefficient to establish if there existed a relationship between the independent and the dependent variables. The analyzed data was presented using tables, pie charts and bar charts. Among the findings, it was realized that there existed a correlation between leadership behaviour of principals, quality improvement practices designed by schools and integration of ICT and innovation in teaching. The responses from teachers showed positive correlations in all the categories. However, responses from principals showed low or negative correlations probably due to the tendency of principals self-rating themselves highly. In addition it was realized that extra contact time with students, remedial teaching and more practical work in sciences were among the three top strategies that enhance improvement of academic performance. The research recommends that the government train all school administrators on strategic management and leadership skills. In addition, since entry behaviour into secondary schools correlates with performance at KCSE, it is important to gauge performance not by use of KCSE mean only but also by use of value added progress. The researcher also recommends strengthening the use of practices such taking care of students' needs, remedial teaching and continuous testing to enhance ability of schools to improve academic performance.

TABLE OF CONTENTS

Content Page
DECLARATION iii
SUPERVISORS REPORT ..... **Error! Bookmark not defined.**
ACKNOWLEDGEMENT. iv
ABSTRACT vi
TABLE OF CONTENTS vii
LIST OF TABLES x
LIST OF FIGURES xi
DEFINITION OF OPERATIONAL TERMS xii
ABBREVIATION OF ACRONYMS. xiii
CHAPTER ONE: INTRODUCTION 1
1.1. Background of the study 1
1.1.1 Strategic management practices 1
1.1.2 Leadership 2
1.1.3 Quality improvement practices 2
1.1.4 Innovations 3
1.1.5 Strategic management practices and academic performance in secondary schools. 3
1.1.6 Strategic management in public sector 4
1.1.7 Strategic management of secondary schools 5
1.1.8 Academic performance in Kenyan secondary schools 7
1.2 Problem Statement 8
1.3 Purpose of the study 9
1.4 Research Objectives 9
1.4.1 General Research Objective 9
1.4.2 Specific Objectives 10
1.5 Research Questions 10
1.6 Justification of the Study 10
1.7 Scope of the Study 10
1.8 Assumptions of the Study 11
1.9 Significance of the study 11
1.10 Limitations of Study 11
1.11 Delimitations of the Study 11
CHAPTER TWO: LITERATURE REVIEW 12
2.1 Introduction 12
2.2 Theoretical review 12
2.2.1 Capital Theory of School Effectiveness and Improvement 12
2.2.2 Strategic thinking model 14
2.2.3 Deming's theory on total quality management 14
2.2.4 Behavioural theory of leadership 16
2.3 Empirical review 17
2.3.1 Leadership behaviour 17
2.3.2 Establishment of quality improvement practices 19
2.3.3 Creativity and innovations 19
2.3.4. Strategic management practices and School academic performance 20
2.4 Summary of literature review. 22
2.5 Conceptual framework 23

2.6 Research gap 23
CHAPTER THREE: RESEARCH METHODOLOGY 26
3.1 Introduction 26
3.2 Research design 26
3.3 Target population 26
3.4 Sampling design 27
3.5 Sample population 28
3.6 Data collection Instruments 29
3.6.1 Principal's questionnaire 29
3.6.2 Teacher's questionnaire 30
3.6.3 Validity of the instrument 30
3.6.4 Reliability of the instrument 30
3.6.5 Secondary data 31
3.7 Data analysis and presentation 32
3.8 Research ethics 32
CHAPTER 4: RESULTS AND DISCUSSION 33
4.1 Introduction 33
4.2 Instrument return 33
4.3 Demographic data of respondents. 34
4.3.1 Gender of respondents 34
4.3.2 Year of service of respondents 34
4.3.3 Qualification of principals 36
4.3.4 School academic performance 38
4.3.5 Resources available in schools 45
4.4 Academic improvement strategies 48
4.5 Extent to which principals exhibit initiative and considerate behaviours 51
4.5.1 Initiative behaviour 52
4.5.2 Considerate behaviour 54
4.6. Extent to which schools have adopted quality improvement practices 56
4.7 Extent to which schools have adopted innovations and ICT integration 58
CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 63
5.1 Introduction 63
5.2 Summary of the study 63
5.2.1 School academic performance. 63
5.2.2 Leadership behaviour of principals 64
5.2.3 Quality improvement practices 65
5.2.4 Adoption of ICT and innovations 65
5.3 Conclusions 66
5.4. Recommendations 67
5.5 Suggestions for further studies 68
REFERENCES 69
APPENDICES 74
Appendix I: Questionnaire to the principal 74
Appendix II: Teachers' questionnaire 79
Appendix III: Research budget 85
Appendix IV: Copy of NACOSTI permit 86
Appendix V: Authorization letter from County education office 87
Appendix VI: NACOSTI Research authorization letter 88
Appendix VI: Authorization letter from ministry of interior 89

LIST OF TABLES

Table Page
Table 1.1: K.C.S.E Analysis for Makueni Sub-county in K.C.S.E 2017 8
Table 3.1: Target population 27
Table 3.2: Sample population.....29
Table 3.3: Reliability (Cronbach's Alpha) coefficients by respondents and section……...31
Table 4.1: Respondents by categories..... 33
Table 4.2: Gender of respondents..... 34
Table 4.3:Years of service of respondents……..... 35
Table 4.4: Qualification of principals……..……37
Table 4.5: Average cutoff mean compared with average KCSE mean 2016 and 2017…… ……..……...39
Table 4.6: Average cutoff mean in school categories compared with their average KCSE mean for 2016 and 2017..... 39
Table 4.7: Pearson correlation analysis on schools' cut off marks and performance in KCSE …….....41
Table 4.8: Pearson correlation analysis on KCSE performance and years of service of principals…….....41
Table 4.9: Pearson correlation coefficient for principals responses on performance……45
Table 4.10 Pearson Correlation coefficient for teachers responses……..45

Table 4:11 Resources available in schools……...46
Table 4.12 Pearson Correlation coefficients for availability of resources and performance ……47
Table 4.13: Pearson correlation analysis on KCSE performance and average perception of principal's on academic improvement strategies……..50
Table 4.14: Mean, standard deviation and Pearson correlation analysis on perception of principals and KCSE performance ……..61
Table 4.15: Mean, standard deviation and Pearson correlation analysis on perception of teachers and KCSE performance……...…….62

LIST OF FIGURES

Figure Page
Figure 2.1: Conceptual framework……..……..…..24
Figure 4.1: Years of service of teachers.…….....36
Figure 4.2: Teachers' professional qualification…….....38
Figure 4.3: School output by category…….....39
Figure 4.4: Is the school mean a good measure of academic performance…….42
Figure 4.5: Responses on whether performance is dependent on entry behaviour... 43
Figure 4.6: perception on whether lack of resources hinders good academic performance in schools…….....47
Figure 4.7: Ranking of academic improvement strategies ……..……...49
Figure 4.8: perception on whether school devised strategies drives academic performance…….…51
Figure 4.9: Rating of principals' initiative behaviour by self and by teachers……....52
Figure 4.10: Principal's self-rating on initiative behaviour per category…….…...53
Figure 4.11: Rating of principals on considerate behaviour by self and by teachers…….……..…….54
Figure 4.12: Rating of principals on considerate behaviour per school category…....55
Figure 4.13: perception on adoption of quality improvement practices in schools…….…57
Figure 4.14: perception on adoption of quality improvement practices in schools per school category…….57
Figure 4.15: Perception of adoption of innovation and ICT integration in schools….59
Figure 4.16: perception of adoption of innovation and ICT integration per school category……...…..60

DEFINITION OF OPERATIONAL TERMS

Entry behaviour:	- Performance of a child entering form one. This is determined by the marks that the child scored at K.C.P.E
Firm:	- An organization or an institution. In this study the firm would still refer to a school as an institution, (Rothaermel ,2013).
Principal:	- The head teacher in a secondary school in Kenya.
Public institution:	- A not-for-profit organization owned by the government. (Crowther & Sahla, 2011).
Public school:	- A school that is solely owned by the government (Crowther & Sahla, 2011).
Strategic practices	- A set of activities designed to bring about superior performance in an organization(Ritson, 2017)
Strategy:	- A pattern of activities addressing the long term goals of an organization that will enhance attainment of a competitive advantage (Rothaermel, 2017).

ABBREVIATION OF ACRONYMS.

I.C.T:	Information and Communication Technology
K.C.P.E:	Kenya Certificate of Primary Education
K.C.S.E:	Kenya Certificate of Secondary Education
K.E.S.I:	Kenya Education Staff Institute
K.N.E.C:	Kenya National Examinations Council
K.N.U.T:	Kenya National Union of Teachers
K.U.P.P.E.T:	Kenya Post Primary Education Teachers
M.O.E:	Ministry of Education
N.C.S.T:	National Council of Science and Technology
N.P.M :	New Public Management
O.E.C.D:	Organization of Economic Cooperation and Development
P.O.Y.A:	Principal of the Year
SPSS:	Statistical Package for Social Science
T.O.Y.A:	Teacher of the Year
T.S.C:	Teachers Service Commission
T.Q.M:	Total quality management

CHAPTER ONE: INTRODUCTION

This chapter will provide information on the background of the study, the problem statement, purpose, objective, research questions, scope of the research, justification and assumptions in the course of carrying out the of the research.

1.1. Background of the study

The desire to perform better than our competitors applies to every aspect of our lives (Rothaermel, 2013). The world is changing; resources are becoming scarce, while their demand is rapidly increasing. Burns (2013) states that the major themes in management running this new age of uncertainty are complexity and change. Small changes tend to be amplified in highly connected systems. Actions in one part of the market can have unexpected and rapid consequence in another part, and not even the sovereign states seem to be able to control this. Bonn (2001) adds that managers in this current dispensation must search for new approaches, and envision better ways of doing things.

Rothaermel (2013) defines strategy as planned and realized set of actions that a firm takes to achieve its goals. Porter (1985) defined strategy as the plan that puts an organization to a superior performance called a competitive advantage. In this regard, adaptability is becoming a key prerequisite for firms seeking to survive, grow and succeed in today's fast changing business environment.

1.1.1 Strategic management practices

The continuous change in the external environment has made strategic management be very important in pursuit for excellent performance in firms (Pearce & Robinson 2009), which is the main goal of every organisation (Okwako, 2013). To achieve a superior performance that Barney (1991) calls a competitive advantage, strategic management practices are formulated and their success determine the effectiveness and efficiency in which objectives set are achieved.

Among the strategic management practices adopted by firms are formulation of clear vision and mission that rests on the leaders, analysis of the situation, laying down clear objectives and clear guidelines on implementation, evaluation and control (Pearce &

Robinson 2009). Therefore effective leadership structures, quality improvement practices, creativity and innovation, change management, staff motivation practices and human resource management practices form a key component in strategic management (Okwako, 2013). In schools, Ibrahim and Orodho (2014) argued that academic performance of students is influenced not only by learner's abilities but also significantly by the head teacher's, management abilities and effectiveness of their systems. It is therefore important for managers in all schools to adopt practices that will enhance academic performance. Leadership, quality improvement practices, adoption of technology and innovations are becoming some of the key ingredients in driving strategic agenda in firms (Ruinge & Kimani, 2015)

1.1.2 Leadership

Effective leadership is essential when implementing school improvement initiatives (Ndiritu, 2012). Leaders can be identified by their capacity to affect people's lives , their ability to handle difficult situations and their ability to influence their subordinates (Mwangi, 2013). Leadership is an important managerial factor in any firm. The success or failure of any organization depends largely on the quality of its leaders in their ability to mobilize all the resources to achieve set goals.

A school like any other organization requires an effective leader. The conduct of these leaders when carrying out various activities brings about leadership behaviour (Ndiritu 2012). In this modern age, leaders in firms are finding themselves with an enormous task of defining, reinforcing and clarifying actions and beliefs that build a culture that will enhance development of a superior performance (Seah, Hsieh & Huang, 2014).

1.1.3 Quality improvement practices

In formulation of strategic practices, quality improvement has become a key component of any strategy. Above providing a vision as leaders, top managers are forced to use total quality management practices to emphasize quality and set quality goals. The managers have to come up with activities that deploy resources to programs that bring about greater customer satisfaction, less wastage, increased total productivity, reduced costs and finally

improved profitability (Ruinge and Kimani, 2015). Managers have come to realize that there exists a relationship between quality management practices and firms' performance.

1.1.4 Innovations

Burns (2013) states that the major themes in management running this new age of uncertainty are complexity and change. Bonn (2001) adds that managers in this current dispensation must search for new approaches, and envision better ways of doing things. Ndiritu (2012) adds that in modern day management leaders must possess change oriented behaviour. This consists of scanning and interpreting external events, articulating an attractive vision leading to proposing, of innovative programs. This will enable a firm to respond to changes in its external environment in pursuit of a desired competitive advantage (Minyu 2010).

1.1.5 Strategic management practices and academic performance in secondary schools.

Performance is a dependent variable. It is determined by effectiveness; that takes into account the extent to which requirements are met, and efficiency; that measures how economical the resources were allocated to bring about customer satisfaction, (Lawrence, 1999). Therefore, managers must seek to identify variables that seek to produce changes in performance. The variables that drive performance are anchored in the strategic management practices and their continued use determines the extent to which objectives are attained. In a school setting performance is measured by learner's performance during national examinations, the school discipline, schools culture, financial stability and excellence in co-curricular activities, (Okwako 2013).

The extent to which formulated objectives are achieved brings about performance (Pearce & Robinson 2009). School management influences how students learn and how prudent resources availed are utilized to enhance better academic performance. Focus on customer satisfaction is therefore critical especially in terms of meeting students' needs,

having quality academic improvement programs and managing changes in learning requirements, (Ruinge & Kimani 2015).

1.1.6 Strategic management in public sector

Governments in the past few decades came up with reforms in the way they carry out their activities to address the impact of their investments to the social wellbeing of their citizens. According to Ploom and Hadma (2013), new public management (NPM) became the leading philosophy of such reforms in most of the countries. NPM encourages the public sector to adopt private sector management techniques and develop strategic management practices such as performance measurements and performance management methods for the provision of public sector services. Nowadays, most of the countries under the organization of economic cooperation and development (OECD) are assessing the performance of public programs and services using this model (Ploom & Hadma 2013).

In 1950, Japan was grappling with the aftermath of World War II. Most industries in Japan were facing a bad reputation from production of shoddy and cheap goods. The global market was demanding higher quality goods and had vowed to keep off Japanese 'junks'. It is at this point that lectures done by American statisticians Deming and Duran provided an impetus to improve quality (Anderson, 1995). The concept that was later referred to us total quality management bore fruits propelling Japan to greater heights of prosperity in the decades that followed. This same drive is evident in many organizations today.

Lunenberg (2010) points out that this idea was not restricted to the business sector only but was adopted into the public sector including the education system. Today as in those earlier days, many nations are realizing the necessity for more efficient and equitable resource allocation with a clear orientation of monitoring results (World Bank, 2012). Efficient and equitable resource allocation is dependent on the decisions that managers make in a firm (Ritson, 2017). This implies that before a performance can be realized strategies are supposed to have been set. Therefore, a competitive advantage will not be

brought about by availability of resources in an organization but by a set of well-organized strategic activities. In this way performance will grow out of an entire system of activities (Minyu, 2010).

According to the Boston Consulting Group findings, it is organisational and people capabilities that drive performance ensuring that organisations attain a sustainable competitive advantage (Bhalla, Caye, Dyer, Dymond, & Orlander, 2011). This according to Lawrence (1999), is a shift from the conventional way of strategic planning where, identification of strategies is programmed, to a system that utilises intuition and creativity. This brings in a practice of strategic thinking that ensures there are innovations and creative ways of solving problems in a firm (Bhalla et al, 2011).

1.1.7 Strategic management of secondary schools

In the United Kingdom, public servants manage almost 40% of the national spending. They run highly complex institutions that affect millions of citizens (Squire & Ivor, 2016). However, it has been noted that spending and investment decisions made by public sector managers in the past decades provided far much lower returns compared to those made by their counterparts in the private sector. School inspectors in the UK are now being asked to consider the overall effectiveness of the governing body in relation to its strategic direction for improving educational quality. The pressure to reform governance arrangements in schools arise from dissatisfaction with school overall performance (Connolly & Chris , 2011).

In the USA after thorough study of successes made in Japan, new ways of managing institutions were adopted across all the sectors from business, government offices, hospitals, social organizations and even in school management. Schools realized that they would no longer lean on the traditional methods of management that emphasized on input and output. Schools started focusing on practices that could slowly bring improvement in the performance. This realization started to entrench a culture of ensuring that there is efficiency and effectiveness in school programs (Bonstingl, 1992).

In Africa, the main purpose of secondary education has been to prepare students for higher education. However, with increased changes in global trends and strong desire by African countries to achieve middle-income status, it is becoming evident that secondary school education has to be strategically designed (Joshi, Rajendra & Andrriaan, 2013). Under its 20:2020 development plan, Nigeria has made milestones to become Africa's largest economy. The country has understood that to maintain vibrant economic growth it must put more investment in human development thus making education one of the main pillars supporting the nation's long-term development plan. Nigeria has therefore established performance agreements with school managers to ensure accountability and to make sure education activities are done efficiently and effectively (World Bank, 2015).

Ethiopia on the other hand, is one of the fastest growing economies in Sub-Saharan Africa. Ethiopia has focused on secondary education reforms particularly in the areas of curriculum, governance, management and financing (Joshi, Rajendra, & Andrriaan, 2013). In East Africa, Tanzania has based its reforms on the understanding that principals must strive to meet the demands of a wide range of interested parties whose satisfaction must be assured if the service offered is to be considered credible (Komba, 2017). Tanzania has therefore instituted reforms in education management to enhance realization of its goals.

In Kenya under the vision 2030, the nation promises to transform itself into a middle-income economy by year 2030 and thus ensure a shared prosperity and eradication of poverty. Although vision 2030 highlights investment in human development, public spending in education, has not guaranteed the much-desired outcomes. The Kenyan government spends roughly a third of its recurrent expenditure on education. It is therefore expected that the allocation of these resources would bring about the much-needed improved academic performance and increased outcomes to the nation (Martin & Pimhidzai , 2013). This brings the need for strategic management in our schools.

1.1.8 Academic performance in Kenyan secondary schools

Over 80% of students seating for the national examinations every year do not obtain the minimum entry requirement to the university (Ndiritu, 2012). There is a continued decline in performance of many secondary schools with some who were well known as the best performing national schools going down in performance to unimaginable levels. A survey has shown that a majority of schools with adequate facilities and good teachers performed dismally even after getting the same resources and student inputs with their peers (Lydiah & Nasongo , 2009).

The K.C.S.E results for 2016 and 2017 in the entire nation revealed a declining trend in performance of secondary school students. In 2017, 615,773 students sat for the national exams. Out of these only 70,073 qualified to join the university by attaining a mean grade of C+ and above. This represents 11.38% of the total candidature (David, 2017). In 2016 out of 577,253 candidates 88,929 qualified to join university representing 15.4% of the candidature. These two years therefore show an alarming drop in performance compared to what was being witnessed in the previous years.

In 2015 for instance, about 165,766 students representing about 31.52% of the 522,870 candidature scored C+ and above (MyGov, 2016). This is in contrast with the 15.04 % observed in 2016. This is attributed to the reforms that the ministry of education carried in 2016 to impove credibility of the national examinations. In 2015 for instance 5,000 students had their results cancelled due to examination irregularities. According to a report given by the standard newspaper of 3rd March 2016, the affected students were spread all over the counties of Kenya with only two counties not involved in the scam.

In Makueni Sub-County only 540 students out of 3,135 candidates qualified to join the university representing 17.22% of the total candidature in 2017 (MOE, 2017). Makueni Sub-county has 46 secondary schools and 103 primary schools. However academic

performance in Makueni sub-county as well as in the other sub-counties in general show an alarming trend as shown in Table 1.1.

Table 1.1 : K.C.S.E Analysis for Makueni SubCounty in K.C.S.E 2017.

Category	Schools No	%	Output to university C+ and above No.	%	Poor Grades D, D- and E No.	%
Extra-county schools	5	10.86	409	75.74	7	0.46
County schools	6	13.04	102	18.88	161	10.69
Sub-county schools	35	76.08	29	5.37	1337	88.83
Totals	46	100	540	100	1505	100

Source: SCDE Makueni sub-county

From the table, 88.83% of students in the sub-county schools category had a mean grade of D and below. The national average of students scoring D and below in that period was about 57% (Daily Nation December 2017). This is in contrast with only 0.46 % and 10.69% of students in county and extra-county schools who had a mean of D and below. While carrying out a study in Embu North sub-county, Nzoka and Orodho (2014) found out that 24 public secondary schools had an average of D from 2007-2011. In the light of these observations the role that school management plays in driving performance in schools need to be established.

1.2 Problem Statement

According to the World Bank report of 2017, countries all over the world have increased budgetary allocation to education with a realization that education is an important ingredient to sustainable development and poverty eradication (World Bank 2017). From independence, Kenya endeavored to bring about economic development by promoting quality education. The country required skilled human resource to drive its economic agenda (Ibrahim and Orodho, 2014). For this to happen the country require sound management practices that ensure prudent allocation of resources to bring about the desired results.

The management of resources allocated to the education sector is placed on the hands of school managers with an expectation that these managers will utilize resources given to bring about desired academic performance (Lydia and Nasongo 2015). Academic Performance is demonstrated by results obtained from national examinations. The role of educational administrators therefore is the planning, directing, organizing and controlling all matters pertaining to education to ensure that desired academic results are obtained (Ibrahim & Orodho, 2014).

