INFLUENCE OF SCHOOL MANAGEMENT PRACTICES ON STUDENTS' PERFORMANCE IN KENYA CERTIFICATE OF SECONDARY EDUCATION IN VOI SUB-COUNTY, TAITA – TAVETA COUNTY, KENYA

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DECLARATION

I declare that this document and the thesis it describes are my original work and that they have not been presented in any other university for academic work

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This thesis was conducted under our supervision and is submitted with our approval as university supervisors.

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DEDICATION

This work is dedicated to my late mother Agnes Nyaguthii, my two kids Colin and Ian, and high school students who may be striving to better their grades.

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I thank my supervisors: Prof. Ongiti and Dr. Boniface Mwangi for their tremendous assistance in completing this work. My thanks also go out to my friends and the many people who helped me with the research and other stages that lead to the formation of this idea. My two sons, Colin and Ian, were in - charge of typing, printing, and binding the work. I'd want to express my gratitude to God for His boundless divine guidance and for instilling immense of dedication, and determination in the conception and ultimate completion of this project. For my African Nazarene University classmates, I owe a sense of gratitude to all of my African Nazarene University colleagues, although I may not have been able to thank personally. Thank you and may God continue to bless you.

ABSTRACT

The impact of school administration on academic achievement cannot be overstated. Rational school management strategies have shown to help students achieve their learning out comes while also improving their grades. However, the Voi Sub-County's KCSE results have been consistently poor for the past five years, from 2015 to 2019, raising concerns among education stakeholders about school management methods. The goal of this study was to see how school administration affected students' KCSE results in Voi Sub-County, Kenya. The following objectives guided the research: to determine the impact of schools' provision of teaching staff on KCSE performance in secondary schools in Voi Sub-County; to investigate the impact of schools' provision of instructional resources on KCSE performance in secondary schools in Voi Sub-County; and to investigate the impact of schools' provision of school facilities on KCSE performance in secondary schools in Voi Sub-County. The Systems Theory led this research. A descriptive survey research design was used in this study. The survey addressed 332 teachers and 25 principals from Voi Sub-County's secondary schools. All of the principals in the sampled schools were purposefully chosen, while 100 teachers were chosen via stratified random sampling. Two sets of instruments were used to collect data for this study: a teachers' questionnaire and a principal's interview schedule. The Cronbach coefficient alpha was used to determine there liability of the research instruments, while the validity was determined by expert opinion and conformance to the study objectives' indicators. Quantitative data analysis included both descriptive and inferential statistics, while qualitative data was analyzed using thematic analysis. Person correlation coefficient and regression analysis were used to test the study hypothesis. The statistical package for social sciences (SPSS) version 25 was used for the analysis. Frequency tables, percentages, figures, and narratives were used to present the findings. The study found that the availability of teaching staff, instructional resources, and facilities by schools had a favorable impact on KCSE performance; all three variables were positively connected to academic success. Furthermore, regression analysis demonstrated that the provision of teaching staff, instructional resources, and school infrastructure explained 10.4 percent of variance in KCSE performance. According to the study, secondary school administrators should put in place measures to ensure that the number of teachers is adequate at all times in accordance with Ministry of Education guidelines, bring all education stakeholder son board to ensure that adequate instructional resources are available, and look for ways to improve school facilities.

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OPERATIONAL DEFINITION OF TERMS

The following operationalized terms were used in the study:

Academic Performance: The achievement of learning goals and the development of skills and competencies as measured by the mean scores of all students in KCSE.

KCSE Performance: This refers to a student's performance in the KCSE.

School Facilities: The amount of classrooms, labs, playgrounds, benches, tables, houses, and desks that are built in schools to facilitate quality learning are referred to as school facilities.

School Management: Teaching personnel, instructional equipment, school infrastructure, and support from the school administration are all examples.

School Management Support: This refers to the type of support that students receive from school administration in order to achieve outstanding academic results in the KCSE. The number of teachers in a secondary school is referred to as teaching staff.

ABBREVIATONS AND ACRONYMNS

FDSE	Free Day Secondary Education
KCSE	Kenya Certificate of Secondary Education
KNBS	Kenya National Bureau of Statistics
MOE	Ministry of Education
NACOSTI	National Commission for Science, Technology and Innovation
OECD	Economic Cooperation and Development
SPSS	Statistical Package for Social Sciences
TSC	Teachers Service Commission
UNESCO	United Nations Educational Scientific and Cultural Organization
USA	United States of America

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter consists of the following sub-sections; background to the study, statement of the problem, purpose of the study, research objectives, research hypothesis, significance, scope, delimitations, limitations, assumptions, theoretical and conceptual frameworks. The chapter lays the foundation of the intended study.

1.2 Background to the Study

Governments all around the world have implemented reforms to ensure that their educational systems meet the needs of the twenty-first century. As a prerequisite to achieving educational goals, these reforms have placed a strong emphasis on good school management methods. According to Ahmed and Qazi (2011), the recognition that education is the key to national development and the undeniable way of achieving social justice and prosperity at the individual and societal levels has prompted this new focus. The quality of a country's formal education system, as a basis for establishing a quality human resource base, determines its rate of social-economic growth (Nsubuga, 2003). Hopkins (2015) supports this position by stating that education aids a country's growth and development, implying the need to place a premium on sound management practices in schools. School management boards have been given the task of organizing and mobilizing human and material resources in order to advance learners' learning activities in schools as assessed by academic success. On the other side, academics and education stakeholders are concerned about the impact of school administration on student academic progress. While secondary school management entails the operationalization of policies as well as the development and creation of resources to achieve educational goals, Hopkins (2015) claims that the quality of school

management is determined by how well a school meets the educational needs of its students, particularly on national examinations. The term "management" usually refers to someone in a position of leadership in an organization who is responsible for monitoring operations, allocating resources, and making the best use of people. Luther Gullick (1930) invented the acronym POSDCORB, which is made up of the first initials of seven management functions: planning, organizing, staffing, directing, coordinating, monitoring, and budgetary control. Schools require management to schedule, coordinate, direct, monitor, and review day-to-day activities in order to fulfill educational objectives through the organization of staff and assigned resources (Farah, 2013). Effective school management, according to Zepeda (2016), includes a commitment to improving teaching and learning, adaptability and responsiveness, a shared vision, a challenging and engaging teaching environment, and a clear and equal disciplinary culture. Bird (2017) goes on to say that proper student monitoring and evaluation, infrastructure, and democratic processes are all important aspects of excellent management styles.

Effective school management techniques enable learners' learning of critical and creative thinking competencies, knowledge, attitudes, values and dispositions that are required for adaptive functioning in the twenty-first century. According to the World Bank (2018), in adequate school management capacity impedes the efficient implementation of instructional goals and the provision of high-quality learning services, both of which are critical components of student academic success. Many countries around the world are unable to fully utilize existing resources to achieve desired educational out comes due to a lack of effective school administration practices. Strong school administration is a critical link between policies developed at the national or global levels and the school, ensuring that planned improvements are implemented

in the classroom. Nyagosia (2011) backed up this claim, stating that a well-managed and organized school environment promotes better teaching and learning. Effective school management has been recognized as a vital aspect in school improvement and learner's academic achievement, according to Lezotte (2010); school management has a direct impact on learning outcomes.

According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO, 2011), as countries adopt universal transition policies, the rapid increase in student enrolment has resulted in insufficient resources, compromising the achievement of projected educational outcomes and negatively impacting student academic achievement. Principals, as school administrators, face great hurdles in their efforts to increase student academic attainment in the face of shrinking resources.