However, over the years it has been observed that though resources were allocated to secondary schools in Kenya the desired results were not being realized. Schools that receive more resources in terms of teachers and finances compared to national averages do not necessarily perform better. Likewise, some schools receive lower allocation of the same resources but are found to perform relatively well compared to others (World Bank 2017). The issue of resource allocation and performance is a management issue. With the current trend in the world where continuous change in the external environment is demanding formulation of strategic practices to drive firms towards excellent performance (Pearce and Robinson 2009), secondary schools in Kenya need not be left behind. It is therefore important to ascertain the extent to which strategic management practices have been carried out and the impact this has had on academic performance.

1.3 Purpose of the study

The purpose of this study was to establish the influence of strategic management practices on academic performance in secondary schools. The study provided enriching information to school administrators that can assist policy makers to identify areas that need improvement in management of schools to enhance academic performance.

1.4 Research Objectives

1.4.1 General Research Objective

To establish the influence of strategic management practices on academic performance of students in secondary schools

1.4.2 Specific Objectives

a. To find out how the principal's leadership behaviour influences students' academic performance.
b. To establish the relationship between quality improvement practices and students' academic performance.
c. To assess the influence of adoption of technology and innovations on academic performance.

1.5 Research Questions

a. How does a principal's leadership behaviour influence students' academic performance?
b. What is the relationship between implementation of quality improvement practices and academic performance?
c. Does adoption of technology and innovations influence academic performance in secondary schools?

1.6 Justification of the study

The study provided insight on the role that strategic management practices play in academic performance in secondary schools. It aimed at providing answers to the role played by leadership, quality improvement practices and ability in enhancing academic performance. Its findings can form a basis upon which the education stakeholders can assess the contribution of the school managers on academic performance of their students. With education being one of the most important pillars in attainment of vision 2030, it is important to provide important insights that can be used in the future to assist schools improve their academic performance. It is expected that schools that have not adopted best practices can learn from the findings of this research.

1.7 Scope of the study

The study based its work in Makueni sub -County that has 46 secondary schools that are a combination of national, extra-county, county schools, and sub-county schools. In these

schools, the study focused on responses from principals as administrators and teachers as the curriculum implementers.

1.8 Assumptions of the Study

The basic assumption of this study was that all the stakeholders in a school were familiar with various aspects that contribute to school academic performance. The researcher also assumed that the respondents would provide information on performance related matters in their schools. Similarly, the researcher assumed that national examination results were reliable parameters for measuring students' achievement at the secondary school level, and that all students in the sub-county used the same curriculum.

1.9 Significance of the study

The study is significant to the field of education in that it builds upon the acquired information to bring about the importance of strategic management in enhancing academic performance in secondary schools. The outcome of the study can assist schools and the ministry of education to understand influence that strategic management practices have on academic performance. This study will also assist the Ministry officials with important information that they can use in training and development of school administrators about academic performance.

1.10 Limitations of Study

The study covered only three variables in strategic management that the researcher felt were critical to academic performance. These are leadership behavior of the principal, quality improvement practices and adoption of technology and innovations. Limitations of this study also arise from the fact that some teachers and principals felt uncomfortable providing information on what they do in the school concerning academic performance. Some did not fill the questionnaires while others delegated the task to subordinates. Some returned questionnaires that were partially filled.

1.11 Delimitations of the Study

The study was confined to Makueni sub-county targeting public secondary school teachers and principals only. This was delimitation to the study because the findings may not be a true reflection of the views of all teachers in the whole county.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter examines various theories that supported this study. It also reviews literature on various strategic management practices and academic performance. Finally, the chapter examines the correlation between strategic management practices and academic performance in secondary schools.

2.2 Theoretical literature review

The study was based on the capital theory of school effectiveness and improvement. It was then supported by the strategic thinking model, the behavioral theory of leadership and Deming's theory of total quality management.

2.2.1 Capital Theory of School Effectiveness and Improvement

This theory was derived by Hargreaves (2001) who stated that an effective school mobilizes its intellectual capital (especially its capacity to create and transfer knowledge) and its social capital (especially its capacity to generate trust and sustained networks) to achieve the desired educational outcomes, with leverage strategies and innovative practices. An improving school therefore increases its performance by use of higher leverage strategies based on evidence of 'what works'.

The theory bases its work on four main concepts that form school effectiveness and improvement. These are outcomes, leverage, intellectual capital, and social capital (Hargreaves, 2001). The theory advocates for the concept of a transformative school, which has an ability to provide services that address students' and teachers' complex and multifaceted needs (Galindo , Sanders & Abel, 2017).

According to this theory, outcomes of a school represent both the extent to which it meets its goals in both moral outcomes and cognitive outcomes (Hargreaves, 2001). In this case, the theory suggests that schools are said to be effective by the measure of how the learners develop their cognitive and moral skills. Intellectual capital is defined as the sum

of knowledge and experience the school stakeholders possess and deploy to achieve its goals, and, how school improvement processes brings about student academic achievement across all learning areas (Hargreaves, 2001). In this case, it addresses the important role that principals play in carrying out strategic management practices that ensure the school does what it is supposed to do.

Social capital on the other hand refers to the structural and cultural components of the organization. Galindo, Sanders and Abel (2017) refer to social capital as the bonding, the bridging, and the linking of different individuals in an organisation. Minckler (2014) defines social capital as the resources embedded in a social structure that are accessed in purposive actions . Nzoka and Orodho (2014) describes it as professional relationships of trust and respect, dynamics within school's parallel leadership and student wellbeing. High levels of social capital strengthen its intellectual capital through sharing (Hargreaves, 2001). This concept supported the variable on leadership behaviour since these relationships are building by how the principal as the leader interacts and allow interactions between various groups in the school.

The theory according to Nzoka and Orodho (2014) is applicable in this study because outcomes in our case is the dependent variable that is measured by the individual student performance and their value added progress in national examinations. According to Hargreaves (2001), cognitive outcomes are measured by performance in national examinations. The theory also supported the independent variable of strategic management practices. Nzoka and Orodho (2014) argue that leverage is the relationship between teacher input and educational output, or changes in students' intellectual and moral state resulting from the teacher's effort. Hargreaves (2001) argues that effective schools concentrate on effective strategies that bring great contribution towards better results with relatively low effort. In this case according to Nzoka and Orodho 2014) outstanding schools use combinations of high leverage strategies. This dimension supported the independent variables of quality improvement practices, leadership and innovation.

2.2.2 Strategic thinking model

Conditions in the 21st century are different from conditions at the turn of the 20th century when modern educational systems were being set up. Therefore, learning and expectations of students in this era require creativity, ingenuity, and critical thinking in addressing the complex issues of a connected world (Hargreaves, 2001). This is supported by the strategic thinking model devised by Minzberg. This model utilises intuition, creativity, exploration and understanding of discontinuities (Minzberg, 1994), to come up with strategies that make a firm respond to a changing environment as it implements its strategies. Using Minzgerg's proposal Liedtka developed a model for strategic thinking. According to Liedkta (1998), a strategic thinker is one who remains open to emerging opportunities. Through this, according to Amitabh and Sahay (2012), the manager is able to create a new source of competitive advantage for the firm.

According to Sande, Wamukoya and Walela (2015), strategic thinking will assist in determining whether schools will come up with new and innovative ways of management and be at different performance level from the rest. The 'being something different' is particularly compelling at this historical moment (Mitchell & Sanckney, 2006). In this study, strategic thinking focused on adoption of innovation and integration of ICT in schools and development of innovative strategies that can improve academic performance. .

2.2.3 Deming's theory on total quality management

According to (Hargreaves (2001) there is a linking between school effectiveness and school improvement. In effective schools teachers look outside their own school for ideas and practices that promote excellence in students and enrich the quality of the professional lives of the teachers themselves. These ideas are a key ingredient in total quality management. Quality has often been cited as the highest competitive priority**,** an issue of strategic importance and survival, and, a means of competitive performance (Anderson, Rungtusanathan & Devaraj, 1995).

Total quality management was proposed by three proponents Deming, Ishikawa, and Juran. The three shared the view that an organization's primary purpose is to stay in business, so that it can promote the stability of the community, generate products and services that are useful to customers, and provide a setting for the satisfaction and growth of organization members (Hackman, 1995).

It represents a bundle of management principles and processes which when properly implemented result in significant improvement in valued organizational goals (Lezotte, 1992). According to Lunenburg (2010), the principles proposed by Deming have been adopted as a basis of achieving excellence in schools. This philosophy provides a framework that can integrate many practices in education such as team teaching, site based management, and cooperative learning and outcome based education. Ngware, Wamukuru and Oderebo (2006) while carrying out a study on total quality management (T.Q.M.) in secondary schools in Kenya observed that T.Q.M., employee empowerment, participative decision making and strategic quality planning are important in provision of quality services hence contribute to improvement of academic performance. These are the foundations of Deming's theory.

According to Lunenburg (2010), the principles of total quality management were based on the assumption that people do the best and constantly improve on the systems in which they work. The theory assumes that organizations that produce quality goods will eventually do better even on traditional measures such as profitability than will organizations that attempt to keep costs low by compromising quality. It also assumes that because senior managers create the organizational systems that determine how products and services are designed and produced, the quality-improvement process must begin with management's own commitment (Hackman, 1998).

While criticizing Deming's 14 principles of total quality management Bonstringl (1992) stated that TQM is not a holy grail. It cannot be viewed as the only thing that can bring

about performance. At the same time, Hackman (1995) felt that total quality management has come to mean different things to different people. There is now such a diversity of things done under the name "total quality" that it has become unclear whether TQM still has an identifiable conceptual core. This means that what one organization does in reference to total quality management differs greatly with what is done in another organization using the same concept. In this study however, the researcher concentrated on the Lezotte (1998) application of Deming's principles on total quality management in schools.

2.2.4 Behavioural theory of leadership

Leadership theories are usually put into three main categories. These are trait theories, behavioral theories and contingency theories. Trait theories postulate that there are inherent characteristics in an individual that makes that individual to be a leader. This differentiates leaders and non-leaders. Behavioral theory on the other hand was formulated to fill in the gaps left by trait theory. It argues that leaders are defined by the way they behave as they lead their subjects in attainment of organizational goals. This theory was derived from studies made by Ohio State, Michigan University, Management grid and Scandinavian studies. The contingency theory on the other hand states that a leader is defined by responses to the situational factors that operate at any specific time. This means a leader's conduct in one particular scenario will be different when the same leader is exposed to a different scenario, Derue S.,Nahrgang J.D.,Wellman N., and Humphrey S. (2011).

This research based its work on the Ohio state university studies. Studies carried out at the Ohio State University had over a thousand dimensions on leadership behaviours as described by employees. They later narrowed down on two dimensions. These were consideration dimension and initiating dimension. A leader operating on the consideration dimension acts in a friendly manner, shows concern to the welfare of the subordinates (Ndiritu, 2012). The initiating dimension refers to how a leader defines

group member's roles, initiates actions, organizes group activities and defines how tasks are to be accomplished by the group (Derue, Nahrgang, Wellman & Humphrey, 2011).

2.3 Empirical literature review

This section describes studies carried out by other scholars on the topic of this study. It will focus on studies made on selected activities in strategic management practices that include leadership, quality improvement practices and the integration of ICT and innovations in school management. It will also focus studies carried out on the dependent variable.

2.3.1 Leadership behaviour

Outstanding leaders have a vision for their organisations , a picture of the future that they share with all members and use it to shape the activities being carried out in the organisation (Awanchukwu , Stanley & Ololube 2015). Leaders' initiative include the principal's organisational strategies, quality improvement strategies and above all skills in cirriculum establishment (Mwangi, 2013).

In addition leaders are strong educators who anchor their work on central issues of teaching, learning and continous improvement of their learners . Through their words and examples leaders in education inspire the whole system by effectively influencing the behaviours , thoughts and feelings of all who are in the school (Awanchukwu , Stanley & Ololube 2015). The extent of success of a school will depend on the extent to which the principal is a leader, a thinker and a decision maker (Lydiah & Nasongo, 2009).

Nyagaka and Odongo (2013) in their research on leadership styles of principals and their influence on academic performance found out that there is a lot of deficiency in leadership styles of principals and this impacts on students academic performance. Ndiritu, (2012) in her study on leadership behaviour and its infuence on academic performance, points out that principal's leadership practices affects the school climate. According to the researcher a positive climate is likely to enhance the environment in which teachers and students work in for improved academic performance. Ndiritu (2012)

in a study on influence of transformational leadership found out that there is a positive correlation between transformational leadership and academic performance. In this case there is a way the leader can connect with his followers and create a working relationship that brings greater results (Mingaine, 2013).

Nyagaka and Odongo (2013) noted that leadership that considers views of subordinates encourages participation and contributions from members, helps them feel relevant and committed to the decision-making process. In this way a manager rather than making all the decisions, seeks to involve other people, thus improving commitment and increasing collaboration (Derue et al, 2011). This leads to better quality decisions and a more successful organization (Amanchukwu et al , 2015). In strengthening this discussion Mwangi (2013) states that principals must involve the teaching staff in their decision making processes if they wish to see improved results.

Leaders high in consideration behaviour form strong connections with their followers. They create connections that result to increased motivation in both followers and leaders themselves (Amanchukwu,Stanley & Nwachukwu, 2015). Leaders in this dimension are transformative in nature (Derue et all, 2011) . According to Ruinge and Kimani (2015), such leaders motivate followers by raising their consciousness about the importance of organizational goals and by inspiring them to transcend their own self-interest for the sake of the organization. Ndiritu (2012) is quick to add that transformational leadership is very appropriate in time of turbulence and change because it leads to organizational improvement and effectiveness.

Ndiritu, (2012) however criticizes transformational leadership stating that personal identification with the leader may result to submission and unquestioning loyalty. This may expose followers to actions they would otherwise not undertake. In this case, if the leaders' motive or ethical standards are poor the followers will end being manipulated.

2.3.2 Establishment of quality improvement practices

In their studies on total quality management and students performance, Ruinge and Kimani (2015) concluded that quality management is a source of enhancing organizational performance through continuous improvement in organizations activities. In this respect, remedial teaching helps to improve general academic performance in students as various obstacles that hinder effective curriculum implementation are removed during remedial teaching.

In addition giving individual attention by handling students' needs creates an enabling environment for learning and performance. Ngware, Wamukuru and Odebero (2006) on the other hand outlined that setting of targets by students, delegation of leadership to teachers, efficient use of remedial teaching to eliminate weaknesess, supervision of syllabus coverage and benchmarking are practices that determine the extent to which quality will be improved in the school.

Mitchell and Sanckney (2016) state that a performing school focuses its activities towards effective student learning. In this respect, effective management in secondary schools in Kenya must embrace practices such as efficient work processes, people systems, open and honest communication, employee empowerment, team building, and performance based management to make sure quality is improved.. (Sande, Walela & Wamukoya(2015).

2.3.3 Creativity and innovations

The world is changing and technology is defining how things should be done to sustain high level of performance (Ocham & Okoth ,2015). According to Awanchukwu et al (2015), leadership is a creative enterprise involving innovation and initiation. It is about looking at the horizon rather than just the bottom line. It is leadership that is supposed to navigate the organisation through change. Kenya vision 2030 and sessional paper of 2015 puts a strong emphasis on the importance of science and technology and innovations. For these to be realised the uptake of ICT and innovations by schools need to be looked at (MOE 2017).

Innovation comes by being different and looking at things at a different persepctive (Mitchell & Sanckney, 2016). According to Mingaine, (2013) the key to this developement will be integration of ICT in schools. While studying this concept Kipsoi, Chang'ach and Sang (2012) found out that students benefit more with analytical, creative, and collaborative power of ICT that enables them to map up and analyze the assumptions present.

Probably the challenges of lack of skills is affecting how principals integrate ICT and allow innovations in their day to day activities (Kipsoi, Chang'ach & Sang 2012). Mingaine (2013) supports this idea by stating that many principals lack competence in ICT skills hence poor integration and use. It is also evident that many schools lack ICT laboratories, and therefore ICT integration has been diffcult, (Kipsoi, Chang'ach & Sang 2012).

2.3.4. Strategic management practices and School academic performance

Many studies have been carried out in the past on what influences academic performance in Kenyan secondary schools. On the influence of school sponsors on school academic performance Mabeya , Ndiku and Njino ,(2012) pointed out that sponsors have limited influence on academic performance since they only inspire learners to do well but are not involved in the actual laying down and implementation of academic strategies.

There was strong evidence from the studies that schools' organizational management greatly influenced student academic outcomes (Lydia & Nasongo 2009). A number of differences in student outcomes in secondary schools correlate with management characteristics of the respective schools. According to Ibrahim and Orodho (2014) success of both secondary schools and students is mainly gauged by their performance in national exams, which is mainly dependent upon environmental and personal factors of students. However, these factors will be significantly influenced by the principal's leadership styles and management effectiveness.

While quoting Kocnahar (1988), Lydia and Nasongo (2013) notes that schools rise to fame or sink to obscurity as 'greater or lesser' the principal in charge is. The authors add that it is not about magnificent buildings but magnificent principals. Mwangi (2013) points out that some schools perform exceptionally well while others perform poorly. However the good performance does not just happen, it is made to happen by good teaching and good leadership. The main role of a principal is to promote academic performance. Whatever therefore will be done in a school will be attributed to the principal (Lydiah & Nasongo , 2009).

Performance management can be defined as a strategic approach to bring about sustainable success in organizations by improving the performance of people and developing of capabilities of both individuals and the teams (Jonyo & Bonn,2017). It has been observed that in schools that have shown good performance or have reversed the trend of poor performance, it is the principal who sets the pace, leads and motivates both pupils and teachers towards performance (Lydiah & Nasongo, 2009). This has been observed in schools posting poor performance and when a new principal is posted, academic performance is dramatically turned around. This dimension according to Jonyo and Bonn (2017) is important in enhancing quality of teaching and ultimately improved performance in the institutions, by building a performance oriented culture with instilled accountability.

Ndiritu (2012) used 2005-2009 KCSE performance to establish how leadership behaviour influences academic performance. KCSE results are therefore used as a measure of determining school's academic performance by considering the overall means of all the students. According to Ruinge and Kimani (2015) students' average mean grade for the years under review are considered to reflect schools performance. At the same time, students scoring above C+ reflect the output of the school by showing the number of students a given school takes to the university. A mean grade of C+ is the minimum

requirement for entry to Kenyan universities and C is the minimum entry requirement to a diploma college.

2.4 Summary of literature review.

The theoretical review has based its work on theories that support the dependent and the independent variables. The capital theory of school effectiveness and improvement has provided indicators that can be used to ascertain whether the school is performing or not. These include the measure of the outcomes, the knowledge level in the school and the leverage strategies (Hargreaves 2001).

The leadership behaviour dimensions revealed different ways in which leaders carry out their functions in influencing performance of their institutions. According to Derue et al (2011), initiating structures describe behaviors that are task oriented in nature as leaders make clear what is expected in terms of task performance and the rewards for meeting those expectations. On the other hand, leaders high on consideration show people oriented leadership. The strategic thinking perspective according to Liedkta (1998) enables an organisation to create new competitive advantages by appropriately responding to a changing environment.

Emperical literature review has given insight on various researches carried out in this field. Mwangi (2013) points out that leaders are those with ability to handle difficult situations and influence their followers to attain the organisational goals. Awanchukwu et al (2015) calls them strong educators who lead by example.

Ruinge and Kimani (2015) discussed the importane of quality management practices in schools while Ngware et al (2006) gives an outline of important quality improvement practices that a school should have. Awanchukwu et al (2015) emphasises on the need for benchmarking while Nzoka and Orodho (2014) advocates for good testing methods and meeting of students needs. In addition , Kipsoi et al (2012) points out that students benefit more through collaborative power of ICT .

Strategic managers have one main focus of leading their firms to attain a superior performance above their rivals. Jonyo and Bonn (2017) emphasizes that for performance to be attained , then a strategic approach must be used. However, Ibrahim and Orodho (2014) have a view that students ability and the school environment determines performance. Lydia and Nasongo (2009) points that this notwithstanding, the principal of the time determines a lot how the students will perform. Mwangi (2013) supports this argument stating that performance does not just happen but it is made to happen.

2.5 Conceptual framework

The conceptual framework focuses on three independent variables in our study. These are the principal's leadership behaviour, quality improvement practices and the integration of ICT and innovations in learning processes. The dependent variable is the school's academic performance measured by outcome or the academic performance in relation to the K.C.S.E mean and the number of students qualifying to go to public universities. These areas give a more objective view of academic performance in a school.

2.6 Research gap

The literature review has shown how wide the issue of academic performance in Kenyan secondary schools have been studied. Ndiritu (2012), Mwangi (2013) emphasised on the importane of leadership. However the studies revealed the presence of leadership behaviours but did not link them to actual performance of students.

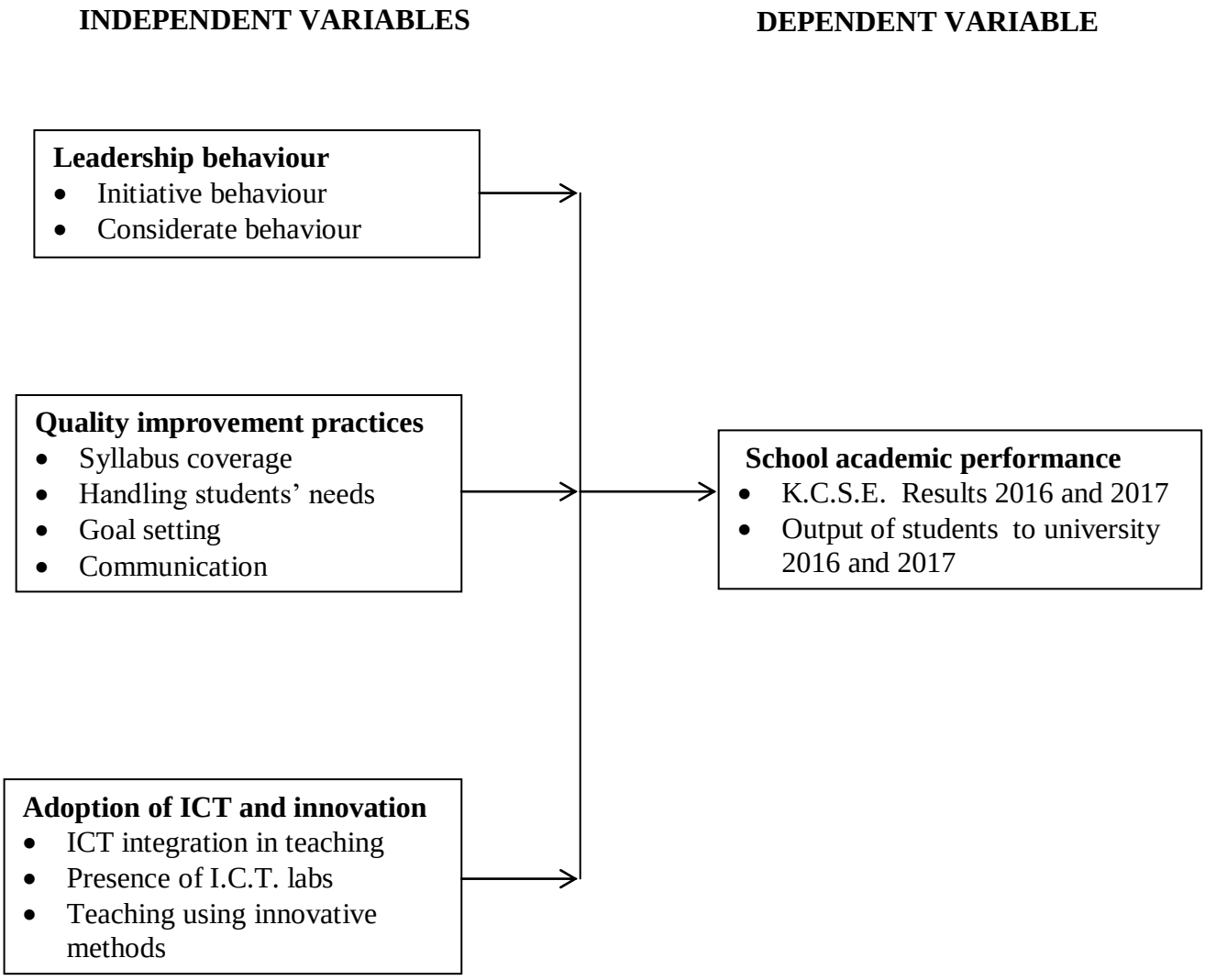


Figure 2.1: Conceptual framework

Source: (Author, 2019)

Nzoka and Orodho (2014) on their part dwelt on school performance and school management while Lydia and Nasongo (2009) expounded on the role principals play in student performance. All these studies did not address on the strategic management practices geared towards attainment of a superior performance. Most of the studies tried to find out the presence of these factors but not on their influence on academic performance.

In most of the studies, issues of the school coming up with new and innovative ways of dealing with performance were not discussed. Some studies mentioned importance of integrating ICT in teaching but no link was established between the ICT and academic performance. The studies therefore failed to focus on the actual practices that contribute to academic performance; practices that have direct influence on what learners do and how they perform. This is the gap that this research aims to fill.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

Research methodology refers to the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them (Kothari, 2009). This chapter therefore describes the methodology that was used in this study. It describes the research design, which gives the plan on the population studied, the sampling techniques, data collection methods, data collection tools, and data analysis method used.

3.2 Research design

Research design according to Kothari (2009) is an arrangement of conditions of collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is a structure within which research was conducted. (Sekaran (2003)

This study used a descriptive survey design. According to Kothari (2009), Sekaran (2003), a descriptive research design, tries to find out characteristics of a group, individual or an institution with clear definition of the population, what is to be measured and what parameters to use. This design allows quick data collection because it uses a large population and a large sample can be obtained making the results more reliable

3.3 Target population

Population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran, 2003). The area of study was Makueni Sub-county. The Sub-county has 46 schools out of which two are private schools and the rest are public schools. The study focused only on the 44 public schools. Out of the 44 schools, one is a national school, four are Extra-county schools, six are County schools and 33 are Sub-county schools. The schools have 44 principals, and 624 teachers as shown in Table 3.1. The target population was the principals and the teachers.

Table 3.1: Target population

Classification	Number of schools	Number of Principals	No of teachers
National and Extra-county schools	5	5	155
County schools	6	6	106
Sub-County schools	33	33	333
TOTAL	44	44	624

Source: SCDE Makueni Sub-county

3.4 Sampling design

According to Kothari (2009), all items in a field of study constitute a whole universe or population, which when large is impractical to study each of its units. It is therefore imperative that data be obtained from a part of the total population that is called a sample population. The respondents in this small part are called the sample and they represent the entire population. The procedure of getting the sample is called the sampling technique. A sample design therefore describes the procedure to be used to obtain a sample (Kothari, 2009).

Descriptive research works well with a probability sampling design (Kothari, 2009). This design gives every item in the population equal chance to be included in the sample. It eliminates errors and biases that are caused by non- probability sampling. In this research, stratified sampling was adopted.

The population was therefore first stratified into different strata while in each stratum simple random sampling was done. The formation of the strata was done by observing homogeneity in the schools. The researcher realized that 27 schools in the Sub-County would form a good representative sample. This accounted to 60% of the schools in the

Sub-county. According to Kothari (2012), if the sample size is increased then precision can also be improved hence providing information that is more accurate.

3.5 Sample population

According to Mugenda and Mugenda (2003), when carrying out descriptive studies, 10% of the target population is a sufficient sample size to carry out a study. In this respect from our target population of 624, a sample above 63 respondents was still sufficient. However Kothari (2009) argues that the larger the sample the greater the accuracy of the findings. The researcher therefore decided to obtain a larger sample of about 17% amounting to 108 respondents. These respondents would therefore be provided by 27 schools amounting to 60% of the total number of schools. In this way 60% of schools in each strata would be sampled each school giving four respondents. Since the principal is only one per school, all the principals would be respondents while the other three would be teachers selected randomly.

According to Sekaran (2003), once the population has been stratified in some meaningful way, a sample of members from each stratum can be drawn using a simple random sampling or a systematic sampling procedure. The subjects drawn from each stratum can be either proportionate is disproportionate. The researcher decided to use a proportionate method since all teachers in a school work in similar environment hence their views on issues in the school may not have great disparity.

The schools were first divided into their respective groups and each given a code. In each stratum, 60% of the schools were picked randomly as follows: three from Extra-county school, 4 county schools and 20 Sub-county schools. The sampling design is shown in table 3.2.

Table 3.2 Sample population

School category	No in the Sub-county	Sampled schools	% Sampled	Principals	Teachers	Totals
Extra-county schools	5	3	60.00	3	9	12
County schools	6	4	66.67	4	12	16
Sub-county schools	33	20	60.61	20	60	80
TOTAL	44	27	61.36	27	81	108

(Source: Author)

The 108 respondents represented about 17.30% of the target population.

3.6 Data collection Instruments

According to Kothari (2009), descriptive research does well with structured tools such as questionnaires with close-ended questions. Data was therefore collected by use of questionnaires. Questionnaires allow a researcher to reach a larger sample within a short time, obtain a more objective response, and allow retention of some form of confidentiality. The questions were close ended along a Likert scale continuum with 1- strongly disagree, 2- disagree, 3- partially disagree, 4- partially agree 5-agree and -6- strongly agree.

Questionnaires were prepared for the principal and for the teachers. The questionnaire was kept short and precise (Kothari, 2009) to increase its success capability. The questions at the same time were arranged in a logical sequence from easy to difficult. This enhanced easy analysis and made respondents to give feedback at ease. Control questions were included to check on the reliability of the information given by respondents.

3.6.1 Principal's questionnaire

The principal's questionnaire had three sections as shown in appendix I. Section A required the principal to give responses on general information. Section B required the

principal to give responses on school details section C required responses on the independent variables.

3.6.2 Teacher's questionnaire

This had two sections as shown in appendix II. Section required responses on the teacher's personal information Sections B required responses on the independent variables. The questionnaires were packed in well-labeled envelopes per school and delivered to the principals by the researcher. Phone calls were made to the principals to check on the progress. In some schools, the questionnaires were partially filled while in others they were completely filled. The questionnaires were then sorted and coded. Those that were not completely filled were discarded. The coding ensured that each school had representation for the principal's responses and teachers responses.

3.6.3 Validity of the instrument

To ensure content validity that Kothari (2009) defines, as the degree to which an instrument measures what it was supposed to measure, the researcher in line with the research questions constructed the questionnaire. Sekaran (2003) states that content validity ensures that the measure includes an adequate and representative set of items that tap the concept. The questionnaires were presented to the supervisors for scrutiny and expert advice. The suggestions obtained from the supervisors were used to refine and improve the questionnaires.

3.6.4 Reliability of the instrument

According to Kothari (2009), an instrument is reliable if it provides consistent results. Reliability measures the degree of accuracy of a tool. Sekaran (2003) define reliability of a measure as the extent to which it is without bias (error free) and hence ensures consistent measurement across time and across the various items in the instrument. Reliability was determined by first piloting the tool before the actual administration was done. Adjustment was then made in the questionnaires before they were released to the main respondents.

After data collection, the reliability of the tool was tested using the Cronbach's Coefficient Alpha. According to (Sekaran, 2003) the Cronbach's Coefficient Alpha tests the consistency of respondents' answers to all the items in a measure. This shows the degree that items are independent measures of the same concept. The Cronbach's Alpha Coefficient for the five main sections of the questionnaire are summarized in Table 3.3

Table 3.3: Reliability (Cronbach's Alpha) coefficients by respondents and section

Section	No of items	Alpha for Principals' questionnaire	Alpha for teachers questionnaire
Academic improvements strategies	17	.89	.79
Initiative behaviour	11	.92	.71
Considerate behaviour	7	.32	.89
Quality improvement practices	23	.71	.59
Integration of ICT and innovations	12	.81	.80

This test helped the researcher to determine the coefficient of reliability whose value vary between 0.00 indicating no reliability to +1.00 indicating perfect reliability. An instrument that has reliability above 0.60 is considered good (Ndiritu, 2012). A low reliability dictates that the results obtained from the tool be rejected. From Table 3.3, it is evident that almost all sections of the tool had high reliability except on the section of considerate behaviour that was administered to the principals.

3.6.5 Secondary data

Secondary data according to Kothari (2009) is data that is already available or has already been collected and analyzed by someone else. The data was obtained from the ministry of education on performance of schools for years 2016 and 2017. The use of secondary data in this study was important in determining the actual academic performance of the schools under investigation. This would eliminate bias that can occur when the same information is sought from respondents.

3.7 Data analysis and presentation

According to Kothari (2009), data analysis involves editing, coding, classification and tabulation of collected data. It involves computation of certain measures along with searching for patterns of relationship that exist among data-groups. A descriptive method of data analysis was used as it involves the study of distributions of responses within a variable (Kothari, 2009).

The data collected was first tabulated in a spreadsheet and checked to ensure that errors of entry were eliminated. The data was then keyed into the S.P.S.S statistical software. Pearson correlations were then generated for the independent and the dependent variables. According to Kothari (2009), correlations are done to determine whether linear relationships exist between various variables in the study.

3.8 Research ethics

The researcher made due considerations of ethical issues because the research involved interaction with people. According to Piper and Simons (2005) many social researchers draw up ethical principles and procedures based on traditional research ethics of duties, rights and analysis of harm and benefit. Others considerations included statements on democratic values of justice, fairness and respect for privacy of persons and public knowledge. The researcher upheld ethical consideration in respect to all respondents. All respondents were respected irrespective of their responses. Confidentiality was upheld with use of codes to replace names and schools where data was being collected.

The researcher applied and obtained a permit from the National Council of Science and Technology (NACOST) to get authority to carry out the research. A copy of the permit is displayed in appendix VI. Permission was also sought from the County director of education Makueni County under whose jurisdiction schools in the area are, to allow the researcher visit schools and collect data. Copies of approval letters are displayed in appendix IV-VI.

CHAPTER 4: RESULTS AND DISCUSSION

4.1 Introduction

This chapter gives information on data analysis, results and discussion of the findings of the study. Questionnaires used as the main tool of data collection provided quantitative data, while the few open ended questions used were supposed to generate qualitative data. However only a few respondents filled the open-ended questions and therefore the qualitative data was ignored in the analysis. Quantitative data was analyzed using descriptive method and analysis presented in form of frequency tables, bar graphs and pie charts. Correlation analysis was done using Pearson moment analysis coefficient. The results from the data analysis provided a basis upon which the researcher made discussions, interpretations, conclusions and recommendations.

4.2 Instrument return

The researcher had targeted and issued questionnaires to 27 principals, and 81 teachers. However only 17 principals and 72 teachers returned their filled questionnaires. Table 4.1 shows respondents by categories.

Table 4.1 Respondents by categories

Category of respondents	No. Targeted	No. of Responded	% respondents	No. of non-respondents	%Non-respondents
Principals	27	17	62.96	10	37.04
Other teachers	81	72	88.89	36	11.11
Totals	108	89	82.41	46	17.59

(Source: Author, 2019)

Those who responded were 82.41 % while those who did not respond were 17.59%. The response from teachers was higher than that of the principals.

4.3 Demographic data of respondents.

In the questionnaire, the researcher had questions that were to provide information on the demography of the respondents. The data included gender, year of service, academic qualification and professional experience of both teachers and principals.

4.3.1 Gender of respondents

Data on demographics by gender of the principals and the teachers was analyzed and presented in a Table.

Table 4.2 Gender of respondents

	Principals		Teachers	
Gender	No.	%	No.	%
Male	10	58.82	43	59.72
Female	7	41.18	29	40.28
Totals	17	100	72	100

(Source: Author, 2019)

From Table 4.2, it was observed that 59.72% of the teachers were male while 40.28% were female teachers. However, among the principals, the female respondents were 41.18 % compared to 58.82% of the male principals. This shows a similarity in the ratio of female teachers and male teachers both in the classroom and in management.

4.3.2 Year of service of respondents

The respondents were asked to indicate the number of years they have been in service. For the principals they were to indicate the number of years they have been serving as principals also. Table 4.3 shows responses obtained from principals on their years of service and on the number of years they have been in the administrative positions of the principal.

Table: 4.3: Years of service or principals

	No of years in service		No of years as principal					
			1-10 yrs		11-20 yrs		21yrs and above	
	No	%	no	%	no	%	no	%
20-24 yrs	6	35.29	4	66.67	2	33.33	0	0.00
25-29 yrs	7	41.18	2	28.57	5	71.43	0	0.00
30-34 yrs	2	11.76	0	0.00	1	50.00	1	50.00
above 35	2	11.76	0	0.00	1	50.00	1	50.00
TOTAL	17	100	4	23.53	1	5.88	1	5.88

From the study, it was realized that 11.76 % of the principals have been in the teaching profession for more than 30 years while 11.76 % were in the profession for more than 35 years. The two categories represent about 23% of the entire population of principals in the Sub-county.

It is also worth noting that none of the principals had below 20 years of service in the profession. This means that experience or the number of years one has been in service determines appointment of individuals in administrative positions. This is supported by data collected on the number of years one has served as a principal. As indicated in the Table 4.3, about 35.29 % of the principals have been in the service for between 20-24 years. Out of the group 66.67% have also been principals for between 1-10 years and 33.33% have been in service for between 11-20 years. None in his category has been a principal for more than 21 years. This further qualifies the theory that appointment to the office of the principal depended on no of years one has served as a teacher.

Likewise, a big percentage of principals amounting to 71.43% who have been in teaching service for 25-29 years have also been principals for between 11-20 years. In this group, also none has served as a principal for more than 21 years. In the same way 50% principals who have been in the service for more than 30 years, have been principals for

11-20 years, and 50% has been principals for 21 years and above. This gives a true reflection that appointment to be a principal have a seniority component.

On the side of teachers, figure 4.1 shows that that 36.11 % of the teachers have been in the service for 5 years of less. In comparison, 26.39 % of teachers have been in the service for more than 15 years.

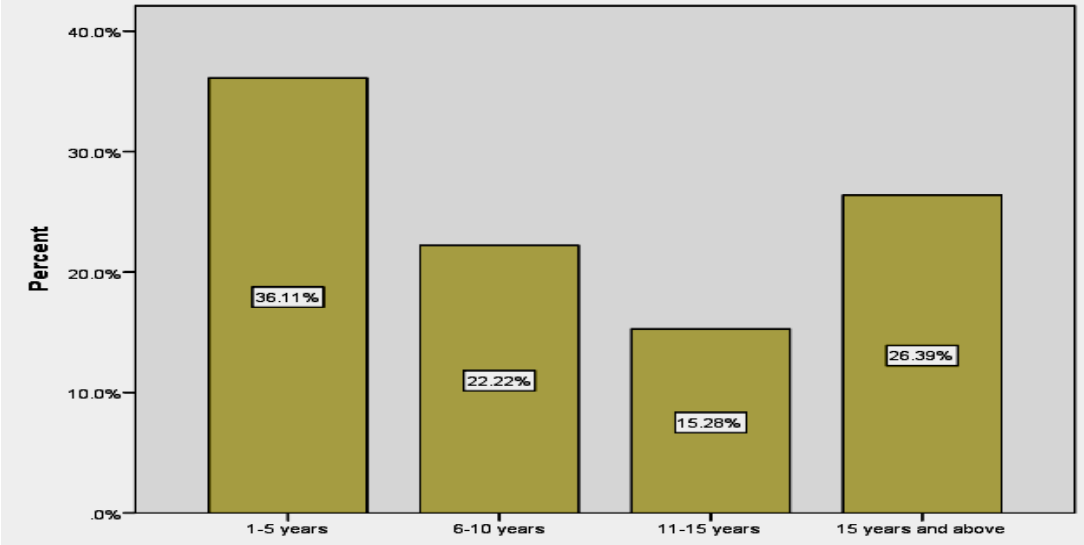


Figure 4.1: Years of service of teachers.

4.3.3 Qualification of principals

Majority of the principals at 76.47% were holders of a degree in education while 17.76% had master's degree as shown in Table 4.4. In addition, 5.88% had degrees in other fields and then acquired PGDE later. One had a masters of arts and another had masters in theology. None is a diploma holder and none had acquired a Ph.D. degree. This shows that all principals in secondary schools in the Sub-county had requisite training in education.

Table 4.4: Qualification of principals

	Academic qualification		With advanced management Diploma from K.E.S.I	
	NO	%	NO	%
DIPLOMA	0	0.00	0	0.00
PGDE	1	5.88	1	5.88
BED	13	76.47	8	47.06
MED	1	5.88	2	11.76
MA	1	5.88	1	5.88
M THEOLOGY	1	5.88	1	5.88
PH.D	0	0.00	0	0.00
TOTAL	17	100.00	13	76.47%

In addition, 13 principals out of the 17 representing 76.47% of all the principals had acquired an advanced diploma in management that is administered by Kenya educational staff institute (K.E.S.I). Therefore, it is evident most all the principals have been trained on basic management skills.

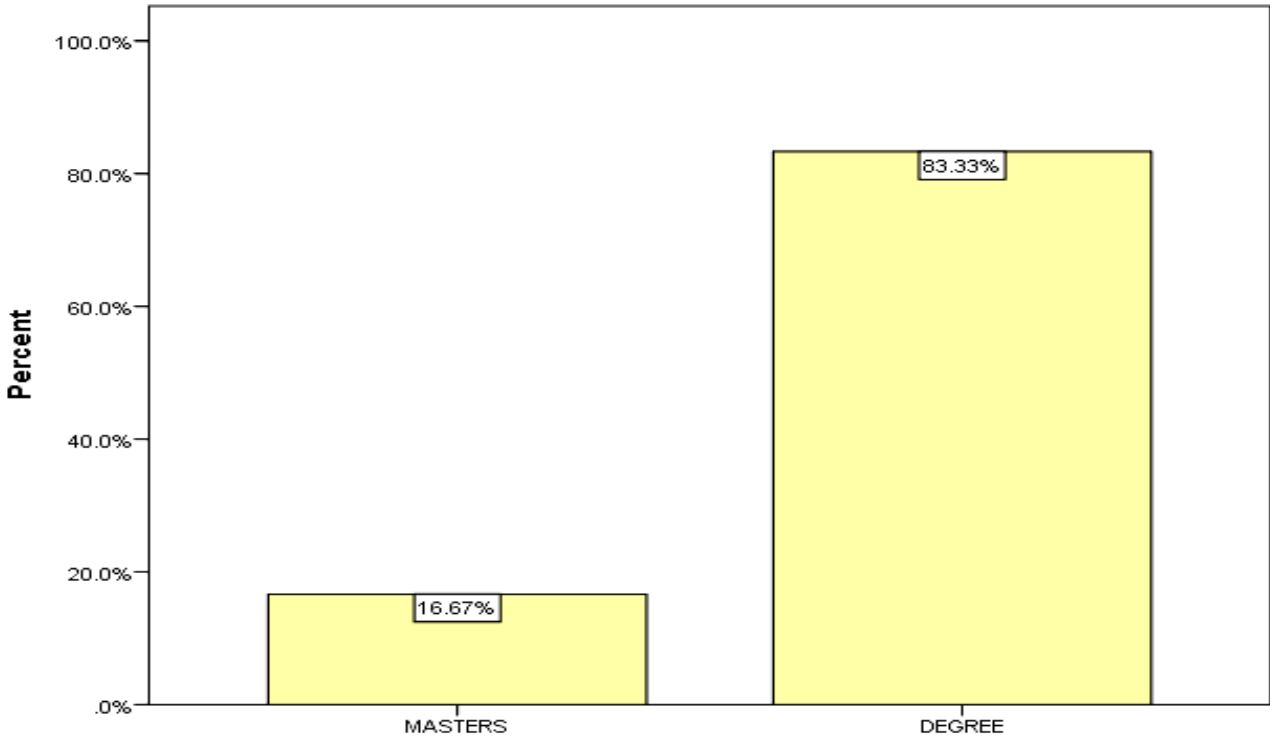


Figure 4.2: Teachers' professional qualification

From the study, it was found out that all teachers who responded were degree holders. In their midst 83.33% had a bachelor degree, while 16.67% had masters. This shows that teachers in the Sub-County had the requisite professional qualification as shown in figure 4.2. However, it is evident that not many teachers have been motivated to attain master's degrees. Ndiritu (2012) realized the same in her study on leadership and its influence on academic performance in Nairobi County. She noted that this has been due to the failure of TSC to use master's degree to promote teachers. There has also been no minimum qualification for the promotion of classroom teachers to principals in terms of academic qualifications.