Day, Gu, and Sammons (2016) found that learners' academic performance is strongly influenced by the school's instructional processes, which are in turn strongly associated to the school's management style. Appropriate and appropriate instructional resources, adequate and appropriately qualified teaching staff, a supportive physical infrastructure, high teacher morale and job satisfaction, ambient organizational culture, and high academic performance are some indicators of an effectively managed school, according to Lezotte (2010). Academic performance is defined by Owan (2012) as the degree to which educational objectives are met in a school, as assessed by the average achievement of students in a school cohort or cycle. Academic achievement can be defined as the extent to which students have achieved their learning objectives. Erumand and Zahoor (2011) reinforce this, stating that factors affecting students' academic achievement and completion rates haves parked scholars' interest for a long time. Examining student academic achievement is one approach to assess a successful high school administration (Aja-Okorie, 2010).

School administration has been shown to be an indisputable component of achieving educational goals around the world, and as a result, it has been the subject of various studies. In the United States of America (USA), for example, school management is so important that it is required for teacher education programs to incorporate some school management instruction (Clement, 2010). According to Barrera, Braley, and Slate (2010), this was motivated by the fact that new and beginning teachers typically regarded bad school management as one of the key causes of low academic attainment among students. According to Lewin and Stuart (2016), academic attainment of high school pupils in underdeveloped nations is lower than that of their counter parts in rich ones. School management techniques were also identified as one of the key contributors to low performance, according to the report. In South America, Hallinger (2018) found that management practices positively influence student achievement in a study done in Brazil on the relationship between student performance and school management programs.

According to Amanekwe (2018), school management in Nigeria is facing major issues that threaten to jeopardize educational aims. These issues include a lack of teachers, a lack of teaching learning resources, packed classrooms, laboratories, and a lack of ICT integration, among others, all of which have an impact on secondary school students' academic progress. Krukru's (2015) study in Nigeria discovered that teaching/learning resources had a statistically significant impact on high school students' academic achievement. The study advised that instructional resources be used to facilitate content delivery because they were found to have a favorable impact on instruction. Learners who were given instructional resources had a greater understanding of subject matter concepts and consequently scored better on academic exams than students who were not given instructional tools (Adalikwu & Lorkpilgh, 2013).

Tety's (2016) research in Tanzania found that instructional resources had a favorable impact on academic attainment. Tuitock, Yambo, and Adhanja (2015) found that books and laboratories were among the key school-related factors that influenced students' academic achievement in Kenyan secondary schools. Nambuya's (2013) research found that physical facilities such as libraries, classrooms, playgrounds, and social amenities have an impact on students' academic achievement. Similarly, several studies in Kenya, such as Odude (2013) in Nairobi, Musyoka (2018) in Machakos, Kaswili (2016) in Makueni and Mburu (2016) in Nakuru, have found various influences of low teacher morale, teaching learning resources, low learner motivation, and inadequate physical facilities on students' performance in the Kenya Certificate of Secondary Education (KCSE). School management has generally escaped scholarly attention as a possible causal element in low KCSE results.

According to a survey conducted by the Institute of Economic Affairs (IEA), schools in Taita – Taveta County face a variety of issues, including a shortage of safe drinking water, sanitation facilities, and wild animals. Secondary school students in Taita-Taveta County had similar difficulties (Wanzala, 2016). Mnyamwezi (2019) bemoaned Taita – Taveta County's dismal performance, adding that out of 5,000 applicants who sat the KCSE exam in 2019, not a single kid from the county received an A. A similar view was expressed by the County Director of Education, that the county was lagging behind in terms of KCSE achievement. According to a Ministry of Education report (2019), Voi Sub-County has had terrible academic performance in the KCSE for the last five years, as evidenced by mean scores below 3.50 for four years in a row starting in 2017. Unfortunately, there are few empirical studies that can help policy makers figure out what can be done to address this issue.

Table 1.1 KCSE performance of the Sub - County

Year	2015	2016	2017	2018	2019
KCSE Mean Score	4.26	2.95	3.00	3.26	3.50

1.3 Statement of the Problem

It is impossible to overstate the importance of school administration in students' academic performance. Proper school management practices have been shown to facilitate the achievement of educational goals and objectives, as well as to improve students' performance in national examinations, as evidenced by research. However, the mean KCSE scores for secondary schools in Voi Sub - County from 2015 to 2019 have been as follows: 2015 (4.26), 2016 (2.95), 2017 (3.00), 2018 (3.13), and 2019 (3.50) (Mnyamwezi, 2019). This does not compare favorably with the national mean score of 3.30 in 2017 and 3.26 in 2018, which is 3.30 in 2015. As a result of this poor performance, scholars and education stakeholders have expressed concern about the possible causes of this concerning trend. In order to address the issue of poor performance in schools, professionals developed the "adopt a school" strategy, in which each professional is assigned to a school with the goal of providing mentorship and motivational talks to the students. Furthermore, studies conducted in the area have primarily addressed issues such as learner and teacher motivation, the provision of instructional resources, and the provision of social amenities, among other things. However, despite this commendable development, performance in the KCSE continues to deteriorate dramatically. The issue of poor school management as a contributing factor to poor academic performance has, to the surprise of many, received little academic attention, and as a result, there is little literature to guide policy makers on what should be done to improve the situation. Against this backdrop, this study aims to

close the gap by investigating the influence of school management on students' performance in the Kenya Certificate of Secondary Education (KCSE) in Voi Sub - County.

1.4 Purpose of the Study

Specifically, the goal of this study was to determine whether school administration had an impact on students' KCSE performance in Taita Taveta County, Voi Sub - County.

1.5 Objectives of the Study

This study was guided by the following research objectives;

1. To establish the influence of schools' provision of teaching staff on KCSE performance in secondary schools in Voi Sub - County;
2. To examine the influence of schools' provision of instructional resources on KCSE performance in secondary schools in Voi Sub – County;
3. To determine the influence of schools' provision of school facilities on KCSE performance in secondary schools in Voi Sub - County

1.6 Research Hypotheses

$H0_1$: There is no statistically significant influence of schools' provision of teaching staff on KCSE performance in secondary schools in Voi Sub - county.

$H0_2$: There is no statistically significant influence of schools' provision of instructional resources on KCSE performance in secondary schools in Voi Sub - county.

$H0_3$: There is no statistically significant influence of schools' provision of school facilities on KCSE performance in secondary schools in Voi Sub - county.

1.7 Significance of the Study

The purpose of this study was to assess the impact of school management on KCSE performance in public secondary schools in the Voi Sub County area. This research may therefore be relevant to education policymakers, such as those at the Ministry of Education (MoE), the Teachers Service Commission (TSC), school boards of management (BOMs), principals, teachers' families, and students. When the Ministry of Education uses the findings of this research, it will be able to identify and remedy shortcomings or a deficit of instructional and physical services in the schools in the study region. The findings can be used by the TSC to address issues such as staffing levels in schools in the sub county and teacher/pupil ratios in comparison to the national average in the future. According to reliable empirical data, the BOM can gain insight into areas of deficiency and what has to be done. In this regard, they can mobilize parents and make an appeal to the Ministry of Education to address the issue. Principals, teachers, and parents can gain insight into the causes of low performance in their schools, as well as possible solutions and methods of alleviating the situation.

1.8 Significance of the Study

The geographical area within which the research is carried out is referred to as the study's reach in this context (Marylin & Goes, 2013). This study was carried out in Voi Sub-County, Taita Taveta County, among students attending public secondary schools. The investigation looked into the effects of the teaching staff, instructional materials, and school infrastructure on KCSE performance. The information was acquired from teachers and from principals through the use of a questionnaire and an interview guide provided by the researcher.

1.9 Scope of the Study

These are the characteristics of a study that limit its scope and draw its boundaries, and which are under the control of the researcher, and are referred to as study delimitations (Meriam, 2014). The research focused entirely on the impact of staffing, instructional services, and school facilities on children' KCSE scores in Voi Sub County, and no other factors were included. For this research, information was gathered through a survey of principals and teachers.