4.3.4 School academic performance

The study obtained data on the school academic performance for 2016 and 2017 K.C.S.E. From the questionnaires, the researcher also obtained data on cut off requirements for all the schools. It is expected that the output from each school should so much correspond to

the entry behaviour. As shown in tables 4.5 and 4.6 all schools in the three categories performed below the cut off means.

In the extra-county schools, the cut off mean was 8.5 but the K.C.S.E. results were at a mean of 7.16. In the county schools, the cut off mean was 5.5 while the KCSE mean was 5.0 while in the Sub-county schools the cut off mean was 3.75 while the KCSE mean was 2.94. This indicates that there was less or no value addition. However is important to have a study that can determine why the performance at primary level does not necessarily translate to the same performance at secondary level.

Table 4.5: Average cutoff mean compared with average KCSE mean 2016 and 2017

	N	Minimum	Maximum	Mean	Std. Deviation
Cut-off mean	17	1.50	8.50	4.79	2.28
Av mean 2016-2017	17	2.10	7.64	3.93	1.86
Valid N (list wise)	17				

Table 4.6: Average cutoff mean for the sampled schools in their categories Compared with their average KCSE mean for 2016 and 2017

School category	N	Cut off mean	Average KCSE mean
Sub-County	12	3.75	2.94
County	2	5.50	5.00
Extra-county	3	8.50	7.16

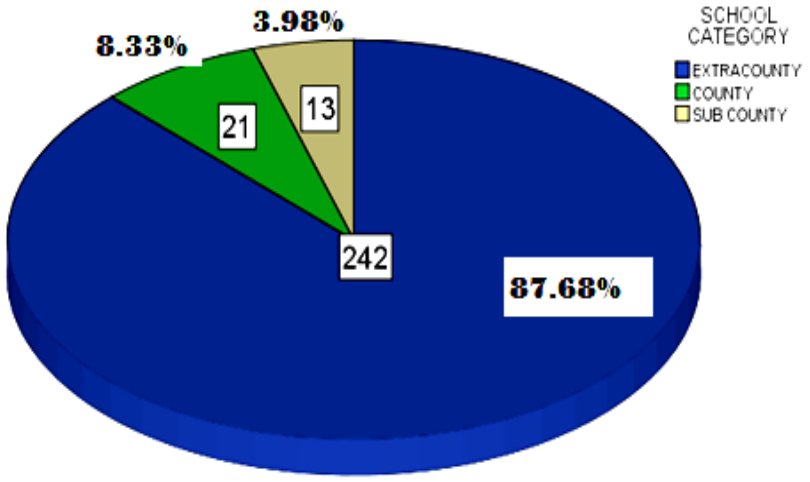


Figure 4.3: School output by category

School academic performance was also analyzed according to the output i.e. The number of students who qualified to go to the university from each school category. These are students who managed a mean of C+ and above. The data was represented using a pie chart as shown in figure 4.3. From the figure, it is evident that the Extra-county schools that were sampled contributed 242 students who qualified to join public universities accounting to 87.68%, while County schools contributed 8.33%. However, Sub-county schools contributed only 13 students representing 3.98%.

This data presents a concern of the presence of secondary schools which do not have any of their students qualifying to join universities. The issue of how these students are managed while in school and the strategies those teachers employ May in some ways contribute to this observation.

The results are in line with an observation made by Ndiritu (2012) that over half of the students in secondary schools in Nairobi County did not obtain the minimum entry requirement to join universities. Ruinge and Kimani (2015) in their study of performance in Kiambu County also realised that 78.35% of the students got a mean grade of below C+ which is the minimum requirement for entry to Kenyan universities.

Pearson Product Moment correlation coefficients were used to determine correlations between various variables and academic performance. An average of academic performance for 2016 and 2017 for all the schools that responded was compared with the mean of their cutoff points. Results from the test show that there is a correlation between school cut off mark as students enter into form one and performance at KCSE.

Table 4.7: Pearson correlation analysis on schools' cut off marks and performance in KCSE

Correlations			
		Mean of KCSE 2016-2017	School cut off
Mean of KCSE 2016-2017	Pearson Correlation	1	.922**
	Sig. (2-tailed)		.000
	N	17	17
School cut off	Pearson Correlation	.922**	1
	Sig. (2-tailed)	.000	
	N	17	17
**. Correlation is significant at the 0.01 level (2-tailed).			

There is a positive and strong correlation with a coefficient (r) of 0.922 and p of 0.00 as shown in Table 4.7. This shows that the entry behaviour of a child will have an effect on the performance of the same child at KCSE. These results are in line with a study made by Ibrahim and Orodho (2014) who stated that success in secondary school though measured by results obtained at KCSE, is a result of the environment in which learning takes place and the ability of the student. It shows that the ability of the child has a part in the overall performance after passing through the four-year secondary school course.

In trying to establish whether the years a principal has served in that position influenced performance at KCSE, a weak correlation with a Pearson coefficient of 0.271 was obtained as shown in Table 4.8.

Table 4.8: Pearson correlation analysis on KCSE performance and years of service of principals

Correlations			
		Mean of KCSE 2016-2017	Years as principal
Mean of KCSE 2016-2017	Pearson Correlation	1	.271
	Sig. (2-tailed)		.292
	N	17	17
Years as principal	Pearson Correlation	.271	1
	Sig. (2-tailed)	.292	
	N	17	17

This means that it is not the experience that a principal has in that position that matters in influencing performance but there other factors. Ndiritu (2012) in her findings pointed out that many secondary schools perform poorly due to poor leadership, besides inadequate funds and poor facilities. Therefore it may not be the lack of experience but the way the principal acts as the leader of the institution. This brings us to the influence of strategic management practices on performance

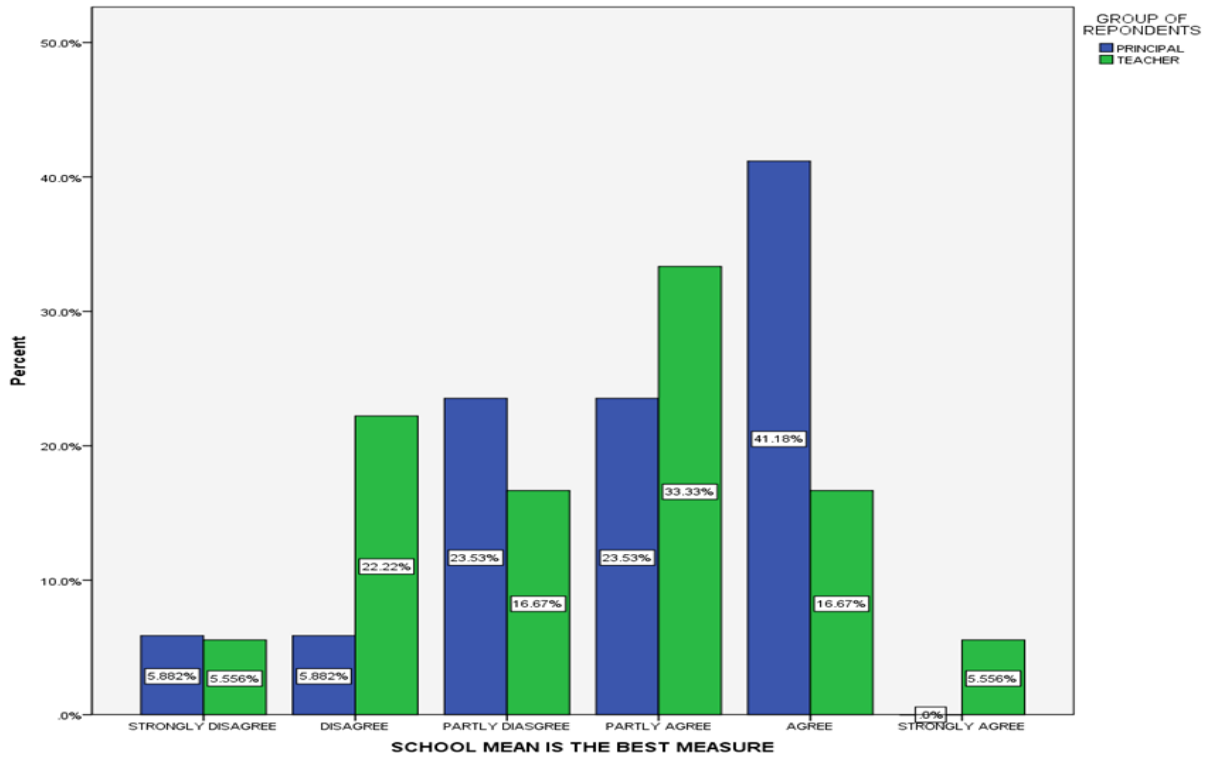


Figure 4.4: Is the school means a good measure of academic performance

When asked their opinion on whether the mean is the best measure of academic performance, the average responses were analysed and presented in figure 4.4. About 41.18% of the principals agreed, and 23.53% partially agreed. This shows that more than half of the principals agreed. However, 23.53% partially disagreed and 5.88% disagreed and strongly disagreed likewise. About 5.56% of teachers strongly agreed, 16.67%

agreed and 33.33% partially agreed. This is similar to those who disagreed with 5.55% strongly disagreeing, 22.22% disagreeing and 16.67 strongly disagreeing.

The issue of using school means for ranking or for determining performance demonstrated varied views from both teachers and students. This is because as Hargreaves (2001) points out, outcomes of a school represent both the extent to which it meets its goals in both moral outcomes and cognitive outcomes. The mean of a school represents just the cognative outcome. It does not reflect the other outcomes such as the moral outcome. Some teachers will argue that even though the child didn't do well academically due to varied factors, the school developed the moral domain of the child important in leading a responsible and fruitful life.

When asked their opinion on whether entry behaviour of students had an effect on performance at KCSE, average responses were analysed and summarized as shown in figure 4.5.

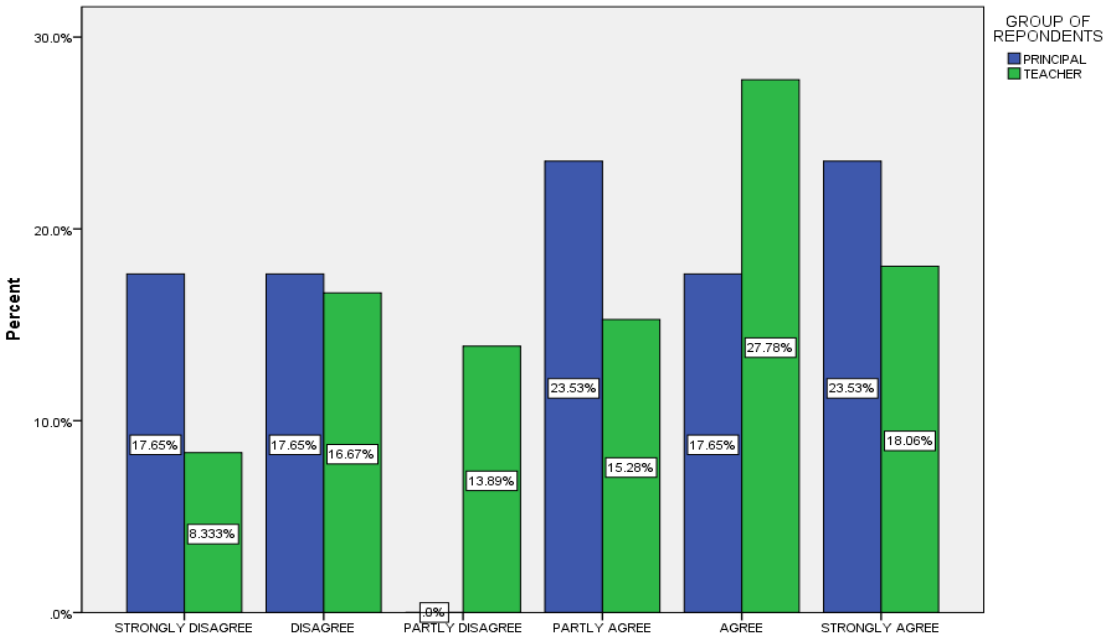


Figure 4.5: Responses on whether performance is dependent on entry behaviour

The results show that 23.53% of principals strongly agreed, 17.65% agreed and 23.53% partially agreed. Therefore, almost two thirds of the principals agreed. However, 8.33%

strongly disagreed and 17.65% disagreed. In addition, 18.06% of the teachers strongly agreed 27.65% agreed and 15.28% partially agreed. However, 13.89% partially disagreed, 16.67% disagreed and 8.33% strongly disagreed.

From the observations, it is evident that most teachers believe that performance is dependent on the entry behaviour as determined by the marks a student got at KCPE. However, this scenario is not always true. In some cases students who scored very poorly in KCPE have been found to have, excellent results in KCSE and vice versa.

The means of the responses of the principals' were tested using Pearson correlation. A correlation of between 0.0 and 0.30, is considered to be weak, 0.31 and 0.70 is considered modest and if it is 0.71 or above, it is considered to be strong (Ndiritu, 2012). The 0.05 level of significance was used to identify those correlations that were statistically significant. It was found out that there was a negative correlation in the responses of principals on output being a good measure of performance. This was at -0.45 with a significance level of 0.066. This shows that the correlation was not statistically significant.

In addition, the performance being dependent on entry behavior had a coefficient of 0.110 and a significance level of 0.675. This also showed that the data was not statistically significant. On value added progress being the best measure, the correlation coefficient was 0.416. This is a modest correlation considering the level of significance was 0.097 showing that the data was statistically significant at 0.05 levels. This is illustrated in Table 4.9.

Table 4.9: Pearson correlation coefficient for principal's responses on performance

Correlations		Av mean 2016-2017	Performance is dependent on entry behaviour	Output in the best measure	VAP is the best measure
Av mean 2016-2017	Pearson Correlation	1	.110	-.456	.416
	Sig. (2-tailed)		.675	.066	.097

The means of the responses of the teachers were also tested using Pearson moment correlation. It was found out that there was a, low correlation of 0.186 on performance being dependent on entry behaviour. However there was no correlation between responses of performance dependent on entry behaviour with a coefficient of -0.145. The level of significance was 0.224 hence not statistically significant at 0.05 levels. At the same time the use of value added progress (VAP) as a measure of performance showed 0.186 correlations. This is a weak correlation with a significance level of 0.119 hence not statistically significant. This is illustrated in Table 4.10.

Table 4.10 Pearson Correlation coefficients for teachers' responses.

Correlations		Av KCSE mean for 2016-2017	VAP is the best measure	Performance is dependent on entry behaviour
Av KCSE mean for 2016-2017	Pearson Correlation	1	.186	-.145
	Sig. (2-tailed)		.119	.224
	N	72	72	72
	Sig. (2-tailed)	.224	.305	
	N	72	72	72

4.3.5 Resources available in schools

The researcher asked respondents to comment on availability of various resources in their schools. These included availability of a school library, computer labs, piped water and electricity. The data was analyzed and presented in a Table as shown in Table 4.11.

Table 4:11 Resources available in schools

School category	Science lab		Library		Computer lab		Piped water		Electricity	
	No	%	No	%	No	%	No	%	No	%
Extra-county	3	100	3	100	3	100	3	100	3	100
County	2	100	1	50	2	100	1	50	2	100
Sub-county	12	100	1	8.33	4	33.33	2	16.67	3	25

All the extra-county schools had libraries while only 50% of the county schools had libraries. Only 8.33% of sub-county schools had libraries. All the county and extra-county schools had computer laboratories while only 33.33 % of the sub-county schools had computer labs. All the county and extra-county schools had electricity while only 25% of sub-county schools had electricity. From the data, however it was observed that all the schools under the study had science laboratories.

It is therefore evident that the extra-county schools and the county schools had almost all the necessary facilities required in a secondary school from water, electricity, computer labs, libraries and science laboratories. However some of these facilities were found missing in the sub-county schools. The absence of electricity, computer laboratories and libraries in sub-county schools cannot be ignored and it so much relates to the performance being experienced from this school category.

When asked on their opinion on whether resources influence academic performance, 64.71% and 37.5% of principals and teachers respectively strongly agreed while 23.53% and 40.28% respectively agreed as shown in figure 4.7. . None strongly disagreed and only small group of teachers at 4.16 % disagreed. 5.88% and 8.33% of principals and teachers respectively partially disagreed. They felt that lack of resources hinders academic performance. Schools that were performing poorly were also found to lack some of the resources important for good academic performance.

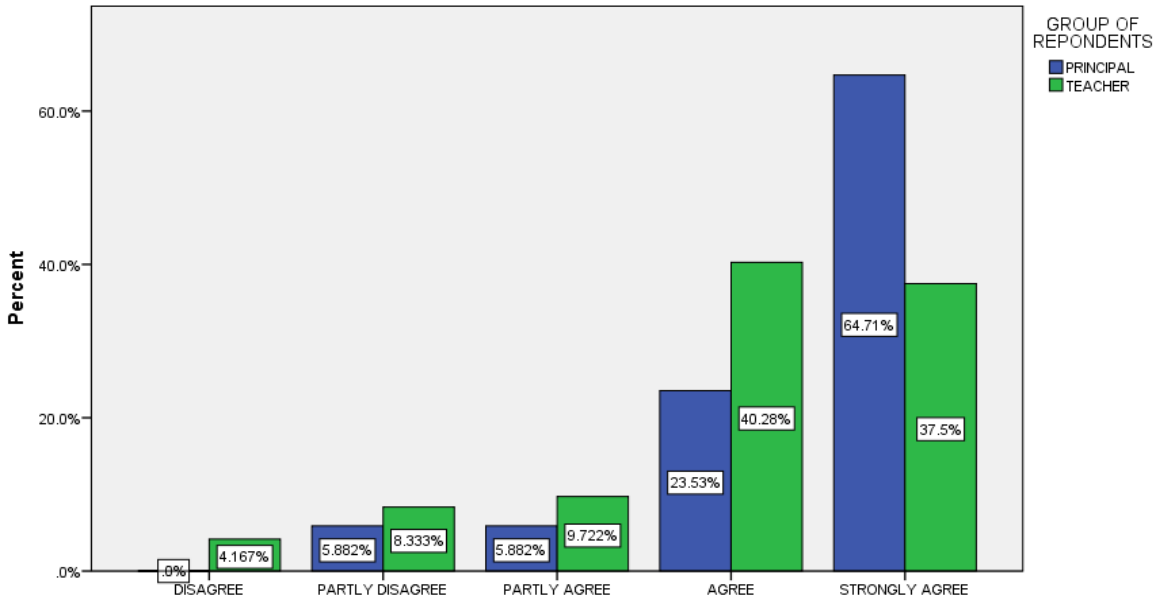


FIGURE 4.6: Perception on whether lack of resources hinders good academic performance in schools

When a Pearson's correlation analysis was done, it was found out that there was a strong correlation of 0.792 between availability of resources and performance. This had a significant level of 0.00 hence it is statistically significance. This is shown in table 4.12.

Table 4.12 Pearson Correlation coefficients for availability of resources and performance.

		Av. KCSE mean 2016-2017	Percentage availability of resources
Av. KCSE mean 2016-2017	Pearson Correlation	1	.792**
	Sig. (2-tailed)		.000
	N	17	17
Percentage availability of resources	Pearson Correlation	.792**	1
	Sig. (2-tailed)	.000	
	N	17	17
**. Correlation is significant at the 0.01 level (2-tailed).			

These findings are in line with conclusions made by Lydia and Nasongo (2015). In their findings, they pointed out that results in education are related to the resources allocated. Schools with better performance had established facilities as a priority issue.

4.4 Academic improvement strategies

Teachers were also asked to rate how various academic improvement strategies contribute to academic performance in their schools. A scale of 1-5 where a 1 stands for lowest contribution and 5 for highest contribution was used. The data obtained from the teachers was analyzed and ranked using the mean of each strategy and then presented using a chart as shown in figure 4.7.

From figure 4.7, it can be observed that having extra contact time with students, regular science practical activities and timely syllabus coverage ranked highly with a mean of 4.06, 4.04 and 4.01 respectively. These strategies according to the teachers are the ones that lead in enhancing good performance. On the other hand, benchmarking use of talents and use of rapid tests were considered the three weakest strategies with means of 2.61, 2.64 and 2.67 respectively.