1.10 Scope and Limitations

In the words of Meriam (2014), study limits are characteristics of the study about which the researcher is aware that they could have a negative impact on the outcome, but over which the researcher may not have control and yet makes efforts to reduce the impact. Because of changes in demographic characteristics that may be impacting KCSE results across the country, the study's findings may not be applicable to other secondary schools around the country. This is in contrast to the situation in Voi Sub County secondary schools, which is not the case. The study relied on self-reporting questionnaires to gather data, which raises the possibility of respondent bias due to the tendency to overrate one's own abilities when using self - report tools. In order to mitigate this, the researcher assured the respondents that there were no correct or incorrect answers and that the items were just intended to elicit their perspectives. The researcher went on to emphasize to the sampled respondents the importance of providing accurate responses to the questionnaire in order to obtain honest results. Some respondents may have been hesitant or unwilling to disclose information about their schools in order to keep any potentially bad information from becoming public knowledge.

In this case, the researcher informed the participants that the findings would be utilized to supplement their efforts in assisting children in improving their KCSE scores, and the volunteers agreed.

1.11 Assumptions of the Study

Assumptions are essential concepts that a researcher believes in or accepts, but which are difficult to prove in any manner other than through conducting additional researc. As a result, it refers to a set of plausible assumptions that are supposed to be valid and beyond the control of the researcher; they are regarded to be facts that are vital for th e study's relevance because they serve as the foundation for its conception and imple mentation (Simon, 2011). The researcher may assume that adequate records and docu mentation on secondary students' KCSE results are accessible and usable in the school s where the research is being conducted. Additionally, the provision of instructional re sources and school infrastructure has an impact on Students' KCSE performance in ad dition to personnel establishment records. Furthermore, the study made the assumptio n that all of the respondents were truthful and trustworthy in their disclosure of pertin ent information.

1.12 Theoretical Framework of the Study

This investigation was guided by the Systems Theory given by Luhmann Nklas (2004). Rather than studying subsystems in isolation, systems theory is a philosophical paradigm based on the premise that comprehending subsystems is better accomplished through their interactions with one another and with other systems, rather than by studying them in isolation. The goal of systems theory is to explain and construct ideas about patterns that emerge in dynamic structures but do not appear to exist in any one system within the entire systemic structure.

The conversion of inputs such as raw materials, individuals, and other resources into outputs (which are the goods or services that comprise the school's services) is described by this principle when applied to a school setting. An important tenet of the book is that school management must interact with the environment in order to collect feedback and return the fruit of their efforts. Therefore, the inputs from schools communicate with all aspects of teaching and learning in this study, resulting in academic success as a result of the manufacturing process. Preparation, scheduling, and administration are all parts of the educational process that include teaching, learning, and management, as well as other aspects. It involves everything from classroom education to the formulation of examination questions, the administration of the examination, the marking or grading of the examination, and the issuance of certificates. The involvement of all stakeholders in the teaching/learning process, including teachers, staff, students, and parents, guarantees that everyone has a voice in how the school operates. Because KCSE success entails marshalling and coordinating all of the material and human resources required for such outcomes, the quality of instruction is what defines the predicted outcomes. Staffing, learning services, and the physical environment of the school are all significant components of achieving these objectives. Since of this, the theory was used in this study because it stresses the relevance of constructive management of school resources, both human and non - human, to students' success in the Kenya Certificate of Secondary Education (KCSE).

1.13 The Conceptual Framework

A conceptual construct is an imagined model that recognizes the idea under consideration and the relationships between it and other ideas. The word "observable event" refers to a step in the scientific research process in which an idea is characterized as an observable event or in quantifiable terms, thereby providing a precise definition for the phenomena (Merriam, 2014). KCSE results, which include KCSE performance, will be the dependent variables in this study, as illustrated in Figure 1.1. The conceptual structure for this study will be centered on school management's allocation of teaching personnel, instructional services, and school facilities, which are all independent variables.

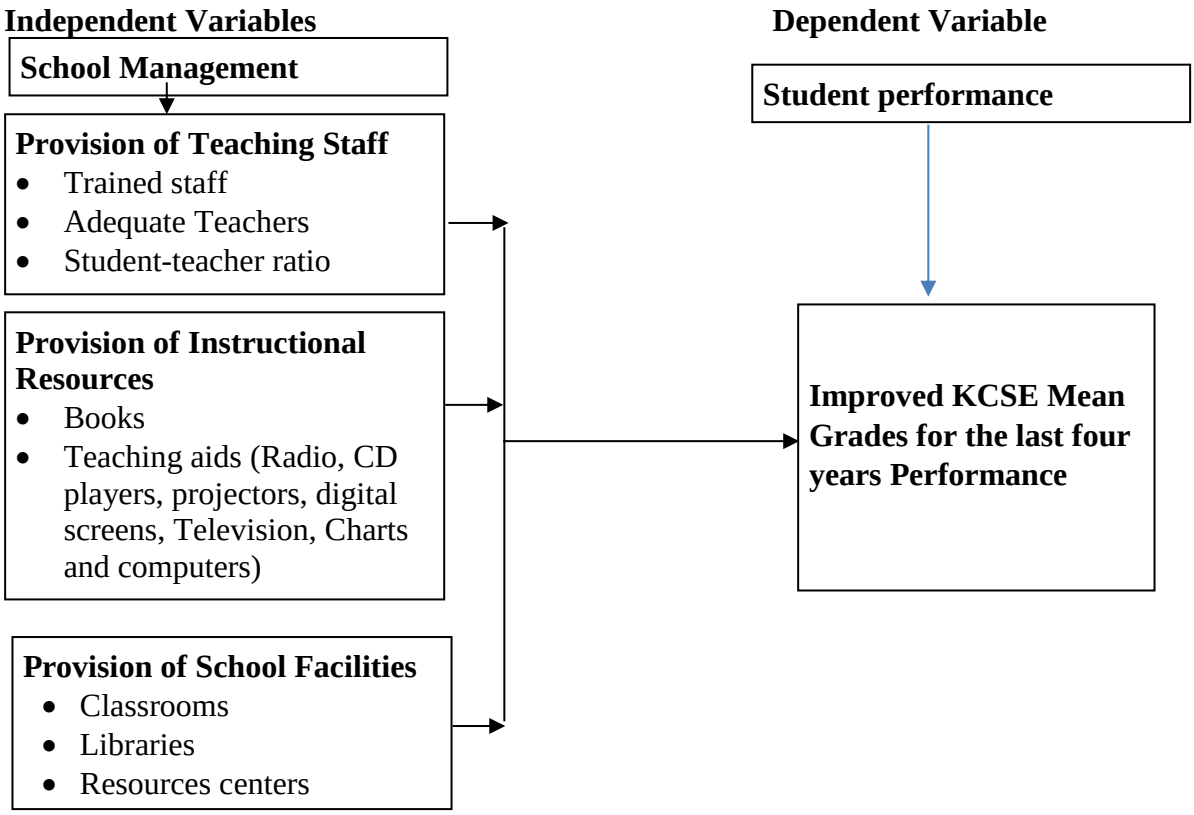


Figure1.1: Conceptual Framework

The model that is used for the study links the school management variables (independent variable) involved in influencing KCSE performance (dependent variable

in public secondary schools in Voi Sub - County. School management comprises of; provision of teaching staff, instructional resources and school facilities. The study postulates that provision of teaching staff, instructional resources and school facilities ensures that learning in schools is effective and thus leads to improved academic performance as indicated by higher KCSE mean grades. Consequently, school management practices could help the learners attain higher academic performance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

It is the researcher's field of study, hence the findings of prior studies that are pertinent to it are summarized in this chapter. Contrary opinions are presented by the researcher, who is critical of a number of writers who have highlighted varied interpretations of the issues under inquiry. It is determined whether the literature is relevant in light of the study objectives outlined in the conceptual framework. As a result, research on the independent variables (the impact of schools' provision of teaching personnel, instructional services, and school facilities on dependent variables) and dependent variables (the impact of schools' provision of teaching personnel, instructional services, and school facilities on dependent variables) will be discussed in the literature (KCSE performance). It also includes are view of the relevant literature, as well as a summary of the gaps that were uncovered during the research process.

2.2 Review of the Empirical Literature

Based on the concept of school management, students' academic performance, the influence of the availability of teaching staff and instructional resources, as well as the influence of school facilities on KCSE performance in secondary schools, the empirical literature for this study is reviewed and evaluated. Student KCSE performance is influenced by the teaching staff in two ways. It is critical that the number of teachers in a school is not only sufficient, but also that they are sufficiently qualified to impart curriculum to the students they teach. Wherever the number of teachers falls below the legally mandated threshold, the quality of teaching and learning suffers, and children are unable to achieve their full educational potential.

It has been several decades since the Ministry of Education (2011) identified equitable teacher distribution as a major concern in Kenya's public secondary schools as a major challenge that remains unaddressed. This has occurred as a result of a variety of circumstances, the most significant of which is that the rate of student enrolment has not kept pace with the rate of teacher recruitment, resulting in an enormous growth in pupil – to –teacher ratios. The number of teachers has stayed relatively stable over time, but the number of students has increased (Guthnie, 2013). Due to the negative impact on the quality of education, students have performed poorly on national examinations as a result of the situation. As reported by the Organization for Economic Cooperation and Development (OECD) in 2009, fewer classes allow teachers to more succinctly address the needs of specific pupils while also reducing the amount of time required to prevent disruptive behavior. In a similar line, Hattle (2009) asserts that small classrooms foster student innovation while simultaneously increasing instructor enthusiasm. Teachers to student ratios, according to Adams (2014), determine the distribution of resources to schools, and the smaller the class size, the greater is the achievement gap between students and their teachers. It was reported by UNESCO (2006) that the highest teacher to student ratio in the world is in Sub Saharan Africa at 46:1, which compares unfavorably with the ratio in industrialized countries, which is 14:1 at the time. This shows that the number of teachers in the country is disproportionately low, i.e, nearly three times lower than in developed countries. According to UNESCO (2012), when a school has a large number of students and a small number of teachers, the pupil teacher ratio is high, which has a substantial impact on the academic attainment of students as assessed by their performance in national tests. After conducting research on the relationship between teachers' workload and the number of learners in a class, Atkins, Carter, and Nichole (2012) found an inverse

relationship between the two variables: reducing the number of learners per class resulted in better grades, while increasing the number of learners resulted in lower grades. According to the findings of this study, it is critical for school administrators who wish to see improved academic results to guarantee that the teacher establishment is strong. Similarly, Luka (2010) found that low pupil - to – teacher ratios resulted in an increase in teacher and learner motivation to attend class, and that class attendance was proven to have a statistically significant association with a learner's academic achievement. This is supported by the findings of Weston (2014), who discovered that when the pupil – to – teacher ratio was optimal, teachers spent more time on less on planning, preparation of teaching aids, and collaboration with colleagues and consultation with their students, all of which resulted in improved instruction and as a result, improved performance in examinations. However, Weston (2014) study did not determine the extent to which the pupil-teacher ratio influenced student academic achievement in the institutions under study.

In Kenya, the number of teachers under permanent employment by the Teachers Service Commission (TSC) has remained essentially stable for several years despite an increase in the number of learners; the recruitment conducted is primarily intended to replace teachers who leave the service (MoE, 2011). As a result, schools must be obliged to hire teachers in an effort to deal with teacher shortages caused by higher student enrollment as a result of the increased enrollment. Due to the responsibility placed on school administration to guarantee that learning takes place despite the problems that may arise, recruitment of teachers at the school level becomes an attractive alternative while the principal awaits the allocation of teachers by the TSC. As the school's human resource manager, the principal is also responsible for motivating and inspiring teachers, delegating responsibilities effectively, resolving

problems, and ensuring that good teaching and learning is taking place in the school. Research was conducted by Akinsolu (2010) in Nigerian secondary schools to determine the sufficiency of teachers and the educational level of students. The ANOVA and the Spearman rank correlation coefficient were used to test three null hypotheses on student academic attainment using a sample of 21 schools to measure students' overall performance in the classroom. According to the findings of the study, teacher – to – student ratios were statistically associated with students' academic attainment.

A study carried out in Tanzania by Sephania (2017) sought to determine the variables that contribute to low performance in form four exams in the Arusha District, with a particular emphasis on the primary challenges that prevent high – quality education from being provided in public secondary schools. The study selected 26 out of 41 public secondary schools in Arusha, Tanzania, using a straightforward random sampling procedure. Data was gathered using questionnaires and interview guides. According to the findings of the data analysis, a scarcity of teachers and teaching staff, as well as a lack of necessary physical infrastructure, all contributed to students' poor academic performance in public secondary schools. Following the study's findings, it was recommended that more teachers be hired, and that a strategy be developed for delivering text books and other instructional materials in secondary schools. The literature reviewed underpins the centrality of school management practices on the provision of teaching staff, instructional resources, and school facilities as factors that influence students' academic performance of KCSE in secondary schools. This indicates, that good or poor academic performance can be as a result of the stated parameters, however, despite in Voi Sub County, secondary schools continues to perform poorly, limited empirical studies have been conducted to identify the possible

contribution of these factors to the observed performance. As a consequence, this study sought to address this gap of knowledge by investigating the influence of school management practices on students' performance in KCSE in Voi Sub-County, Taita – Taveta County, Kenya.

Lidoro and Orodho (2014) conducted a study in Kakamega County to determine the effectiveness of teachers and the processes of teaching and learning in schools. It was decided to employ a simple random sample technique to choose the 23 primary schools from among the target population of 68 schools. Purposefully picked from each school were 23 head teachers and 69 members of the Board of Management. The information was gathered through the use of questionnaires that were delivered to the sampled respondents. The data analysis found that the number of teachers in the county was unacceptably low, as evidenced by the pupil – to – teacher ratio of 56:1, which was unacceptable. According to the findings of the study, teachers were over burdened with regard to job allocation and were therefore unable to teach effectively, resulting in poor academic achievement. Indeed, in the study the inability by TSC to promptly post teachers in case of teachers exiting service by natural attrition, transfers or otherwise has been widely perceived as a perennial problem to adequacy of teachers. TSC should hire more teachers from Kenya's Kakamega County, according to the report. Musyoka and Cheloti (2018) discovered that teacher sufficiency had statistically significant and favorable relationships with academic achievement in the Kenya Certificate of Secondary Education (KCSE) in secondary schools in Machakos County. According to the findings of the study, more teachers should be hired and allocated to the county, availability of such information would be crucial in addressing the educational challenges in secondary schools in Voi Sub County and consequently positively impact on academic performance. This is one of the objectives of this study.

Several of the studies evaluated indicate that having a suitable number of teachers in relation to the number of students is critical to ensuring that students achieve high levels of academic achievement in school. It is also critical to have teachers who are appropriately qualified in all of the academic are as covered by the curriculum. Insufficient or absent teachers jeopardize educational objectives, resulting in a reduction in the academic performance of the students in the classroom. With the implementation of the FDSE and the implementation of universal transition rates by the government, the teacher – to – student ratio has increased significantly, resulting in increased workload for teachers and, as a result, poor performance in the Kenya Certificate of Secondary Education (KCSE). However, despite the fact that Voi Sub - County has consistently performed poorly in the KCSE, the location has received little scholarly attention. As a result, only a limited number of empirical studies have been conducted that can inform education stakeholders. These studies have not indicated whether a simple change in teaching staff and students' KCSE performance can be justified. This is something that the proposed study hopes to fill.