Other strategies that teachers considered to be of low influence in academic performance were phasing out of poor students at 2.85, subject symposia at 2.75 and use of subject champions at 2.96. There however appeared a group of several strategies that teachers moderately felt were influencing performance. These included use of academic days where parents visit schools to discuss child's performance, having good reward system, use of students mentorship programs, topical revision and topical testing and inviting subject specialists. These strategies had means of between 3.0 to 3.96. ,

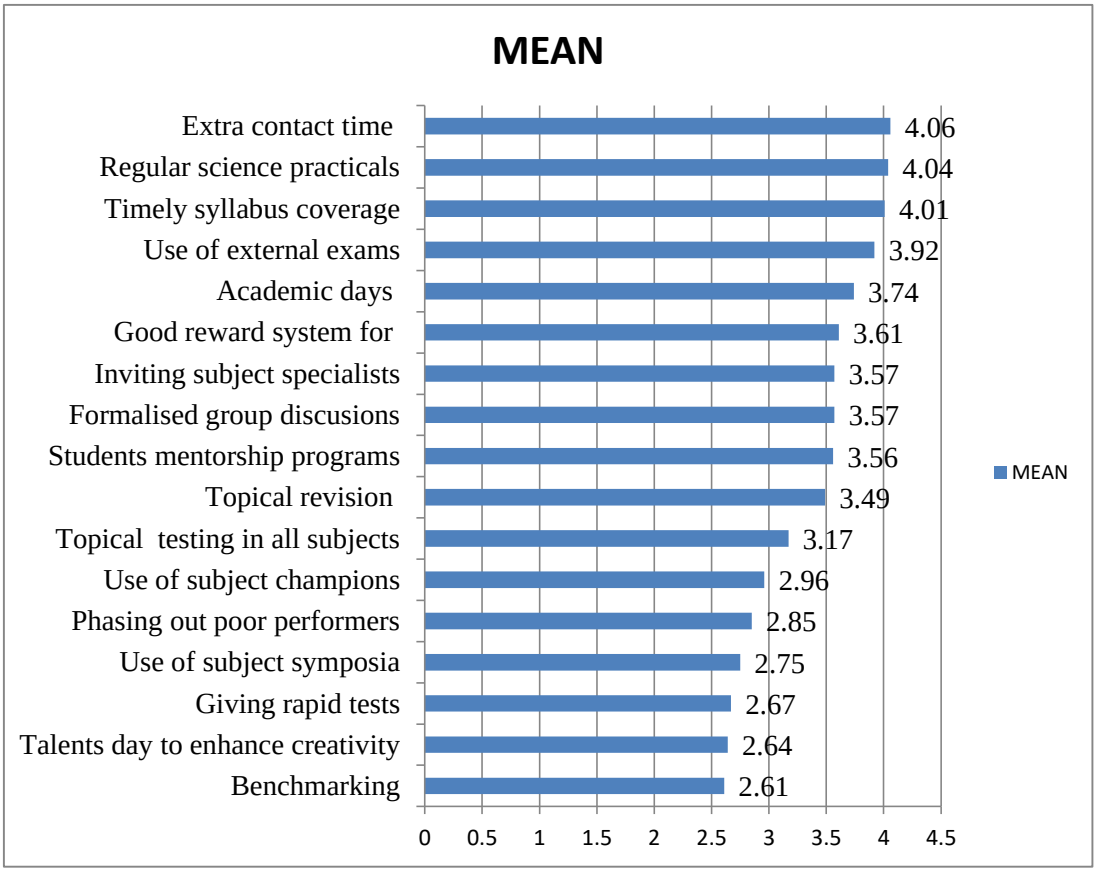


FIGURE 4.7: Ranking of academic improvement strategies

These results confirmed the position of the capital theory of school effectiveness and improvement. The theory bases its work on the concept of transformative schools, which has an ability to provide services that address students' and teachers' complex and multifaceted needs (Galindo , Sanders & Abel, 2017). According to this theory, outcomes of a school represent both the extent to which it meets its goals in both moral outcomes and cognitive outcomes (Hargreaves, 2001).

These findings also concur with conclusions made by Ruinge and Kimani (2015). They noted that Identification of weak students in various subjects and having extra instructional assistance helps to improve general academic performance in students. This is because various obstacles that hinder effective learning are eliminated during remedial teaching.

When a Pearson Correlation test was carried on average perception of principals on strategies that schools use to improve performance, the analysis showed a modest relationship with r at 0.364 and p at 0.002 showing that the correlation was statistically significant as shown in Table 4.13. There is therefore a relationship between the strategies applied in schools and academic performance.

Table 4.13: Pearson correlation analysis on KCSE performance and average perception of principal's on academic improvement strategies

		KCSE 2017 mean	Average perception of strategies
KCSE mean	Pearson Correlation	1	.364**
	Sig. (2-tailed)		.002
	N	72	72
Average perception of strategies	Pearson Correlation	.364**	1
	Sig. (2-tailed)	.002	
	N	72	72

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

In addition, respondents were asked to give their opinion on whether strategies devised by a school drive academic performance. 11.76% of the principals partially agreed, 47.06% agreed and 35.29% strongly agreed. Only a small percentage of 5.88% partially disagreed as shown in figure 4.8. On the other hand, 22.22% of teachers partially agreed, 37.50 % agreed and 31.94% strongly agreed. Similarly, the principals, only a small percentage less than 2.77% disagreed an any level.

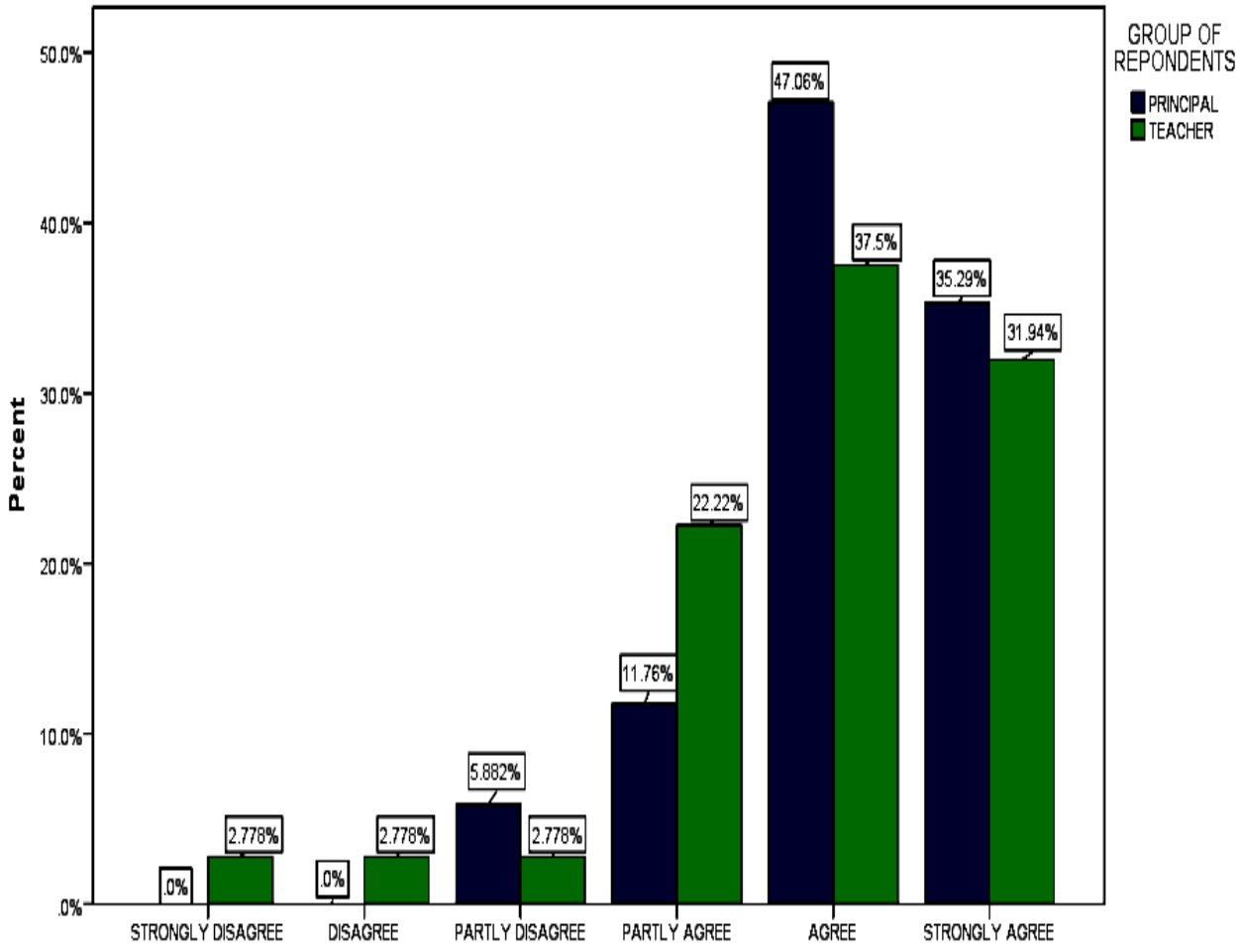


FIGURE 4.8: Perception on whether school devised strategies drives academic performance

This means that teachers are well conversant with what exactly drives performance. The findings concur with Mitchell and Sanckney, (2016) in their study on high performing schools. They stated that that a performing school focuses its activities towards effective student learning. This is by having practices that are important to academic improvement anchored well in its strategic plan. In designing strategies schools focus on their external and their internal environments to come up with activities that suits them best.

4.5 Extent to which principals exhibit initiative and considerate behaviours

This section required respondents to rate the principal's leadership behavior

4.5.1 Initiative behaviour

The researcher therefore wanted to gauge the extent to which principals portray task-oriented behavior. An average of a set of responses on task orientation was obtained and results presented in a chart as shown in figure 4.9.

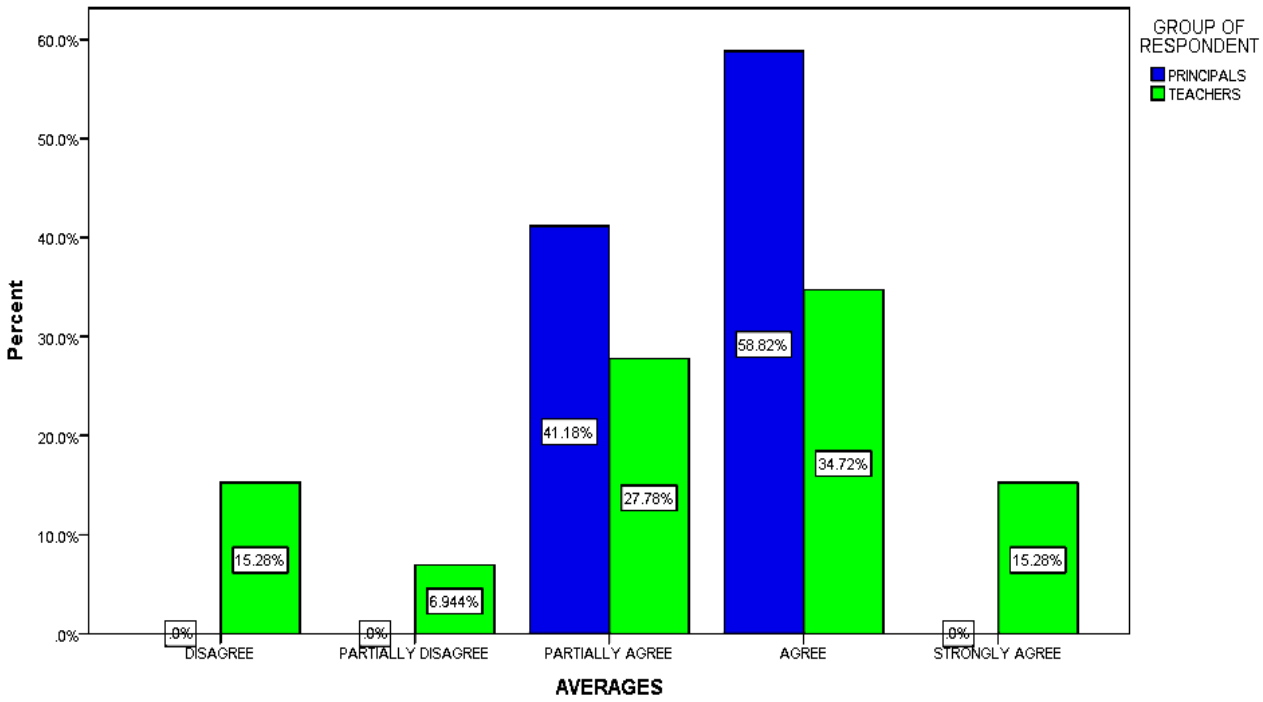


Figure 4.9: Rating of principals' initiative behaviour by self and by teachers

From the graph, it is evident that most of the principals assessed themselves highly with 41.18% agreeing that they possess task-oriented behavior while 58.82% agreed. None of the principals disagreed. About 15.28% of the teachers partially disagree, 6.94 % disagreed, 27.78 %, partially disagree, 37.72% partially agreed, 37.72% agreed while 15.28% strongly agreed.

When this was determined in terms of, the school categories the results obtained are as shown in figure 4.10. it was found out that in the Extra-county schools 20.83 % partially agreed, 45.83% agreed and 25.0% strongly agreed that their principals show task oriented behavior while only a few at 4.17 % partially disagreed and disagreed respectively. This observation was different from the one observed in Sub-County

schools. 23.73 % of teachers in these schools disagreed, 9.09 % partially disagreed while the rest moderately agreed.

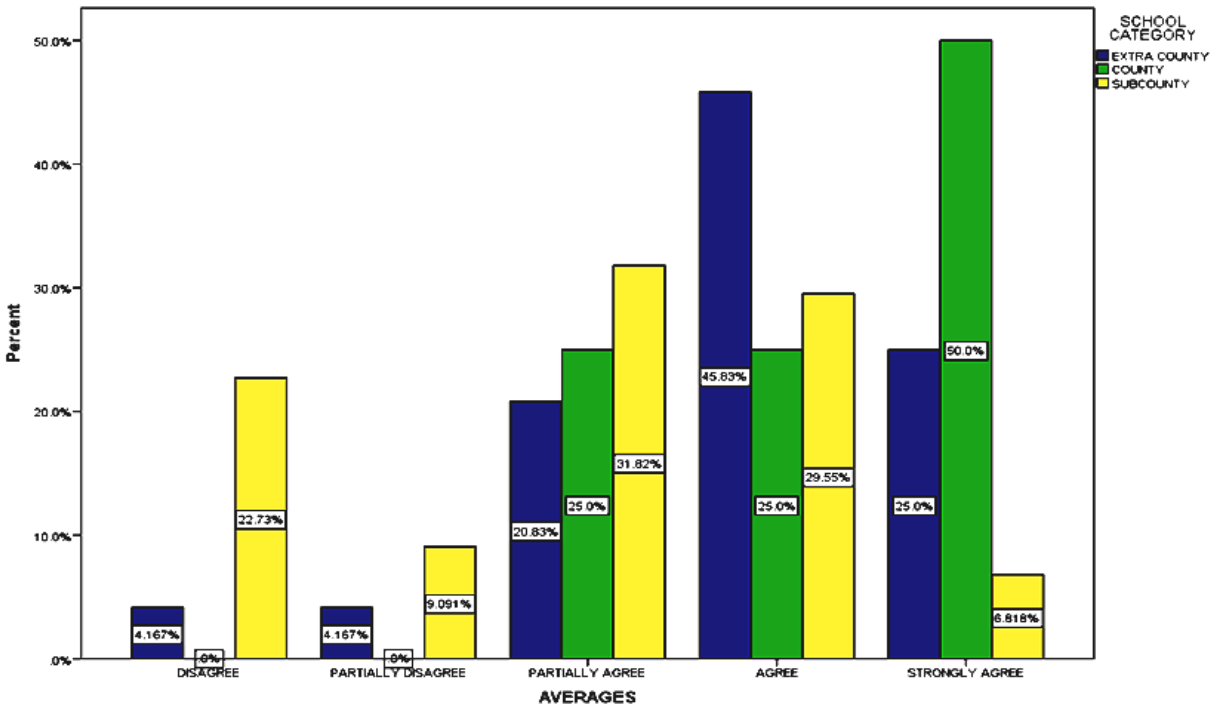


Figure: 4.10: Rating of principals' initiative behaviour per school category

Initiative behaviour refers to the extent which a leader defines group member roles, initiates actions, organizes group activities and defines how tasks are to be accomplished by the group. According to Derue, Nahrgang, Wellman and Humphrey (2011), it describes behaviors such as defining task roles and role relationships among group members, coordinating group members' actions, determining standards of task performance, and ensuring group members perform up to those standards. The researcher therefore wanted to gauge the extent to which principals define tasks, co-ordinates group's members and how they set standards of performance.

From the results, it is evident that principals rated themselves highly. The results concur with the findings made by Mwangi (2013), who found out that teachers differ with principals on the way they engaged in initiation behaviour with principals rating them

higher than the way they were rated. It is also evident that most of the principals feel they portray initiative behaviour often.

4.5.2 Considerate behaviour

From the study, the researcher wanted to know the perception of teachers on the extent to which they feel their principals show considerate behavior. The questions asked included how the principals praised teachers, whether the principals reprimands poor performers, whether teachers were handled with dignity and the level of motivation by the principals in terms of rewards and support of teachers' decisions.

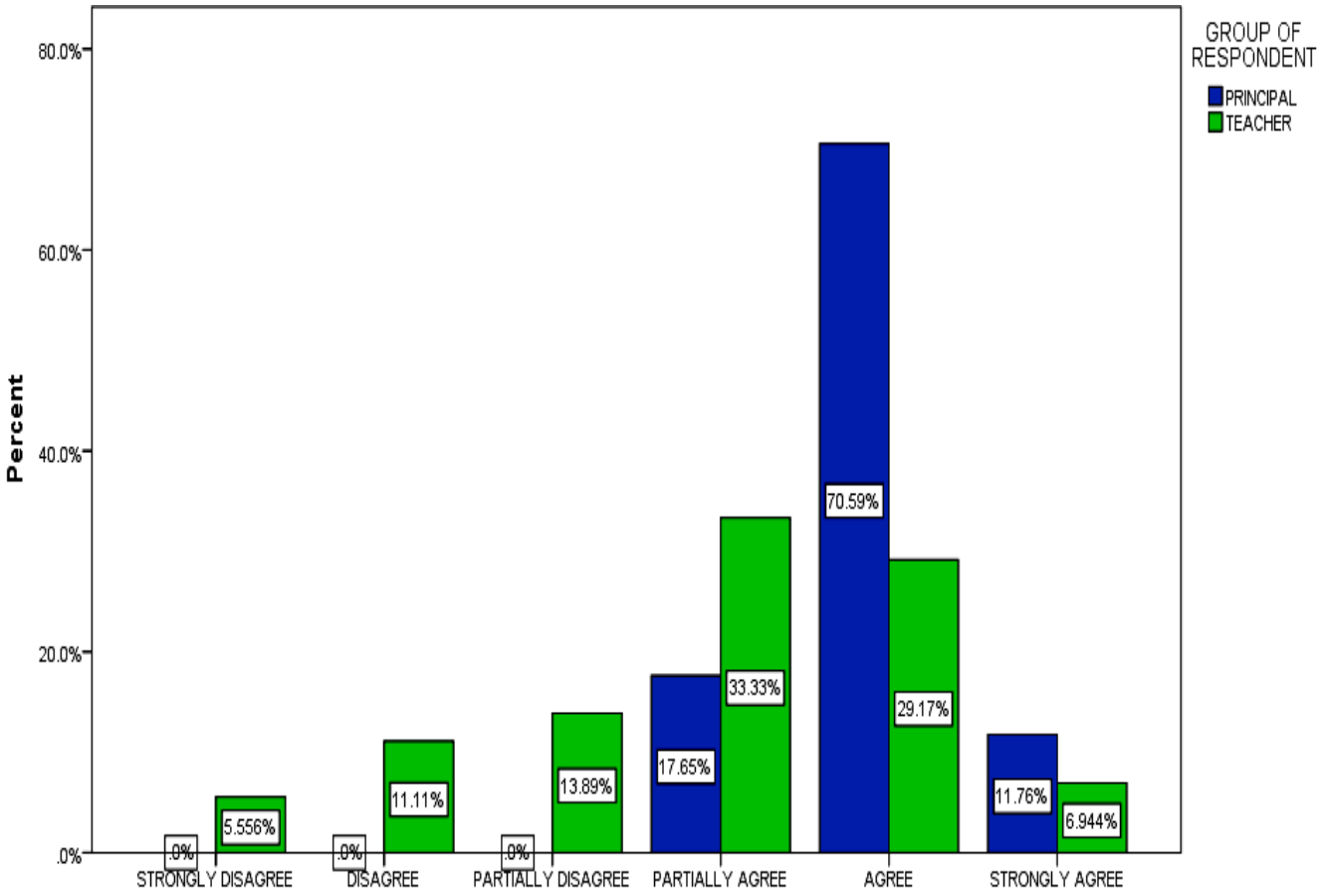


Figure 4.11: Rating of principals on considerate behaviour by self and by teachcers

The averages of the responses were analyzed and presented in a graph as shown in figure 4.11. From the study, it was observed that it is only the teachers who disagreed with the statements on the considerate behavior of their principals. 5.55 % strongly disagreed,

11.11% disagreed and 13.89% partially disagreed. This means that teachers felt that their principals scored poorly on considerate behavior.

On the contrary, none of the principals disagreed hence the issue of individuals rating themselves highly. 70.59% of the principals agreed that they portray considerate behavior, compared to only 29% of the teachers, 11.76% of the principals strongly agreed they possess considerate behavior compared to 6.99 % of the teachers.