2.2.2 Availability of Instructional Resources and Students KCSE Performance

Educational inputs that are necessary for effective teaching and learning in a school, according to Ogbu (2015) are referred to as instructional resources. According to the Organization for Economic Cooperation and Development (OECD), instructional resources are educational materials that are used in schools to promote learners' acquisition of information, competencies, and abilities by facilitating richer teaching/learning experiences (OECD, 2017). Instructional resources, as defined by Remillard and Heck (2014), are materials that teachers use to support classroom teaching and learning activities. These materials include books, charts, maps, writing

materials, pencils, rulers, chalk, crayons, dusters, and other similar items, among other things. These are effective tools for teaching new concepts to your pupils, even if they are difficult for them to grasp. Students' motivation is aroused by providing them with practical experiences that allow them to train by actively participating in the learning activities. Slavin (2010) observed that properly planned and creative use of instructional resources in teaching control learner apathy, complement deficiencies of books, and arouse student's motivation by providing them with practical experiences that allow them to train by actively participating in the learning activities. Slavin (2010) went on to suggest categories of prized instructional materials for teaching and learning activities, including maps, diagrams, images, audio – visual aids, and models, among other things. It is said by Shukla (2019) that textbooks, graphic coordinators, and teacher – made teaching materials are the most extensively used types of instructional resources in the classroom. However, Shukla (2019) study was however, not conclusive since it looked at just types of instructional resources. More information could have been generated through examining a wider spectrum of instructional resources and their relationship with students' academic performance. The current study targeted a large collection of instructional resources in secondary schools.

A similar line of argument is advanced by Ogbu (2010), whose study in Nigeria contended that instructional resources are essential to the effective delivery of information in any subject area that is provided in the curriculum. Further, the study point out that educational resources, such as pictures and experiments as well as tactile sensations (touch, sight, and smell), allow the learner to comprehend concepts more fully, and as a result, they complement the limits of lecture – based methods of training. In support of this position, Mayama (2012) states that the provision of appropriate instructional materials in schools increases the relevance and quality of the skills and

knowledge that are imparted to students and increases their motivation to study. However, since the line of argument advanced by Ogbu (2010), was based purely on a study of secondary schools in Nigeria, it is plausible that the population is fundamentally different from secondary schools in Voi Sub County. Therefore, performance of KCSE could be attributed to other factors due to contextual factors in delivery of information in any subject area.

According to Ogbu (2015) insufficient instructional resources prevent the teaching/learning process from responding quickly to new difficulties in education, so compromising the quality of education, the efficiency with which it is delivered, and the desired outcomes. When it comes to improving academic performance among Nigerian students, Bukoye (2018) investigated the extent to which instructional materials are used as devices to do so. To determine the reasons for students' failure on standardized tests, the researchers used a descriptive survey template with a sample of 100 respondents from five carefully chosen high schools. The survey was conducted using a questionnaire to determine the reasons for students' failure on standardized tests. According to the data, the majority of schools lacked instructional materials, and the vast majority of teachers refused to incorporate any type of instructional resource into their teaching methodologies. It is recommended that seminars and workshops be held to raise awareness among teachers about the importance of employing instructional resources in the classroom as a result of the findings of this study. Lowe (2009) conducted a study in South Africa on the impact of instructional resources, and the results revealed that a lack of proper teaching materials was positively associated to learners' performance in national tests. The findings of the study highlighted the importance of harnessing teachers' creative abilities to develop learning materials and activities by linking classroom experiences with students' social and physical

environments as a means of nurturing content relevance and intrinsic motivation in students. In the study, it was discovered that providing a large pool of appropriate textbooks that were in alignment with curriculum requirements was critical to improving learners' academic performance. Because students have a wide range of abilities and interests, teachers should choose a diverse range of instructional resources in order to accommodate students' individual differences. Lowe (2009) concluded by recommending that in order for students to attain high levels of performance in their studies, they should be given the opportunity to choose learning tools that best suit their learning styles and preferences. In Voi Sub County, there is little evidence unequivocally linking the provision of instructional resources in secondary schools to academic achievement among learners in secondary schools. In this regard, this study sought to establish the relationship between provisions of instructional resources on students' performance in secondary schools.

The findings of a study conducted in Bungoma County on the appropriateness of teaching/learning resources and their impact on teacher preparation revealed that the resources were better established in high performing schools when compared to poorly performing schools. The study also revealed that the observed difference was statistically significant between the two school categories, which was confirmed by other researchers. These findings are consistent with a study conducted by Adan (2011) on the challenges faced by secondary school principals in implementing the Free Day Secondary Education (FDSE) programin Wajir County, which found that the primary challenge to teaching and learning was not only inadequate physical facilities in most schools, but also a lack of teaching and learning resources. The study recommended that in order to achieve better academic performance among learners, the ministry of educational institution should provide more teaching and learning resources to

secondary school principals. Mother (2010) discovered that the availability of teaching/learning resources had a positive correlation with the grades attained by WASCE candidates, in her study on the influence of teaching learning resources on students' academic resources are relatively better regarding academic achievement. However, regarding secondary schools in Voi Sub County, there was a contextual gap that prompted the need to embark on the study.

According to the findings of the analyzed research, instructional materials have a substantial impact on learner accomplishment because they enable effective content delivery and learning of intellectual concepts among students, which in turn leads to improved academic performance in the classroom. Learners are less likely to be absent from schools if they have access to engaging, relevant, and appropriate interactions, and as a result, instructional opportunities are more likely to lead to improved academic performance. To ensure successful teaching and learning, these services must be provided insufficient number and quality in educational institutions. When teaching and learning resources are insufficient, learning is jeopardized, and the consequences are reflected in poor academic achievement, retention, behavioral difficulties, and educational waste, among other things. Voi Sub County is situated in a semi-arid region in Kenya that is lacking in food sufficiency, infrastructural and communication facilities; such demographic factors could be quite different from other parts of the country implying that provision of instructional materials could be present a different trajectory among students. The purpose of this study is to determine the impact of instructional resources on learners' KCSE performance in Voi Sub - County.

2.2.3 Availability of Physical Facilities and Students' KCSE Performance

In the opinion of Lackney (2018), the physical amenities of a school are an essential component of the teaching and learning process. Facilities that are designed and laid

out well create an academic environment that allows both students and teachers to have a "place experience." The quality of school facilities fosters a sense of belongingness, safety, and ownership among students. Physical facilities ineffective schools should be responsive to emerging educational needs to support the achievement of expected learning outcomes; they should provide comfort and security, as well as being easily accessible, well – lit and ventilated, and aesthetically pleasing to students. Physical facilities in schools include things like buildings, playgrounds, lawns, driveways, foot walkways, flowerbeds, furniture, outdoor learning facilities, electricity, social amenities and conveniences, ICT equipment, and other things. As stated by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the physical condition of a school's physical facilities can either impede or enhance educational attainment; effective learning occurs when schools ensure student safety, hygienic conditions, reasonable levels of comfort, and an environment that stimulates the learner's cognitive abilities. A sound school design should take into consideration factors such as classroom size, furniture, ventilation, lighting, noise level, temperature, cleanliness, and the provision of auxiliary facilities, among other things. Majority of secondary schools in Voi Sub County are situated in desolate rural areas characterized by low rainfall, poverty, extreme temperatures, unreliable water supply, poor road networks, among other deficiencies, it would therefore be prudent to establish how availability of physical facilities can impact academic performance of students' struggling with the basic needs.

Students' academic progress, absenteeism, discipline, graduation rate, and teacher turnover rates were investigated by McGowen (2007) in a study conducted at selected high schools in the state of Texas, which is in the United States of America (USA). According to the findings of the study, student performance, attendance, and graduation

rates were not associated with the physical infrastructure of the school. The findings of this study revealed that there was no association between a school's physical facilities and students' academic achievement; nonetheless, numerous studies have found a statistically significant relationship between students' academic performance and a school's physical infrastructure. The reviewed literature clearly indicates the link between provision of physical facilities and academic performance. However, in Voi Sub County, there is scanty information that can authoritatively link the provision of physical facilities to academic performance. This is one of the objectives that this study addresses.