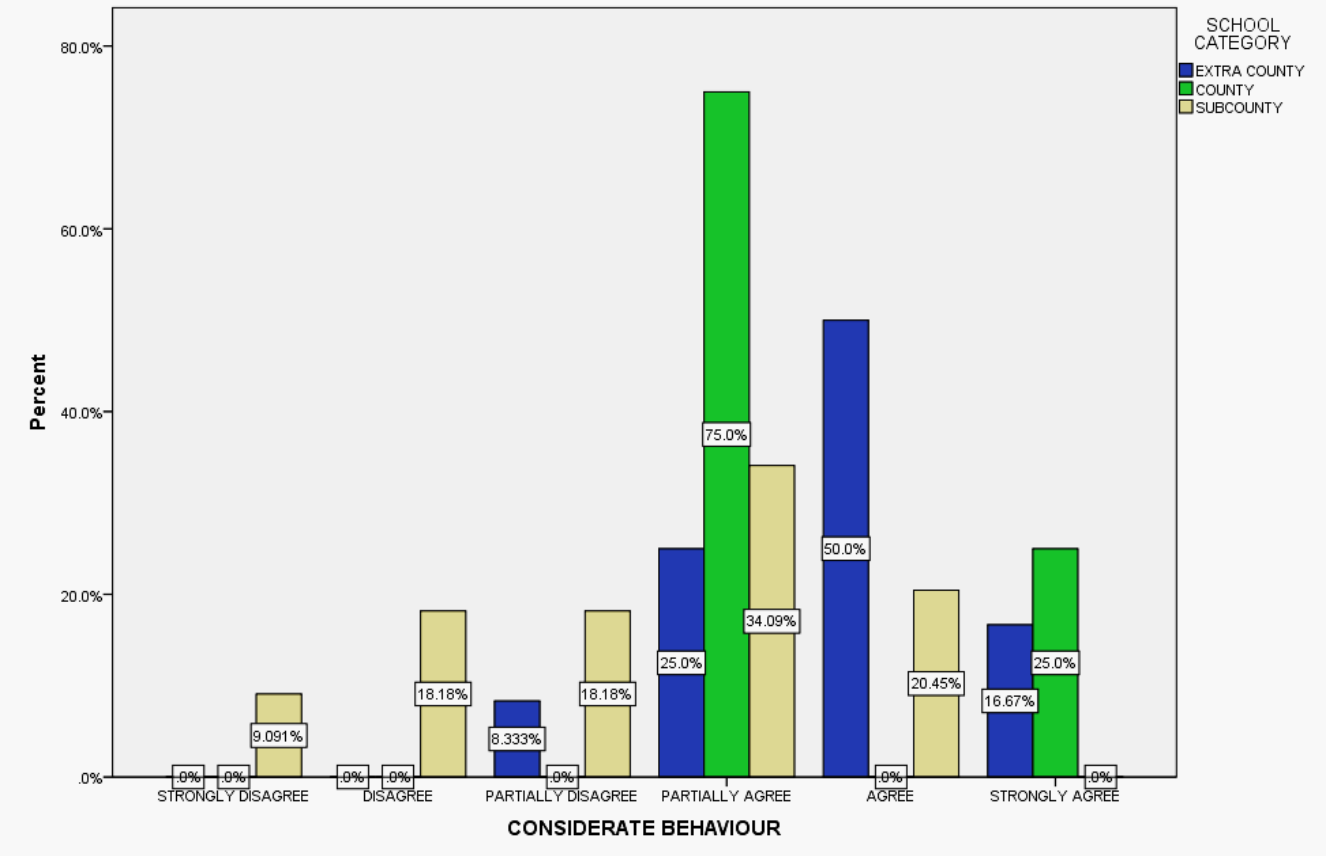


Figure 4.12: Rating of principals on considerate behaviour per school category

When this was analyzed using responses of teachers in various categories of schools, the results were summarized as shown in figure 4.12. From figure, it is clear that 9.09 % of teachers strongly disagreed, 18.18 % disagreed and another 18.18 % also partially disagreed on the ability of their principals to be considerate. Only a small percentage 8.33% of teachers in County school partially disagreed.

In the county school, the teachers agreed that their principals exhibited considerate behavior with 75% partially agreeing and 25% strongly agreeing. In the sub-county schools 20.45% agreed and 34.09% partially agreed. Above 70% felt that principals in county schools showed considerate behaviour while above 50% of extra-county schools followed suit. From the findings, it is clear that principals rate themselves highly. At the same time, it was also noted that principals from county and extra-county schools were rated highly on considerate behaviour than those in sub-county schools.

This concurs with findings by Mwangi (2013) and Ruinge and Kimani (2015) who felt that considerate behaviour of leaders impacted on academic performance and success of school is improved when leadership principles are fully applied (Amanchukwu et al 2015). The findings are strengthened by Lydia and Nasongo (2009), when stated that teamwork and delegation of duties ensured that work was done effectively.

4.6. Extent to which schools have adopted quality improvement practices

In this section, respondents were asked their opinion as to what extent their school carried out various quality improvement practices. These included according to meeting of students' needs, effective communication and setting of objective targets. An average of the responses from the respondents was obtained and represented in figure 4.13.

From the figure, it can be observed that 1.38 % of the teachers disagreed while 23.61% partially disagreed. However, none of the principals disagreed on presence of quality improvement practices in their schools. 47.06 % of the principals partially agreed, 47.6 % agreed and 5.88% strongly agreed. The largest part of the teachers at 47.06% partially agreed and agreed to equal measure. However, about 5.08% of the teachers strongly agreed that in their school quality improvement practices were evident.

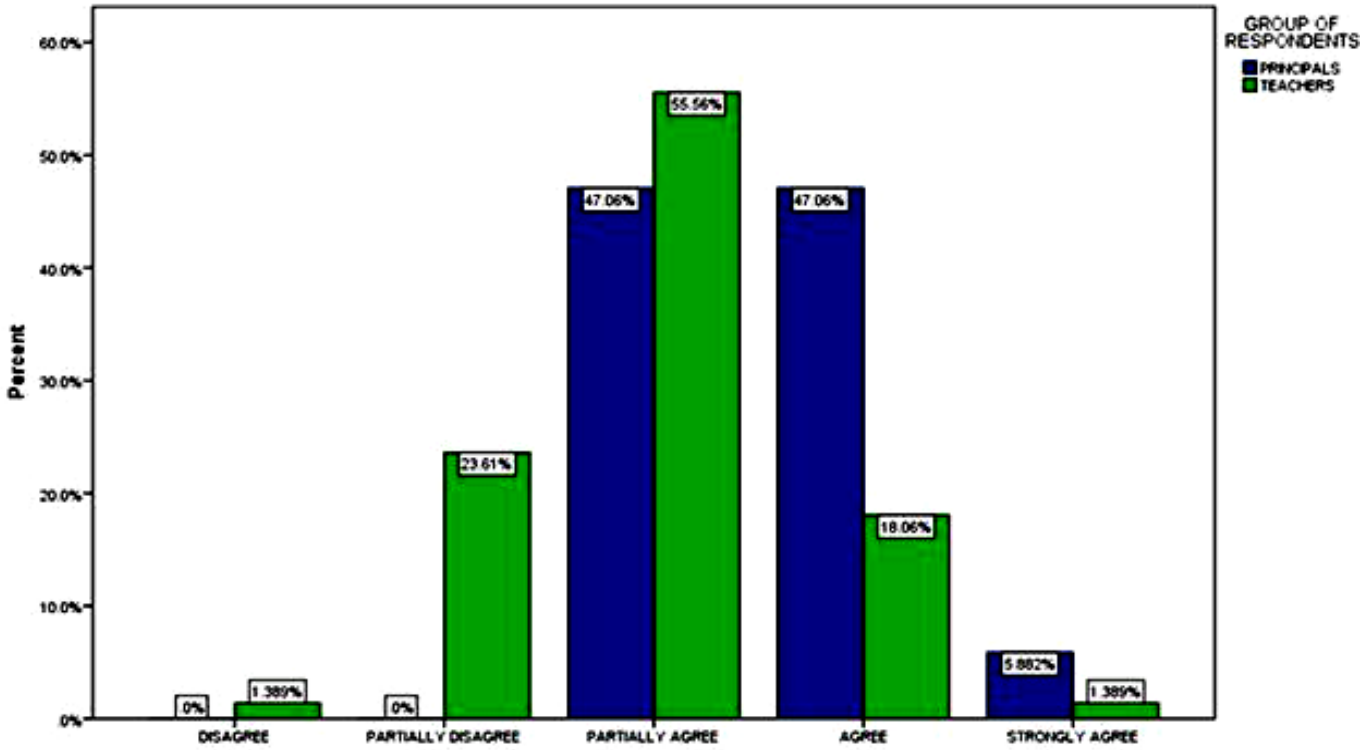


Figure 4.13: Perception on adoption of quality improvement practices in schools

When the same data was analyzed in respect to school category results were represented in figure 4.14.

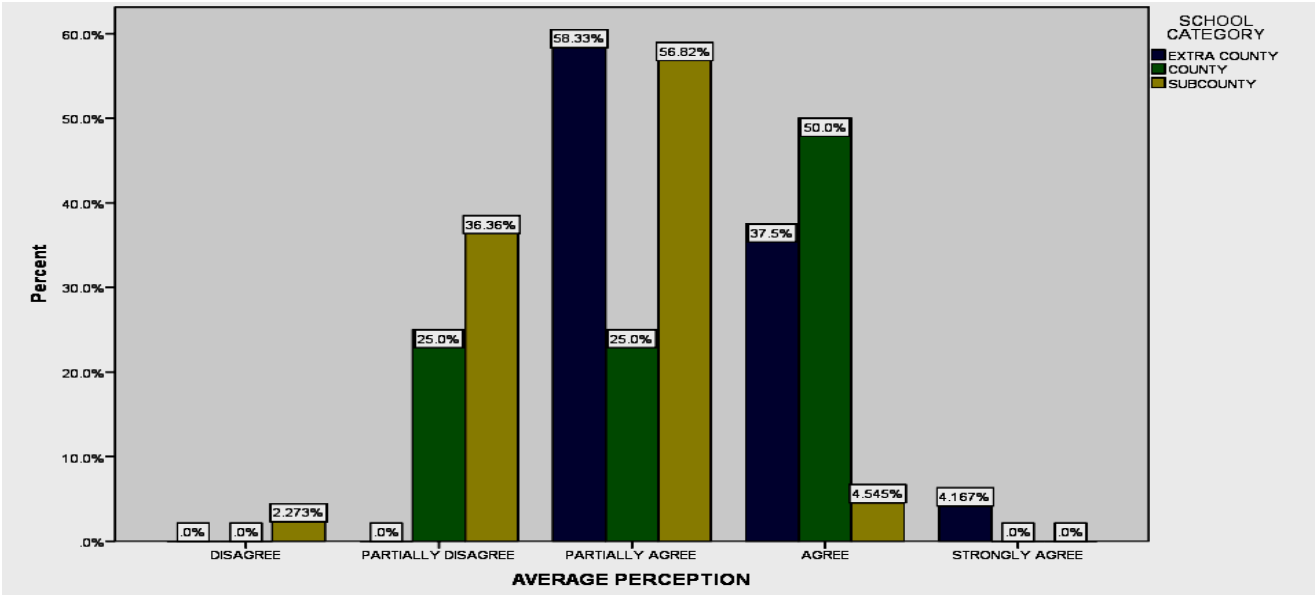


Figure 4.14: Perception on adoption of quality improvement practices in schools per school category

From the figure, it can be observed that 2.27% of the teachers in sub-county schools disagreed, 36.36% partially disagreed, 56.25% partially agreed and 4.54% agreed. In county schools 58.37% partially agreed, 37.57% agreed and 4.13% strongly agreed. In addition, 25.00% of teachers in county schools partially disagreed, 25 % partially agreed and 50% agreed. In this section, extra-county schools were rated highly than the county and cub-county schools.

These findings were in line with observations made by Ruinge and Kimani (2015) who found out that there is significant relationship between quality improvement practices such as meeting of student's needs, establishing of performance objectives, and effective communication and performance at KCSE. This means that deliberate strategies laid by the school on improving the quality of services offered to learner's influences academic performance. The schools in sub-county level were rated poorly in these practices and it is evident with their average performance at KCSE. In addition, Lydia and Nasongo (2015) concluded that head teachers' use of quality improvement measures influenced results of schools. High performing schools strongly put into consideration frequent testing and giving of feedback and remedial teaching, and controlled entry mark to enhance excellence in academic performance.

4.7 Extent to which schools have adopted innovations and ICT integration

On adoption of ICT and innovation in schools, the researcher asked question on, presence of ICT facilities and their use in the schools for teaching and for management. From the study, the averages of the perception of the responses were analyzed and presented in a graph as shown in figure 4.15. When the analysis was done with regard to school category, the findings were presented in a graph as shown in figure 4.16.

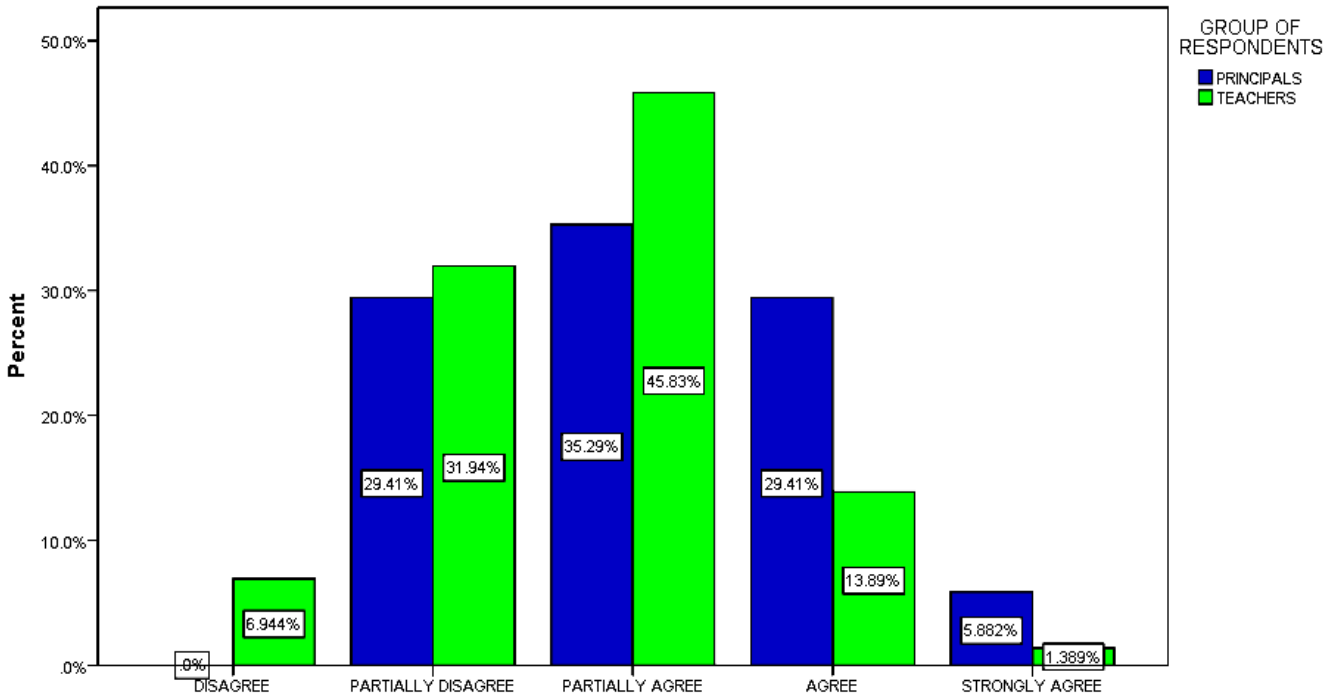


Figure 4.15: Perception of adoption of innovation and ICT integration in schools

In this section 45.83 % of principals and 35.29 % of teachers partially agreed, 29.41% and 13.89% agreed respectively. However only a small percentage 5.88% and 1.38% strongly agreed. This shows that it is only a few schools that had strong ICT integration policies. On the other hand, 29.41% of principals and 31.94% of teachers partially disagreed while 6.94% of teachers disagreed. None strongly disagreed.

When the responses were compared between the three school categories as shown in figure 4.16, 50% of teachers disagreed and 50% partially agreed. This shows a lukewarm response in the integration of ICT in county schools.

In extra-county schools 45.83% partially agreed, 33.33% agreed and 4.16% strongly agreed. This is evidence that in extra-county schools there was more integration of ICT in learning compared to the other school categories. This is also demonstrated by their performance at KCSE, which is higher than in the other two school categories.

From the figure, it can be observed that 40.91 % of the teachers in sub-county schools partially disagreed, 45.45% partially agreed, 9.09% disagreed and 4.54% agreed. These results show that a greater part of sub-county schools felt that they were yet to embrace technology in teaching and learning.

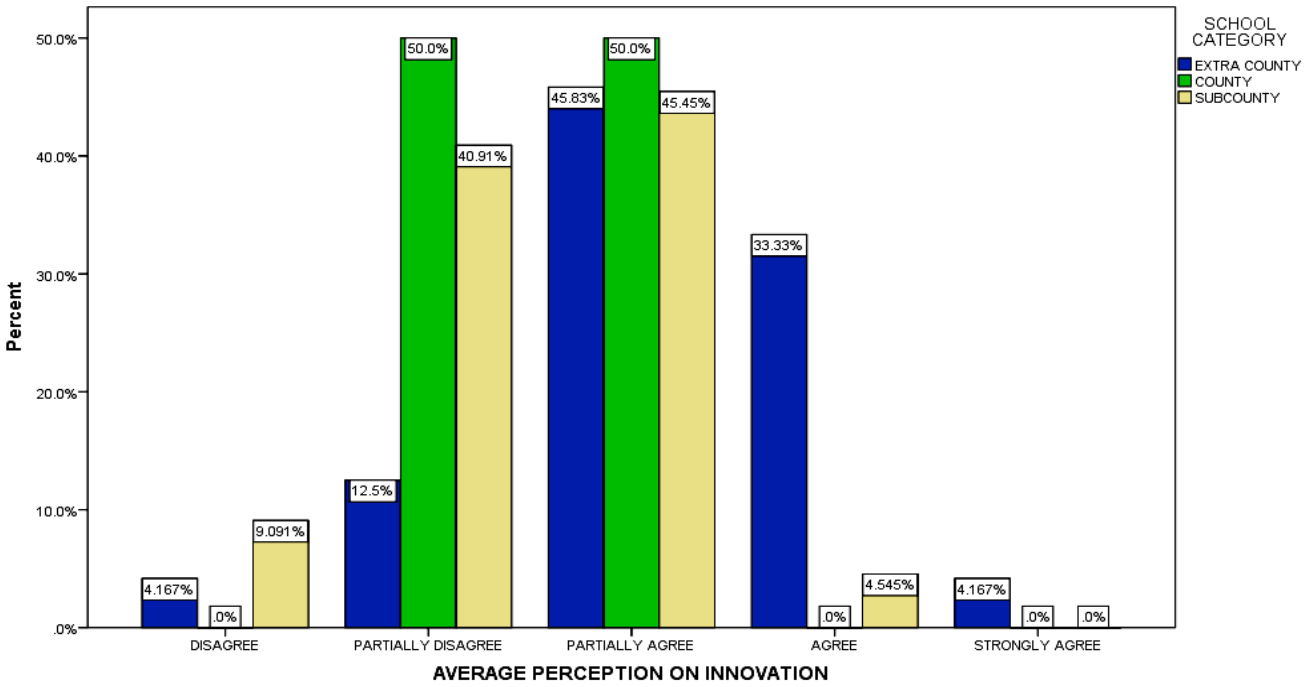


Figure 4.16: Perception of adoption of innovation and ICT integration per school category

These findings correlate with their KCSE performance, which was lower than in the other two categories. These results concur with findings made by Kipsoi, Chang'ach and Sang (2012). The researchers realized that lack of ICT facilities and limited use of ICT in school management hindered the use of the same in teaching and learning. As earlier seen only 33.33% of sub-county schools had computer laboratories.

A correlation analysis on average perception on principals and teachers on the five main variables in the study was analyzed as presented in Table 4.14. These two tables assisted the researcher to gauge responses made by the principal as a self and those made by the

teachers as an observer. The principal is the manager who is in charge of the institution hence overall in accountability on what goes on in the school. The teacher is a subject or a subordinate whose actions are at the control of the principal. Their perceptions therefore showed varied results.

Table 4.14: Mean, standard deviation and Pearson correlation analysis on perception of principals and KCSE performance

	Mean	Std. Deviation	Pearson Correlation	Sig. (2-tailed
Average self-perception of principals leadership behaviour	4.7294	.34288	-.380	.132
Average self-perception of principals initiative behaviour	4.59	.507	-.198	.445
Average self-perception of principal on considerate behaviour	4.94	.556	-.219	.399
Average self-perception of principal on quality improvement practices in the school	4.6059	.43369	.211	.417
Average self-perception of principal on innovation and	4.12	.928	-.188	.470

From the table it was evident that the principal's responses showed no correlations. Pearson's coefficient was below 0.3 and some were even negative. All were not significant at 0.05 level of significance. This is because individuals tend to rate themselves highly. This makes the responses from the principals not to be statistically significant. The findings concur with study made by Ndiritu (2012) who suggested that the reason for high self-rating was due the fact that sometimes the principals thought they were practicing effective leadership practices which may not be what the observer perceive.

Table 4.15: Mean, standard deviation and Pearson correlation analysis on perception of teachers and KCSE performance

	Mean	Std. Deviation	N Pearson Correlation	Sig. (2-tailed)
Average teacher perception on improvement strategies	3.36	.67	.422**	.000
Average teacher perception on principals leadership behaviour	4.16	1.23	.302**	.010
Average teacher perception on initiative behaviour	4.28	1.25	.273*	.020
Average teacher perception on considerate behaviour	3.90	1.291	.419**	.000
Average teacher perception on quality improvement practices	4.13	.76	.480**	.000
Average teacher perception on innovations	3.71	.84	.410**	.000

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

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

The responses from the teachers as observers showed correlation of all the five areas of the study with academic performance of respective schools. This shows that the responses of the teachers were more reliable in providing accurate information on the area being studied. Their responses also were statistically significance at 0.01 and 0.05 levels of significance. These findings are strengthened by Ndiritu (2012) who stated that it is not unusual to find self-scores being higher than observer scores in specific workshop or research settings. This observation contributes to precision of responses with those of self being more subjective while those of observer being more objective.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter is composed of a summary of the study, conclusions from the findings, recommendations and suggestions for further research.