Akomolafe and Adesua (2016) conducted a study in Nigerian public secondary schools to determine the impact of physical facilities on students' motivation and academic achievement. The purpose of the study was to investigate the effect that physical amenities have in improving students' motivation and academic accomplishment. A total of 1050 students participated in the study, and the information was gathered through questionnaires. According to the study's findings, there was a statistically significant relationship between a school's teaching materials and a student's motivation and exam performance on standardized tests. According to the findings of the study, schools should provide more physical resource material in order to encourage students and achieve better educational achievements. Although the reviewed study by Akomolafe and Adesua (2016) did determine the impact of physical facilities on students' motivation and academic achievement, the study was conducted in Nigerian public secondary schools, the findings may therefore not be generalizable to secondary schools in Voi Sub County due the different population characteristics in secondary schools in the two countries. This study therefore sought to establish the relationship

provide more physical resource material in order to encourage students between provisions of academic achievement in secondary schools in Voi Sub County. .

A study conducted in Tanzania by Mvuyekule (2017) investigated the monitoring of physical amenities in schools and its impact on academic achievement among learners in Uvinza District. The study investigated the factors that contribute to a lack of physical facilities in schools, as well as the interventions and challenges associated with preserving the current physical facilities. The information was gathered from a sample of 56 primary school teachers through the use of an observation guide, oral interviews, and questionnaires. According to the findings of the study, the physical facilities were damaged, old, and in needed repairs and therefore could not be conducive to academic achievement. According to the findings of the study, all stakeholders in the country's education system should collaborate and develop policy guidelines for intervention methods that can be implemented to improve learners' academic attainment through effective management of physical facilities. However, whereas the findings of Mvuyekule (2017) study did establish pertinent information regarding availability of physical facilities and students' academic performance, the study used a small sample of only 56 primary school teachers. This study used a stratified random sample of 125 teachers drawn from 25 secondary schools. That implies that this study is fundamental dissimilar Mvuyekule (2017) study in terms of population and the research methodology, as a consequence the findings cannot be generalized to schools in Voi Sub County.

To investigate the impact of scientific laboratories, physical classrooms, libraries, and suitable boarding facilities on learners' academic progress in the Kenya Certificate of Secondary Education (KCSE), Muendo (2016) performed research in Machakos County. The study employed a descriptive survey research design, with the target

population consisting of nine principals, 27teachers, and 43 type four students. Data was obtained through the use of questionnaires. The Pearson correlation coefficient revealed a positive relationship between the availability of a science laboratory, physical classrooms, a library, and boarding facilities, and KCSE performance in the previous year. According to the findings of the study, school boards of management should be educated on the importance of acquiring additional physical amenities in order to achieve better academic achievement in the Kenya Certificate of Secondary Education (KCSE). National Policy on Education (2012) states that the development of an enabling environment is necessary to guarantee the successful implementation of the national policy on education. Parents Teachers Associations (PTAs) are responsible for making sure that schools have adequate physical facilities; however, since the implementation of the FDSE, the Ministry of Education has faced difficulties as a result of increased enrollment, which has severely strained the school's physical facilities, resulting in a decline in learner's academic performance as a result of the decline. Despite the large number of studies conducted across the country and in other parts of the world on the impact of physical resources on academic performance, limited information on the same exists in the case of Voi Sub – County despite the fact that the local is one of the most poorly performing in terms of KCSE performance in the entire country; therefore, the intended study seeks to fill this knowledge gap in the case of Voi Sub - County.

2.2.4 Summary of the Literature Review and Research Gaps

According to the research reviewed, it is critical for schools to have a suitable number of teachers in order to comply with internationally recognized norms. A major difficulty that has been unaddressed for several decades, according to Kenya's Ministry of Education (2011), is the equal distribution of teachers in public secondary schools,

according to the Ministry of Education (2011). This has occurred as a result of a variety of circumstances, the most significant of which is that the rate of student enrolment has not kept pace with the rate of teacher recruitment, resulting in an enormous grow thin pupil – to – teacher ratios. Due to the negative impact on the quality of education, students have performed poorly on national examinations as a result of the situation. Having small classes allows teachers to meet the needs of individual pupils more effectively while also reducing the amount of time required to prevent disruptive behavior (OECD 2009). This is in accordance with the UNESCO (2012) report, which states that when a school has many students and a small number of teachers, the pupil teacher ratio is high, which has a significant impact on the academic achievement of students as measured by their performance in national examinations. Despite an increase in the number of learners in Kenya, the number of permanent teachers employed by the Teachers Service Commission (TSC) has remained largely unchanged for several years; as a result, schools are being forced to hire teachers in an attempt to cope with teacher shortages caused by increased student enrollment as a result of the increased enrolment.

The examined research clearly demonstrates that instructional resources are effective tools for teaching new concepts to students who may find them challenging to grasp. More fundamentally, instructional materials allow the learner to comprehend concepts through pictures, experimentation, touch, sight, and smell, among other means, and as a result, they supplement the limits of lecture – based methods of teaching by filling in the gaps left by these approaches. Based on Slavin (2010)'s observation that properly planned and creative use of instructional resources in teaching can help control learner apathy, compensate for the shortcomings of books, and arouse student motivation by

providing them with practical experiences that allow them to train by actively participating in the learning activities, this idea is supported.

Lowe (2009) conducted a study on the impact of instructional resources, which found that a lack of acceptable teaching materials was positively associated to learners' performance on national examinations. This is a strong confirmation of the previous findings. As a result of the study, it was concluded that teachers' creative abilities should be used to produce learning materials and activities that are linked to the students' social and physical environments in order to foster content relevance and intrinsic motivation in their pupils. In the study, it was discovered that providing a large pool of appropriate textbooks that were in alignment with curriculum requirements was critical to improving learners' academic performance. Because students have a wide range of abilities and interests, teachers should choose a diverse range of instructional resources in order to accommodate student's individual differences. Lowe (2009) concluded by recommending that in order for students to attain high levels of performance in their studies, they should be given the opportunity to choose learning tools that best suit their learning styles and preferences. It is essential for the teaching and learning process that a school's physical facilities are in good condition. Facilities that are designed and laid out well create an academic environment that allows both students and teachers to have a "place experience." Quality school facilities create a sense of belonging, safety, and ownership among students and teachers. Physical facilities in effective schools should be responsive to emerging educational needs in order to support the achievement of expected learning outcomes; they should provide comfort and security, as well as being easily accessible, well – lit and ventilated, and aesthetically pleasing to students. Physical facilities in schools include things like buildings, playgrounds, lawns, driveways, foot walkways, flowerbeds, furniture, outdoor learning facilities, electricity,

social amenities and conveniences, ICT equipment, and other things. Furthermore, according to the United Nations Educational, Scientific, and Cultural Organization (2013), the physical condition of a school's physical facilities can either impede or enhance educational attainment; effective learning occurs when schools ensure student safety, hygienic conditions, reasonable levels of comfort, and an environment that stimulates the learner's cognitive faculties. A sound school design should take in to consideration factors such as classroom size, furniture, ventilation, lighting, noise level, temperature, cleanliness, and the provision of auxiliary facilities, among other things.

The importance of school management techniques on students' academic success has been conclusively demonstrated in peer – reviewed literature. Secondary schools in Voi Sub – County have consistently done poorly in national examinations for a number of years in a row, raising questions about the underlying causes of this poor performance. Despite this terrible performance, only a small number of studies have been done in order to better understand this concerning scenario. Empirical evidence obtained from studies conducted in other locations has demonstrated the importance of school management practices, specifically the provision of teaching staff, instructional resources, and physical facilities, as important determinants of educational achievement in those locations. In the study locality, however, there is a scarcity of such critical information about the state of these variables, which could inform the development of intervention strategies to improve students' academic performance. This indicates a knowledge void that this study tries to fill with its findings.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter details the approach that was employed in the methodology. All of the following aspects of the research are covered: the research design, study area, population, sample and sampling methodologies, instrumentation, data gathering methods, data processing techniques, and ethical considerations.