5.2 Summary of the study

The study focused on three aspects of strategic management that are leadership, quality improvement practices and innovation. A review of the literature provided the theory that the study was anchored on hence assisted in formulation of three objectives for the study. For each of the independent variables, descriptive analysis was done to establish how each factor influenced academic performance.

5.2.1 School academic performance.

From the study, it was realized that the entry marks of students correlated positively with the performance they got at KCSE. A Pearson correlation of 0.922 was obtained when comparing the cut off mean at entry and the schools means at KCSE. County and Extra-county schools obtained learners with higher entry scores than the other schools. This is in line with a study made by Ibrahim and Orodho (2014) who stated that success in secondary school though measured by results obtained at KCSE, is a result of the environment in which a study studies in and the ability of the student.

However, it was observed that the years of service of the principals had no correlation with performance at KCSE. On the best measure of academic performance there was a low correlation of perception of teaches and principals on use of mean, output and value added performance in determining overall academic performance of schools.

On academic improvement strategies, teachers ranked the strategies using a scale of 1-5. They felt that having extra time with the learners was the best strategy with a mean of 4.06, followed by regular science practicals with a mean of 4.04 and timely syllabus coverage with a mean of 4.01. However, benchmarking use of talents and use of rapid tests were considered the three weakest strategies with means of 2.61, 2.64 and 2.67 respectively.

In addition, respondents felt that lack of adequate resources hinders academic performance with 64.71% of principals and 37.50% of teachers strongly agreeing. From the results on availability of resources in schools, it was evident that resources in secondary schools in the sub-county are somehow concentrated in the few schools under the category of county and extra-county schools.

It was also observed that all the county and sub-county schools had libraries and computer laboratories while only 33.33% of sub-county schools category had computer labs and only 8.33% had libraries. These facilities are important in curriculum delivery and their absence automatically influences academic performance. The perception on availability of resources and academic performance showed a Pearson's coefficient of 0.792, which was statistically significant.

5.2.2 Leadership behaviour of principals

From the study, it was observed that leadership behaviour of the principal influences academic performance. The perception of teachers showed a significant correlation between principals' leadership behaviour and students' academic performances. For instance, 34.72% of teachers agreed that their principals exhibited initiative behaviour while 29.17% agreed that their principals exhibited considerate behaviour. In both instances, more than 10 % of teachers strongly agreed that their principals had both considerate and initiative behavior.

These findings were found to be statistically significant with a Pearson's correlation coefficient of 0.273 for initiative behaviour and 0.419 for considerate behaviour. However due to self-rating, the responses of principals' were not statistically significant having realized negative correlation coefficients. This is because individuals tend rate themselves highly thereby becoming more subjective in their opinions.

In their findings, Nyaga and Ondongo (2013) had noted that a deficiency in leadership would automatically affect performance. Ndiritu (2012) on the other hand noted that

there exists a positive correlation between leadership and students' academic performance at KCSE. It is therefore evident that leadership as a component of strategic management is important in guiding a firm to performance.

5.2.3 Quality improvement practices

From the study, it was realized that quality improvement practices influence academic performance. The respondents gave their perception on quality improvement practices such as setting of targets, meeting of student's needs, remedial teaching and effective communication. Schools with quality improvement practices were also found to have higher academic performance. The poorly performing schools rated poorly in quality improvement practices. This concurs with findings made by Sande, Walela and Wamukoye (2015) which indicated that effective management of secondary schools must embrace efficient work processes, people systems and practices that improve communication for academic excellence.

These findings also concur with findings by Lydia and Nasongo (2009) who felt that quality improvement practices such as entry mark; syllabus coverage and remedial teaching for poorly performing learners enhance academic improvement in secondary schools. Pearson correlation indicated statistical significance between teacher's perception on quality improvement practices and students' academic performance. All perceptions from principals showed no correlation.

5.2.4 Adoption of ICT and innovations

From the study, respondents gave their views on presence and use of ICT in their schools. It was found out that integration of ICT and use of innovations influences academic performance. A Pearson's correlation also indicated a positive correlation between perception of teachers on use of ICT and innovations and academic excellence with a coefficient of 0.410 and significance at 0.01 levels. This is in line with findings made by Kipsoi, Chang'ach and Sang (2012) that found out those students who benefit from analytical, creative and collaborative facilities, perform better in their exams than those

who do not. Poorly performing schools were found to be poor in use of innovations and in integration of ICT in learning with most of them lacking computer laboratories.

5.3 Conclusions

From the study, the following conclusions can be derived:

1. Strategic management practices are critical in ensuring that academic performance in secondary schools is attained. The overall duty of designing, formulation and implementation of strategies in schools lies with the principal. The level at which the principal implements the laid out strategies determines the level of performance of the schools.
2. Leadership behaviour of principals has an influence on student's academic performance. In the school where principals show strong initiation and considerate behaviour students tend to perform better than school where leadership is deficient. The ability of the principal to delegate authority, motivate, value views of teachers, and encourage innovations were seen to be some of the key practices that drive a school to better performance.
3. Academic performance is determined by the quality improvement practices adopted by a school. Having a clear strategic plan that focuses on key performance areas such as handling weak students, prompt completion of the syllabus and having extra contact hour with students are very vital. In addition, improvement of performance in sciences depends on continuous practice by having many practical activities.
4. Having extra contact time with learners, prompt syllabus coverage and regular science practicals are the best strategies that improve academic performance.
5. Adoption of technology enhances better teaching that contributes to academic performance. Schools with ICT infrastructure were found to have better academic performance than school where the infrastructure was deficient. ICT therefore creates leverage in delivery of content and therefore it enhances academic performance.

6. Categorization of schools by the ministry into sub-county, county and extra-county seems to be based on performance and resource capability of a school. Sub-county schools were relatively lower in performance and had lower resource endowment compared to other school categories. Extra-county schools had more resources.
7. The cut off entry mark is determined by the school category and type. Sub-county schools had lower cut points and in some cases, some did not have a definite cut point meaning students from all abilities were free to join the schools. The extra-county schools whose performance was higher received pupils with higher marks.
8. School academic performance is determined by the entry level of the learners and the academic improvement strategies that the school carries out.
9. At the same time use of KCSE mean, the value added performance and output to the university are good measures of determining the success of a given school.

5.4. Recommendations

1. From the study, it was found that strategic management principles are an important ingredient in academic performance. The researcher recommends that the government train all school administrators on strategic management to enhance their capacity to carry out activities that brings about better performance.

2. Leadership behaviour of principals influences how teachers work to bring about the desired results. The researcher recommends that leadership training be embedded in training and development programs of school administrators. The government needs to invest more on training of teachers on innovative ways of teaching and ways of utilizing resources available to produce better results.

3. Entry behaviour of learners as they enter into secondary schools has a bearing in their performance at KCSE. In analyzing academic performance, it is important to factor in the entry behaviour of the learners. It is therefore not prudent to compare performance of sub-county schools and those of extra-county schools since each group receives learners with different capabilities.

4. It is important for schools to carry out quality improvement practices such as taking care of learners needs, remedial teaching of learners with difficulties, continuous testing

and providing access to required facilities. Such activities provide a more conducive environment where good academic performance is achieved.

5.5 Suggestions for further studies

The study was carried in Makueni Sub-county only. The same need to be done in other counties. The researcher was not able to get information on actual correlation between student's academic performance at entry and exit performance. This needs further investigation.

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APPENDICES

Appendix I: Questionnaire to the principal

SECTION A: **Background information**

1. Gender: Male □ Female □
2. How many years has been a teacher?..... years.
3. How many years have you been a principal? ..... Years.
4. What is your professional qualification. Diploma □ Degree □Master □ PHD□
5. Which other professional qualification do you possess? Tick the appropriate one(s)

   CPA/CPS
   □Diploma in management – KESI
   Diploma in management-(KIM, KNEC etc.)
   Master's in Education
   Master's in Business Administration
   Masters in Psychology/G&C or any other masters degree
   PHD
   Others –(specify

SECTION B: School Information

1. What type of school do you head? (tick one) National □ Extra-county□ County□ Sub-county □
2. What category is your school? Boys Boarding□ Girls Boarding□ Mixed Boarding□ Mixed Day and Boarding□ Mixed Day only□
3. What is the enrolment of your school?..... students
4. What was your school's KCPE cut off mark during form 1 admissions this year marks/500
5. How many TSC employed teachers do you have in the school. .....
6. How many BOM employed teachers do you have in your school?.....
7. How many **TSC appointed HOD'S** do you have in your school? .....
8. How many **KNEC Trained Examiners** doyou in your school? ----------
9. Does your school have the following facilities? Tick yes or no
   a. Library Yes □ No □
   b. Computer lab Yes □ No □
   c. Piped water Yes □ No □
   d. Electricity -mains Yes □ No □
   e. School bus Yes □ No □
   f. Students' TV Yes □ No □
   g. Science laboratory Yes □ No □
10. Has any of your teachers participated in the TOYA (Teacher Of The Year) competitions Yes □ No □ i don't know □

a. If yes how many teachers have participated in the awards between 2016-2018. .....

11. Do you have teacher who are union officials either KUPPET or KNUT in your school? Yes□ No □ i don't know □
    a. If yes how many teachers.....
12.
    a. Do you have teachers in your school who are consultants or facilitators in academic matters such as in Subject Panels, SMASSE training, Exam preparation talks, G/C programs etc. Yes□ No□ I don't know □
    b. If present state an approximate number.....

SECTION C: School performance

Using a scale provided that range from 1-6, tick to indicate the extent to which you agree with the statements given on academic performance **:**The scale is as follows:

6 Strongly Agree
5 Agree
4 Partly Agree
3 Partly disagree
2 Disagree
1 Strongly Disagree

1. School mean is the best measure of a school academic performance	6	5	4	3	2	1
2. Output/number of students qualifying to go to the university is the best measure of academic performance in a school	6	5	4	3	2	1
3. Value added performance of comparing the entry behaviour and	6	5	4	3	2	1
4. The current criteria of measuring school academic performance is not adequate.	6	5	4	3	2	1
5. Secondary school academic performance is dependent on entry behaviour of learners.	6	5	4	3	2	1
6. Pupils coming to form 1 are not adequately prepared for secondary school studies.	6	5	4	3	2	1
7. School academic performance is influenced by strategies laid down by the school	6	5	4	3	2	1
8. Effective teaching results to good academic performance	6	5	4	3	2	1
9. Teachers who are examiners assist in boosting of school academic performance	6	5	4	3	2	1
10. Lack of adequate resources hinders academic performance	6	5	4	3	2	1

SECTION D: Leadership Behaviour

i. Using a scale provided that range from 1-6, tick to indicate the extent to which you engage in the following behaviours?
    1- Rarely
    2- Once in a while
    3- Sometimes
    4- Frequently
    5- Very frequent
    6- Almost always

1.	I encourage cooperative relationships among the teachers	6	5	4	3	2	1
2.	1 usually set an example to the teachers of what I expect from them	6	5	4	3	2	1
3.	I praise teachers who perform well	6	5	4	3	2	1
4.	I reprimand teachers with poor performance	6	5	4	3	2	1
5.	I challenge the teachers to look for new ways and to come up with new ideas and methods that can be make our school perform better	6	5	4	3	2	1
6.	I enthusiastically describe to the teachers what we are able to accomplish together as a team	6	5	4	3	2	1
7.	I listen to diverse points of view	6	5	4	3	2	1
8.	I let teachers know about my confidence in their abilities	6	5	4	3	2	1
9.	I search outside the school for innovative ways to improve our teaching.	6	5	4	3	2	1
10.	In our meetings I encourage teachers to share their views on the future direction of our school	6	5	4	3	2	1
11.	I treat teachers with dignity and respect	6	5	4	3	2	1
12.	I make sure that teachers are rewarded for their contributions to the success of our school.	6	5	4	3	2	1
13.	I support decisions that teachers make on their own.	6	5	4	3	2	1
14.	I publicly recognize teachers and students who show commitment to performance	6	5	4	3	2	1
15.	I give teachers freedom and choice in deciding how to do their work.	6	5	4	3	2	1
16.	I ensure that teachers develop professionally	6	5	4	3	2	1

ii. Using a scale provided that range from 1-6, tick to indicate **To what extent do you agree with the following statement about a principal and school management**.

6 Strongly Agree
5 Agree
4 Partly Agree
3 Partly disagree
2 Disagree
1 Strongly Disagree

1.	Principal should strictly adhere to laid down rules and regulations	6	5	4	3	2	1
2.	Principal should ensure strict meeting of deadlines by staff	6	5	4	3	2	1
3.	Principal should fully delegate responsibility to various department	6	5	4	3	2	1
4.	Principal should have a functional senior management team for decision making on important administrative issues	6	5	4	3	2	1
5.	Teachers can work without supervision.	6	5	4	3	2	1

6. Some teachers cannot work well without being monitored.	6	5	4	3	2	1
7. Principals should be relieved of teaching work	6	5	4	3	2	1
8. Without strictness teachers cannot work effectively	6	5	4	3	2	1
9. Principal should give prompt feedback on any issue of concern raised by the teachers.	6	5	4	3	2	1
10. Principal should value teachers' views	6	5	4	3	2	1

SECTION E: Quality improvement practices

Using a scale provided that range from 1-6, tick to indicate **To what extent do you agree with the following statement about your school**.

6 Strongly Agree
5 Agree
4 Partly Agree
3 Partly disagree
2 Disagree
1 Strongly Disagree

1. The school strategic plan has sections addressing academic improvement in the school	6	5	4	3	2	1
2. Needy students are given assistance by the school	6	5	4	3	2	1
3. Weak students are met separately by the teachers for remedial teaching.	6	5	4	3	2	1
4. Marked examination papers are returned to the students without delay.	6	5	4	3	2	1
5. There is a good reading culture in the school.	6	5	4	3	2	1
6. Students set individual targets on their academic performance	6	5	4	3	2	1
7. Teachers always find extra time to teach lessons not taught.	6	5	4	3	2	1
8. Students have been allocated enough time to do revision.	6	5	4	3	2	1
9. Students consult teachers regularly	6	5	4	3	2	1
10. Our academic improvement strategy targets learners of all abilities	6	5	4	3	2	1
11. We have internal academic contests and awards for good performance	6	5	4	3	2	1
12. We have a mentorship/student adoption programs where a teacher mentors a small group of students	6	5	4	3	2	1
13. The school carries out benchmarking to learn on best practices from performing schools	6	5	4	3	2	1
14. Teachers are sponsored to attend seminars in their respective subject areas	6	5	4	3	2	1
15. The school sets clear targets for each student	6	5	4	3	2	1

16. Students who do not meet targets are advised to look for alternative schools	6	5	4	3	2	1
17. Students are constantly exposed to exams in the performance improvement strategy	6	5	4	3	2	1
18. Teachers organise participatory activities where learners coach each other on difficult areas in all subjects.	6	5	4	3	2	1
19. The school administration constantly monitors the quality of teaching	6	5	4	3	2	1
20. Students who do not meet targets are enrolled in remedial programs	6	5	4	3	2	1
21. Parents are called during academic days to discuss students performance	6	5	4	3	2	1
22. Teachers who meet targets are adequately rewarded	6	5	4	3	2	1
23. Each department accounts for the targets not met during staff meetings	6	5	4	3	2	1
24. The school invites facilitators and experts who mentor students on academic improvement	6	5	4	3	2	1

SECTION F: Creativity and innovation

Using a scale provided that range from 1-6, tick to indicate **To what extent do you agree with the following statement about your school**.

6 Strongly Agree
5 Agree
4 Partly Agree
3 Partly disagree
2 Disagree
1 Strongly Disagree

1. ICT integration enhances improvement of academic performance	6	5	4	3	2	1
2. The school has fully integrated use of ICT in teaching	6	5	4	3	2	1
3. The hindrance to ICT integration is lack of enough funds	6	5	4	3	2	1
4. The integration of ICT does not in any way enhance improvement of academic performance.	6	5	4	3	2	1
5. ICT helps to Improve efficiency in office work	6	5	4	3	2	1
6. There is a fully equipped computer lab in the school	6	5	4	3	2	1
7. The school is connected to internet	6	5	4	3	2	1
8. Most teachers lack interest in use of ICT in teaching	6	5	4	3	2	1
9. Teachers in the school use innovative ways of teaching	6	5	4	3	2	1
10. Teachers share experiences on creative ways of teaching during staff meetings.	6	5	4	3	2	1
11. Teachers are rewarded for use of creative methods of teaching	6	5	4	3	2	1

Appendix II: Teachers' questionnaire

There are five sections in this questionnaire each with several questions. Please tick (√) the choice you have made. There are no right or wrong answers. Feel free to give your most honest response.

SECTION A: **Background information**

1. Gender: Male □ Female □
2. The type of school you head(tick one) National □ Extra-county □ County □Sub-county □
3. What category is your school. Boys Boarding □ Girls Boarding□ Mixed Boarding □Mixed Day and Boarding □ Mixed Day only□
4. Which other responsibilities do you have in the school other than teaching?
   Senior teacher □ HOD□ Class Teacher□ Games/Music/Drama Coach□ Club/society patron□ staff welfare□ subject Head□ none□
5. How many years have you been a teacher?.....years
6. What is your academic qualification?
   Masters □Bachelors Degree □Diploma □PGDE□ Others State……..
7. What was your schools cut off at form one admissions this year...../500
8. What is your current lesson workload per week .....lessons
9. Do you have a staff welfare in your school? Yes□ No□ I Don't Know □
10. Does your welfare have an enterprise project such as merry go round or loaning facility. Yes□ No□ I Don't Know□
11.
    a. Do you carry out any corporate social responsibility activities in the school or outside the school? Yes□ No□ I Don't Know □
    b. If yes mention the activity.....
12.
    a. Do you have a schools sports day? Yes□ No □ I Don't Know□
13. If yes do the teachers compete with students during such days? Yes□ No□ I Don't Know □
14.
    a. Are you aware of TOYA (Teacher of the Year) competitions? Yes□ No □
    b. If yes have you ever been involved in the program. Yes□ No □
15. Do you have licensed sports referees amongst your colleague teachers. Yes□ No□ I Don't Know□
    If yes how many teachers. .....

16. Rate how the following academic improvement strategies contribute to academic performance in your school using a scale of 1-5. (Where 1 stands for lowest contribution and 5 for highest contribution). low high

Syllabus coverage by end of term	1	2	3	4	5
Use of extra class time in mornings, evenings and weekends	1	2	3	4	5
Use of subject champions /subject movers to improve participatory learning	1	2	3	4	5
Phasing out of poor performers	1	2	3	4	5
Use of academic days to involve parents in performance	1	2	3	4	5
Use of Student mentorship/ student parenting by teachers	1	2	3	4	5
Regular science practicals	1	2	3	4	5
Use of formalised group discussions	1	2	3	4	5
Involvement in Internal subject symposia	1	2	3	4	5
Use of talents days to enhance creativity	1	2	3	4	5
Use of weekly rapid tests	1	2	3	4	5
Topical testing in each subject	1	2	3	4	5
Inviting Subject specialists to talk to students	1	2	3	4	5
Good rewards for performing students	1	2	3	4	5
Use of external exams	1	2	3	4	5
Benchmarking	1	2	3	4	5
Topical revision in all subjects	1	2	3	4	5

17. State other strategies that teachers use to improve academic performance in students.

_____

_____

18. What was your KCSE school mean in 2016.....and 2017.....

According to you, was the KCSE performance in 2016 and 2017 a true reflection of performance in your school. Yes□ no □ not very sure□

SECTION B: School performance

Using a scale provided that range from 1-6, tick to indicate the extent to which you agree with the following statements on academic performance **:**

6 Strongly Agree
5 Agree
4 Partly Agree
3 Partly disagree
2 Disagree
1 Strongly Disagree

1. School mean is the best measure of a school academic performance	6	5	4	3	2	1
2. Output/number of students qualifying to go to the university is the best measure of academic performance in a school	6	5	4	3	2	1
3. Value added performance of comparing the entry behaviour and KCSE results is the best measure of school academic performance	6	5	4	3	2	1
4. The current means of measuring school academic performance is not adequate.	6	5	4	3	2	1
5. Secondary school academic performance is dependent on entry behaviour of learners.	6	5	4	3	2	1
6. Pupils coming to form 1 are not adequately prepared for secondary school studies.	6	5	4	3	2	1
7. School academic performance is influenced by strategies laid down by the school	6	5	4	3	2	1
8. Effective teaching results to good academic performance	6	5	4	3	2	1
9. Teachers who are examiners assist in boosting of school academic performance	6	5	4	3	2	1
10. Lack of adequate resources hinders academic performance	6	5	4	3	2	1

SECTION C: Leadership Behaviour

i. Using a scale provided that range from 1-6, tick to indicate the extent to which you think your principal engages in the following behaviours?