3.2 Research Design

The research utilized a descriptive survey research design. Kothari (2014) asserts that descriptive research is concerned with the current circumstances as they exist without manipulating the variables of the study. Additionally, descriptive research investigations are designed to gather important and precise information about the current condition of a phenomenon and, when possible, to make clear inferences from the data collected. This design was found most appropriate with regard to the study because the study sought to identify in retrospect relationships between occurrences and outcomes, specifically the impact of school administration on students' performance in the KCSE in Voi Sub - County, Taita – Taveta County.

3.3 Location of the Study

The study was carried out in Kenya's Taita – Taveta County's Voi Sub - County, according to the findings. Located in the old Coast Province, the sub – county is approximately 300 kilometers south – west of Nairobi. Having a population of approximately 87,803 people and a land area of 3269 kilometers squared, the sub – county has a population density of 27 persons per kilometers squared (KNBS, 2009). According to the KCSE Performance Analysis Report (2019), Voi Sub – County has

been ranked among the lowest performers in the KCSE for a number of consecutive years. Secondary schools in Taita Taveta County and in particular Voi Sub County in were selected for the study because of existence of information that they were competing unfavourably with secondary schools in the rest of the country. As a result of this poor performance, scholars and education stakeholders have expressed concern about the possible causes of this concerning trend.

3.4 Target Population

The target population refers to the subjects of a real or imaginary series of events, items, or people who share noticeable traits and for whom a researcher hopes to generalize the study results. The target population can be either real or hypothetical (Kelly, 2011). Thus, the target population for this study comprised of all 30 secondary schools in Voi Sub – County, which consisted of 26 public and four private schools. There were 297 teachers and 26 principals in public schools while private schools had 26 teachers and four principals (Voi Sub County Education Office, 2019). Table 3.1 provides a summary of the target population.

Table 3.1 Target Population

School category	No. of schools	No. of Principals	No. of Teachers
Public	26	26	297
Private	4	4	35
Total	**30**	**30**	**332**

(Source. Voi Sub – County Education Office, 2019).

3.5 Sample Size and Sampling Procedures

According to Creswell (2014), a sample is a small part of the target population that is representative of the characteristics of the full population. The sample must contain all of the features of the population in order to be considered representative of the entire population. The sampling tables developed by Krejcie and Morgan (1970) were used to determine the number of schools that would be included in the study. According to these tables, a sample of 25 secondary schools is an acceptable representation of a population of 28 secondary schools. All the principals of the sampled schools were purposively sampled and included in the study. The Mills and Airasian (2009) sampling technique was then used to determine the number of teachers to be drawn from each school. This technique recommends that for descriptive studies the sample size should range between 10 - 30% of the population depending on the size of the population. In this regard, the upper limit (30%) was employed, which gave a sample 100 teachers. The 100 teachers were evenly distributed in the 25 sampled schools. Thus, simple random sampling was used to select four teachers from each of the selected schools who were evenly distributed across all of the sampled schools. Accordingly, a total of 125 respondents were selected for the study as a result. The sample distribution is summarized in Table 3.2.

Table 3.2 Sample Size and Sample Distribution

School Category	No. of Schools Sampled	No. of Principals	No. of Teachers
Public	22	22	88
Private	3	3	12
Total	**25**	**25**	**100**

Source, researcher, 2020

3.6 Research Instruments

Data for this study was collected using two sets of instruments; a teachers' questionnaire and a Principal's interview schedule.

3.6.1 Teachers' Questionnaire

The questionnaire for the teachers was divided into four sections: A, B, C, and D. Section A consisted of four questions that gathered information on the respondent's background. Section B had ten items that gathered information on the availability of teachers. Section C, which contained 16 items on a Likert scale, was designed to collect information about the provision of instructional resources. Section D collected information on the availability of physical amenities and consisted of 16 items rated on a Likert scale. Finally, Section E contained one item that inquired about the school's KCSE mean score from 2016 to 2019.

3.6.2 Principals' Interviews Schedule

Principals' interviews schedule consists of open – ended questions, and gathered qualitative information related to school administration concerns such as the provision of teaching staff, instructional resources, and school facilities. It also gathered information on the performance of secondary school students in the KCSE.

3.7 Pilot Testing of Research Instruments

According to Creswell (2014) a researcher should always pilot the research instruments before conducting actual data collection. This is vital since it helps to ensure the reliability and validity of the research instruments. Gay, Mills, and Airasian (2010) suggest that the pilot sample should have features that are as close as possible to those of the research sample. A pilot sample should be between 1 and 10% of the study sample (Creswell, 2014). In this study, the researcher choose one private and two public secondary schools. Simple random sampling was then used to select four teachers from private secondary schools and eight teachers from two public schools, while the principals were selected by a purposive sampling from each of these schools. The sampled respondents were presented with the research tools, and the information gained was used to compute the reliability of the research instruments. The pilot test also provided an opportunity for the researcher to fine – tune the tools and remove any ambiguities in the items. According to Mugenda and Mugenda (2003), piloting is an important step in ensuring that instruments are free of errors during the data gathering process. In addition, the researcher ensured that the participants in the pilot study would not be included in the main study.

3.8 Validity of the Data Collection Instruments

The validity of a research instrument, according to Stangor (2011), is a measurement of the credibility and usefulness of the tool. Two methodologies were used in this study to determine the validity of the results. In order to demonstrate content validity, the items in the research instruments were aligned with the measures of the survey's objective, which was the first step. Additionally, the researcher sought expert input from her supervisors as well as from other members of the Department of Education at

Africa Nazarene University. Their suggestions were taken into consideration during the development of the tool's items.

3.9 Reliability of Data Collection Instruments

According to Orodho (2012), the reliability of a tool is defined as the degree to which it consistently generates reliable results following repeated testing. When conducting this investigation, the Cronbach coefficient alpha was used to determine the internal correctness of the testing devices. According to Kothari (2014), this method of establishing reliability is advantageous because it requires a single administration of a single survey instrument. Generally, reliability coefficients of 0.70 or above are regarded adequate for descriptive research. A research instrument is deemed to be dependable when it fits the aforementioned characteristics.

3.10 Procedures for Data Collection

The researcher obtained a letter of introduction from Africa Nazarene University Department of Education. The researcher then used the introductory letter to obtain a research permit from the National Council for Science, Technology, and Innovation (NACOSTI). The obtained permit was forwarded to the Voi Sub County Education Officer, who gave a clearance letter to collect data from the sampled schools. After delivering the official authorization letters to principals and establishing rapport, the researcher went to the sampled schools and administered the tools. The questionnaire was given to the teachers by the researcher individually. After that, the principals were interviewed in person. The interviews were done in a variety of locations, depending on what was most convenient.

3.11 Data Processing and Analysis

The quantitative data obtained through questionnaires was sorted, cleaned, coded, and entered into a computer for analysis in accordance with the study's objectives. Quantitative information was analyzed with the help of both descriptive and inferential statistics. Descriptive statistics namely; frequency distributions, mean scores and standard deviations, were used to establish the relationship between the schools' provision of instructional resources, and facilities on KCSE performance. Inferential statistics, namely; Pearson correlation coefficient was used to establish the relationship between the schools' provision of teaching staff, instructional materials, and facilities on KCSE results. Regression analysis, on the other hand, was employed to determine the relative influence of each of the independent variables to academic performance. Analysis was conducted with the aide of the computer application – the Statistical Package for Social Sciences (SPSS) version 26. Thematic analysis were used to organize and analyze qualitative information in accordance with the study objectives. The findings were presented using frequency charts, tables, figures, and narratives. Table 3.3 provides a summary of the data analysis.