1-Rarely
2-Once in a while
3-Sometimes
4-Frequently
5-Very frequent
6-Almost always

1. Principal encourages cooperative relationships among the teachers	6	5	4	3	2	1
2. Principal usually sets an example to the teachers of what I expect from them	6	5	4	3	2	1
3. Principal praises teachers who perform well	6	5	4	3	2	1
4. Principal reprimands teachers with poor performance	6	5	4	3	2	1
5. Principal challenges the teachers to look for new ways and to come up with new ideas and methods that can be make our school perform better	6	5	4	3	2	1
6. Principal enthusiastically describes to the teachers what we are able to accomplish together as a team	6	5	4	3	2	1
7. Principal listens to diverse points of view	6	5	4	3	2	1
8. Principal is confident in the abilities of the teachers	6	5	4	3	2	1
9. Principal searches outside the school for innovative ways	6	5	4	3	2	1

to improve our teaching.						
10. In our meetings, Principal encourages teachers to share their views on the future direction of our school	6	5	4	3	2	1
11. Principal treats teachers with dignity and respect	6	5	4	3	2	1
12. Principal makes sure that teachers are rewarded for their contributions to the success of our school.	6	5	4	3	2	1
13. Principal supports decisions that teachers make on their own.	6	5	4	3	2	1
14. Principal publicly recognizes teachers and students who show commitment to performance	6	5	4	3	2	1
15. Principal gives teachers freedom and choice in deciding how to do their work.	6	5	4	3	2	1
16. Principal ensures that teachers develop professionally	6	5	4	3	2	1

ii. Using a scale provided that range from 1-6, tick to indicate **To what extent do you agree with the following statement about your school**.

6 Strongly Agree
5 Agree
4 Partly Agree
3 Partly disagree
2 Disagree
1 Strongly Disagree

1. The principal values strict adherence to laid down rules and regulations	6	5	4	3	2	1
2. The principal values strict meeting of deadlines	6	5	4	3	2	1
3. The principal fully delegates responsibility to various departments	6	5	4	3	2	1
4. There is a functional senior management team in the school	6	5	4	3	2	1
5. Teachers in this school can work without supervision.	6	5	4	3	2	1
6. Some teachers cannot work without supervision.	6	5	4	3	2	1
7. Principals should be relieved of teaching work	6	5	4	3	2	1
8. Teachers normally feel comfortable and free to express their feelings, problems/concerns to the school administration	6	5	4	3	2	1
9. The school administration gives prompt feedback on any issue of concern raised by the teachers.	6	5	4	3	2	1
10. Teachers' views are normally valued by the school administration.	6	5	4	3	2	1
11. All our teachers interact well with one another	6	5	4	3	2	1
12. As a teacher am encouraged to always seek better ways of doing things.	6	5	4	3	2	1
13. The principal is always ready to make changes when we give him/her new ideas	6	5	4	3	2	1
14. Poorly performing teachers are criticised by the administration.	6	5	4	3	2	1
15. Am actively involved in teacher's welfare activities.	6	5	4	3	2	1

16. The principal always appreciates the staff members.	6	5	4	3	2	1
17. The principal encourages us to enjoy our work	6	5	4	3	2	1
18. The principal encourages us to be creative and innovative	6	5	4	3	2	1
19. The school administration takes great concern when a teacher is faced with personal challenges	6	5	4	3	2	1

SECTION D: Quality improvement practices

Using a scale provided that range from 1-6, tick to indicate **To what extent do you agree with the following statement about your school**.

6 Strongly Agree
5 Agree
4 Partly Agree
3 Partly disagree
2 Disagree
1 Strongly Disagree

1. Am conversant with school improvement strategy outlined in the schools' strategic plan	6	5	4	3	2	1
2. Weak students are met separately by the teachers for remedial teaching.	6	5	4	3	2	1
3. Marked examination papers are returned to the students without delay.	6	5	4	3	2	1
4. The school has adequate water for use by the students.	6	5	4	3	2	1
5. Teachers in this school are able to complete the syllabus in time	6	5	4	3	2	1
6. There is a good reading culture in the school.	6	5	4	3	2	1
7. Students set individual targets in their academic performance	6	5	4	3	2	1
8. Teachers always find extra time to teach lessons not taught.	6	5	4	3	2	1
9. Students have been allocated enough time to do revision.	6	5	4	3	2	1
10. Students consult teachers regularly.	6	5	4	3	2	1
11. Our academic improvement strategy targets learners of all abilities	6	5	4	3	2	1
12. School has a cut off entry mark during form 1 admissions.	6	5	4	3	2	1
13. Teachers organise symposia in their respective departments	6	5	4	3	2	1
14. Students in this school attend symposia every year	6	5	4	3	2	1
15. Students in this school participates in science fairs every year	6	5	4	3	2	1
16. We have internal academic contests where winning students are awarded	6	5	4	3	2	1
17. We have a mentorship/student adoption programs where a teacher mentors a small group of students	6	5	4	3	2	1
18. The school carries out benchmarking to learn on best practices from performing schools	6	5	4	3	2	1

19. The school organizes benchmarking activities each year	6	5	4	3	2	1
20. Teachers are sponsored to attend seminars in their respective subject areas	6	5	4	3	2	1
21. The school sets clear targets for each student	6	5	4	3	2	1
22. Students who do not meet targets are advised to look for alternative schools	6	5	4	3	2	1
23. Students are constantly exposed to exams in the performance improvement strategy	6	5	4	3	2	1
24. Teachers organise participatory activities where learners coach each other on difficult areas in all subjects.	6	5	4	3	2	1
25. The school administration constantly monitors the quality of teaching	6	5	4	3	2	1
26. Students who do not meet targets are enrolled in remedial program	6	5	4	3	2	1
27. Parents are called during academic days to discuss students performance	6	5	4	3	2	1
28. Each department presents its academic improvement strategy during each staff meeting.	6	5	4	3	2	1
29. Teachers who meet targets are adequately rewarded	6	5	4	3	2	1
30. Each department accounts for the targets not met during staff meetings	6	5	4	3	2	1
31. The school invites facilitators and experts who mentor students on academic improvement	6	5	4	3	2	1

SECTION E: Creativity and innovation

Using a scale provided that range from 1-6, tick to indicate **To what extent do you agree with the following statement about your school**.

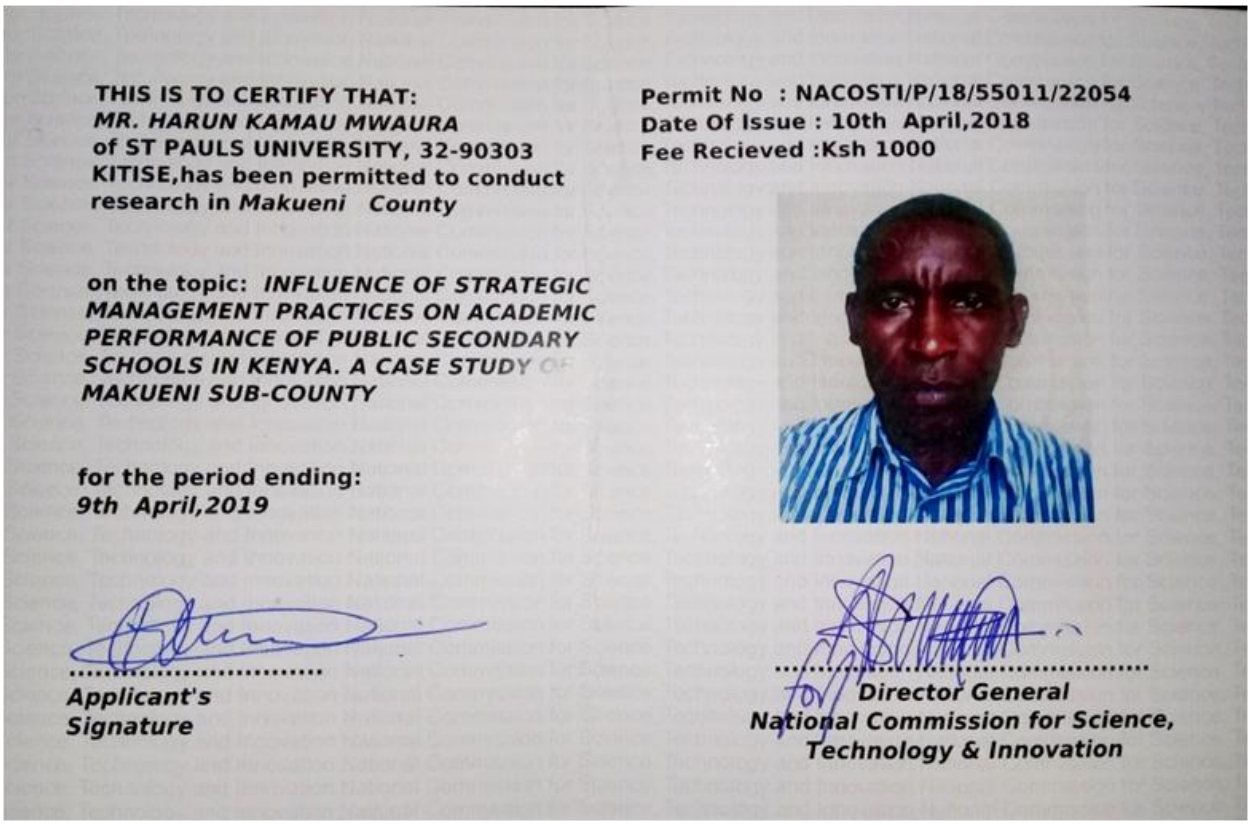
1. ICT integration enhances improvement of academic performance	6	5	4	3	2	1
2. The school has fully integrated use of ICT in teaching	6	5	4	3	2	1
3. The hindrance to ICT integration is lack of enough funds	6	5	4	3	2	1
4. The integration of ICT has improved quality of teaching in our school	6	5	4	3	2	1
5. ICT helps to Improve efficiency in office work	6	5	4	3	2	1
6. There is a fully equipped computer lab in the school	6	5	4	3	2	1
7. The school is connected to internet	6	5	4	3	2	1
8. Most teachers lack interest in use of ICT in teaching	6	5	4	3	2	1
9. Teachers in the school use innovative ways of teaching	6	5	4	3	2	1
10. Teachers share experiences on creative ways of teaching during staff meetings.	6	5	4	3	2	1
11. Teachers are rewarded for use of creative methods of	6	5	4	3	2	1

teaching						

Appendix III: Research budget

SN	PARTICULARS	UNITS	APPROXIMATE COSTS
1	Proposal development- data bundles , transport and printing	1	10000/=
2	Data collection-12 visits 4 schools per day	500	24,000/=
3	Stationery	1	1,000/=
4	Data analysis and report writing	1	30,000/=
5	Miscellaneous expenses- (5% contingency)	1	2050/=
	Total budget		67,050/=

Appendix IV: Copy of NACOSTI permit



THIS IS TO CERTIFY THAT:
MR. HARUN KAMAU MWAURA
of ST PAULS UNIVERSITY, 32-90303
KITISE,has been permitted to conduct
research in *Makueni County*

on the topic: *INFLUENCE OF STRATEGIC MANAGEMENT PRACTICES ON ACADEMIC PERFORMANCE OF PUBLIC SECONDARY SCHOOLS IN KENYA. A CASE STUDY OF MAKUENI SUB-COUNTY*

for the period ending:
9th April,2019

.....
Applicant's Signature

Permit No : NACOSTI/P/18/55011/22054
Date Of Issue : 10th April,2018
Fee Recieved :Ksh 1000

.....
Director General
National Commission for Science, Technology & Innovation

Appendix V: Authorization letter from County education office

REPUBLIC OF KENYA

Tel: 044-33318
FAX: @gmail.com
Email:cdemakueni@gmail.com
When replying please quote

County Director of Education Office,
P.O. Box 41,
MAKUENI.

MINISTRY OF EDUCATION

STATE DEPARTMENT OFEARLY LEARNING AND BASIC EDUCATION

MKN/C/ED/5/33 VOL 11/79 **17th April, 2018**

Harun Kamau Mwaura
St. Pauls University
P.O Private Bag-00217
Limuru.

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION –HARUN KAMAU MWAURA

This is to confirm to you that Harun Kamau Mwaura St. Pauls University Limuru has been authorized to carry out research as per letter dated **10th April, 2018**,Ref **No. NACOSTI/P/18/55011/22054** on **"Influence of Strategic management practices on academic performance of Public Secondary Schools. A case study of Makueni Sub-County," for** the period ending **9 April, 2019.**

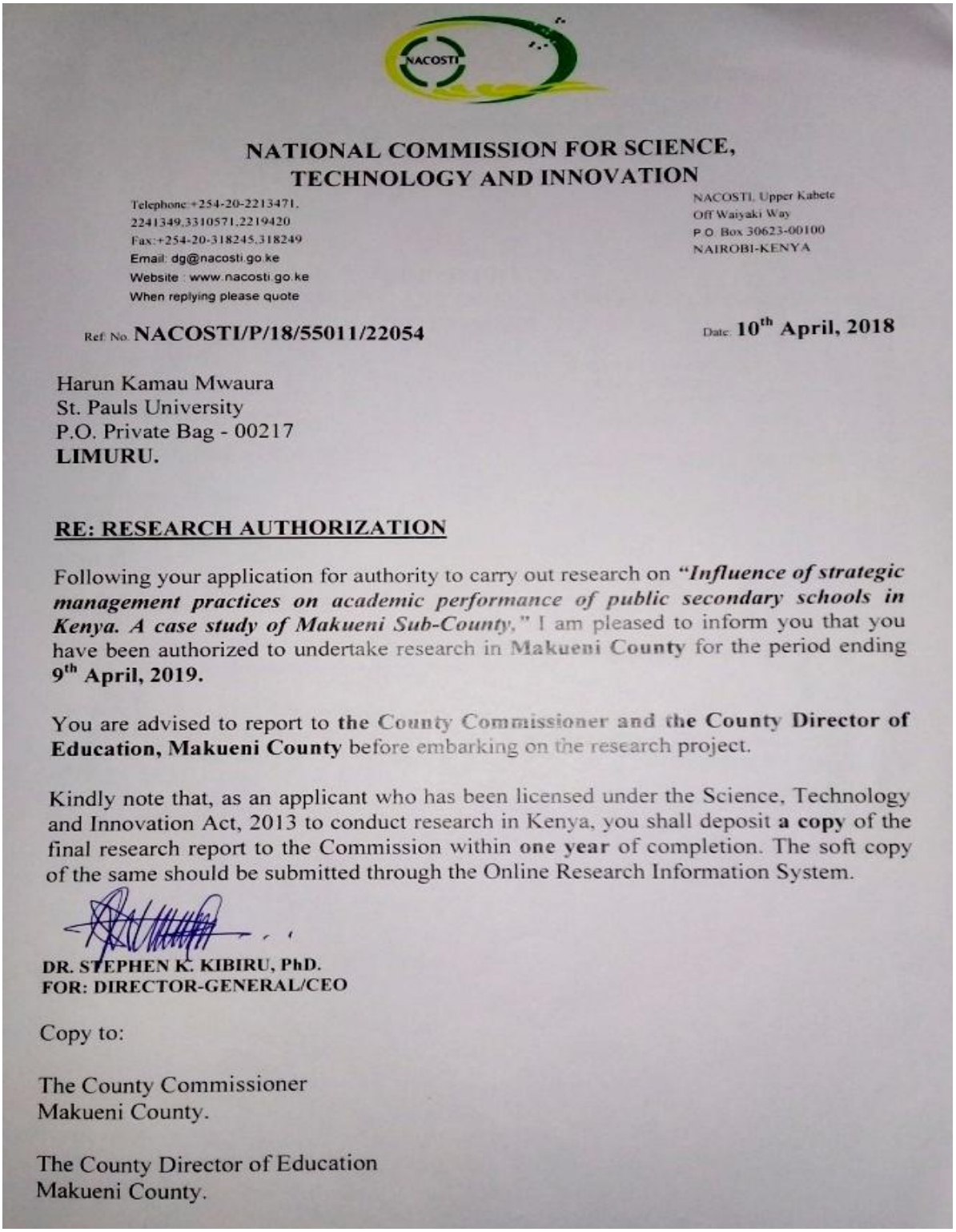
You are however expected to ensure that you conduct the exercise professionally.

Kindly give him all the assistance required.

DATE: 17/4/2018
P.O. BOX 41-90300
MAKUENI

Gladys Malonza
For County Director of Education
Makueni.

Appendix VI: NACOSTI Research authorization letter



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471, 2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/18/55011/22054**

Date: **10th April, 2018**

Harun Kamau Mwaura
St. Pauls University
P.O. Private Bag - 00217
LIMURU.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Influence of strategic management practices on academic performance of public secondary schools in Kenya. A case study of Makueni Sub-County,"*** I am pleased to inform you that you have been authorized to undertake research in **Makueni County** for the period ending **9th April, 2019.**

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

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

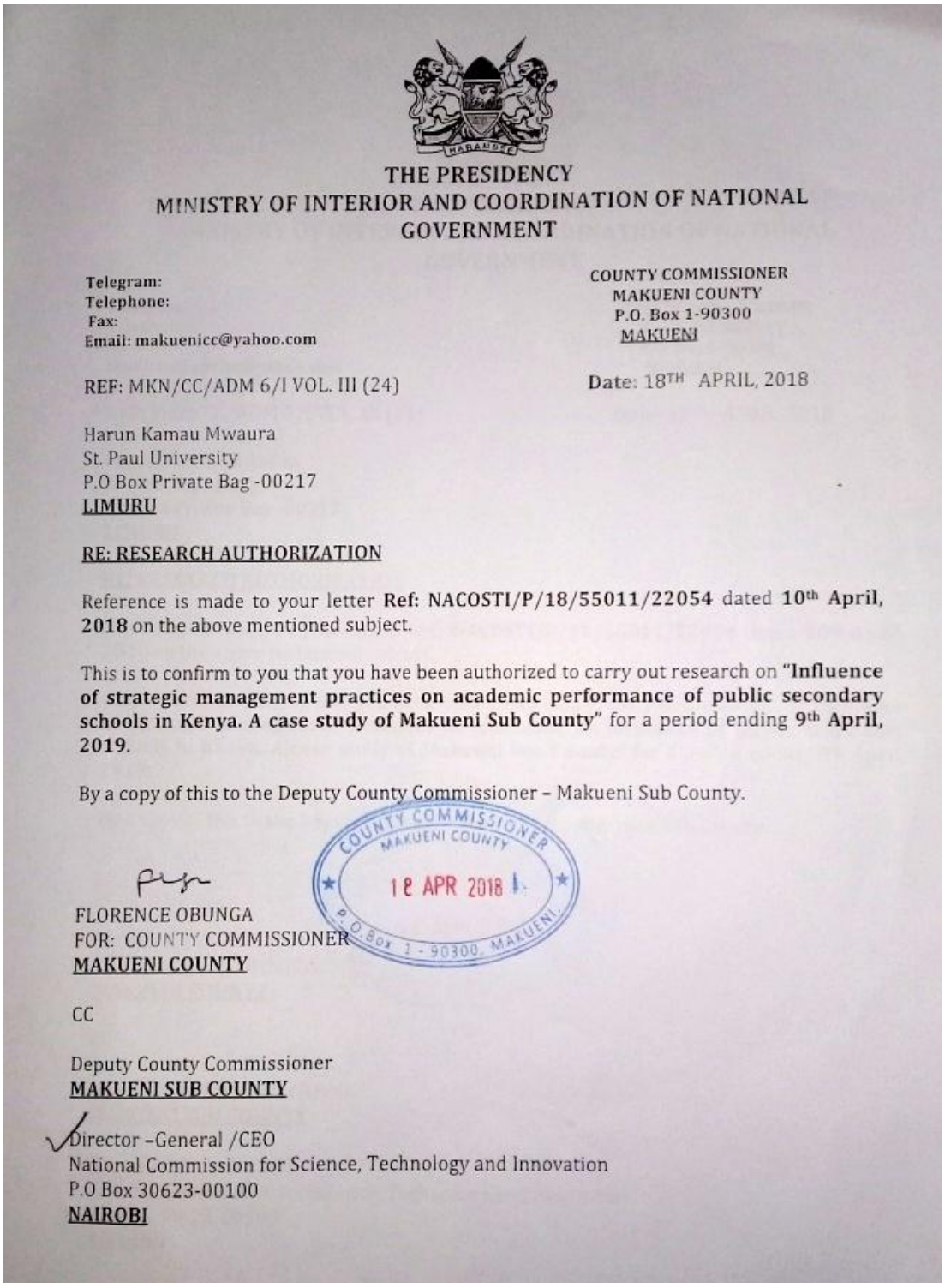
DR. STEPHEN K. KIBIRU, PhD.
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Makueni County.

The County Director of Education
Makueni County.

Appendix VI: Authorization letter from ministry of interior



THE PRESIDENCY
MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telegram:
Telephone:
Fax:
Email: makuenicc@yahoo.com

COUNTY COMMISSIONER
MAKUENI COUNTY
P.O. Box 1-90300
MAKUENI

REF: MKN/CC/ADM 6/I VOL. III (24)

Date: 18TH APRIL, 2018

Harun Kamau Mwaura
St. Paul University
P.O Box Private Bag -00217
LIMURU

RE: RESEARCH AUTHORIZATION

Reference is made to your letter **Ref: NACOSTI/P/18/55011/22054** dated **10th April, 2018** on the above mentioned subject.

This is to confirm to you that you have been authorized to carry out research on **"Influence of strategic management practices on academic performance of public secondary schools in Kenya. A case study of Makueni Sub County"** for a period ending **9th April, 2019.**

By a copy of this to the Deputy County Commissioner – Makueni Sub County.

COUNTY COMMISSIONER MAKUENI COUNTY 18 APR 2018 P.O. Box 1 - 90300, MAKUENI

FLORENCE OBUNGA
FOR: COUNTY COMMISSIONER
MAKUENI COUNTY

CC

Deputy County Commissioner
MAKUENI SUB COUNTY

Director –General /CEO
National Commission for Science, Technology and Innovation
P.O Box 30623-00100
NAIROBI