Table 3.3 Summary of Hypothesis Testing

	Hypothesis	Independent variable	Dependent variable	Statistic
1.	**Ho1**: There is no statistically significant influence of schools' provision of teaching staff on KCSE performance	Provision of teaching staff	KCSE performance	Pearson correlation coefficient and linear regression
2.	**Ho2:** There is no statistically significant influence of schools' provision of instructional resources on KCSE performance	Provision of instructional resources	KCSE performance	Pearson correlation coefficient and linear regression
3.	**Ho3:** There is no statistically significant influence of schools' provision of school facilities on KCSE performance	Provision of school facilities	KCSE performance	Pearson correlation coefficient and linear regression

3.10 Legal and Ethical Considerations

Because of the current global concerns on ethical issues pertaining human and animal rights in scientific research, ethics has become a vital component of the research process in many fields. In this regard, in addition to obtaining permission to conduct the study, consent from participants was also obtained before data collection. Where the respondent has been provided with detailed information about the study, informed consent, is presumed that they are completely aware of their participation rights and how the study results will be used (Saunders, 2012). To ensure that all participants understand the objectives of the study, participants were informed that the information they provided would be kept strictly confidential. The identities of the schools, students, teachers, and principals were not revealed in the report. Additionally, the researcher obtained all necessary authorizations and adhered to the ethical standards that guide the conduct of research, as specified by NACOSTI, before beginning the study.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter presents analysed data and provides an analysis of the findings based on the findings. Data was collected from secondary school principals and teachers in Voi Sub – County and evaluated using descriptive and inferential statistics. For quantitative data inferential statistics employed were Pearson correlation coefficient and regression analysis, while the descriptive statistics used were mean scores, standard deviations, percentages, and frequencies. Thematic analysis was used to analyse qualitative data. According to the stated objectives, data analysis was carried out in order to: evaluate the influence of schools' provision of; teaching staff, instructional resources, and educational facilities on KCSE achievement in secondary schools in Voi Sub - County. The study also tested the following null hypothesis.

$H0_1$: There is no statistically significant influence of schools' provision of teaching staff on KCSE performance in secondary schools in Voi Sub - County.

$H0_2$: There is no statistically significant influence of schools' provision of instructional resources on KCSE performance in secondary schools in Voi Sub - County.

$H0_3$: There is no statistically significant influence of schools' provision of school facilities on KCSE performance in secondary schools in Voi Sub - County.

As explained in chapter three the study targeted 25 principals and 100 teachers of which 16 principals and all (100) teachers responded. This accounted for 64.0% for the principals and 100% for the teachers, which was a good representation. Table 4.1 presents a summary of the response rates.

Table 4.1 Response Rates

	Respondents	Target	Response Rate (%)
1.	Principals	25	16 (64.0%)
2.	Teachers	100	100 (100%)
	Total	**125**	**116 (92.8%)**

4.2 Demographic Characteristics of the Respondents

This section provides an overview of the demographic characteristics of the respondents involved in the research. In order to provide a thorough picture of the respondents in the study, it was necessary to provide a detailed description of their characteristics, which may have influenced the results depending on the objectives of the study. The following demographic variables were included in this section: school category, gender, level of training, and teaching experiences.

4.2.1 School Category

The study looked at the classification of the schools that were engaged in the study; the schools were divided into two main categories, namely, private secondary schools and public secondary schools. Unfortunately, all the private schools declined to participate in the study, citing various reasons, such awaiting approval of their directors, tight schedules, and administration of examinations, among others.

4.2.2 Gender Distribution of the Respondents

The study sought to determine the gender distribution of the participants. Figure 4.1 depicts the frequencies of each gender and the percentage their composition.

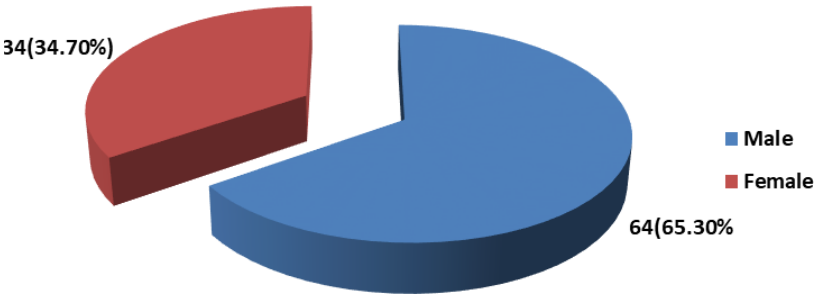


Figure 4.1 Gender Distribution of the Respondents

Figure 4.1 shows that male teachers outnumbered female teachers. There were 64(65.3%) male and 34(34.70%) female teachers. It is possible that the dominance of male teachers over female teachers is attributable to the fact that Voi Sub – County is located in a climatically desert section of the country.

4.2.3 Professional Qualifications of the Respondents

The study investigated the highest level of learning among the respondents who were involved in the study. Figure 4.2 depicts the results of the investigation.

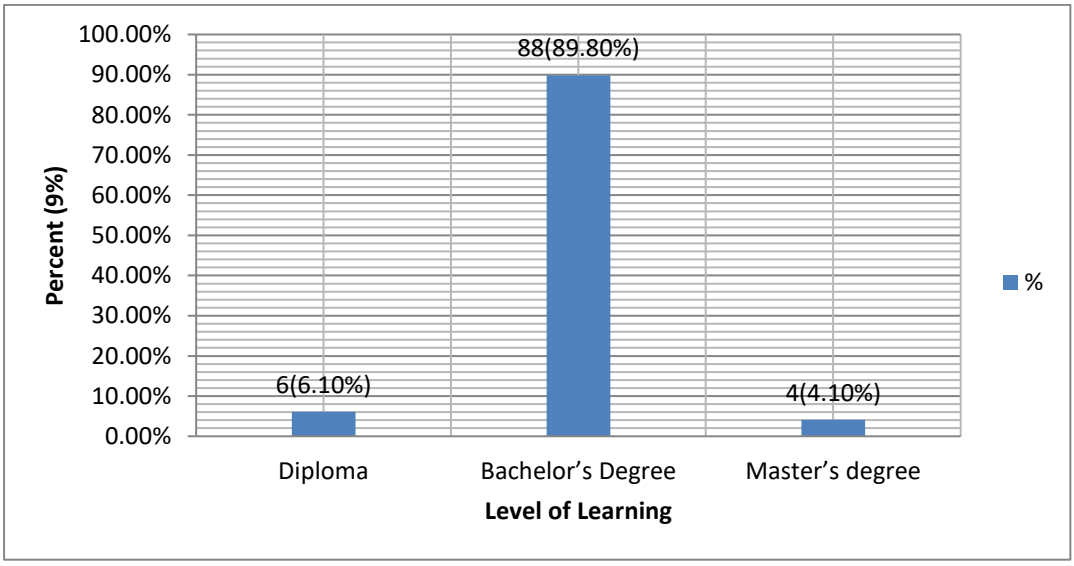


Figure 4.2 Respondents Highest Level of Learning

As shown in Figure 4.2, the majority of teachers 88(89.80%) held a bachelor's degree as their greatest level of educational preparation. Six people 6(10%) had a teaching diploma, while 4(4.10%) held master's degrees. This suggests that the vast majority of the teachers received only the most fundamental training. A secondary source of information was provided via a principal's interview schedule, in which eight principals (57.1 %) stated that their schools had teachers who were suitably trained in respect to the courses offered in their schools.

4.2.4 The Respondents' Teaching Experience

Further, the study sought to find out the respondents' teaching experience. In order to do so, the respondents were requested to check the box next to the bracket that indicated their work experience. The observations were shown in Figure 4.3.

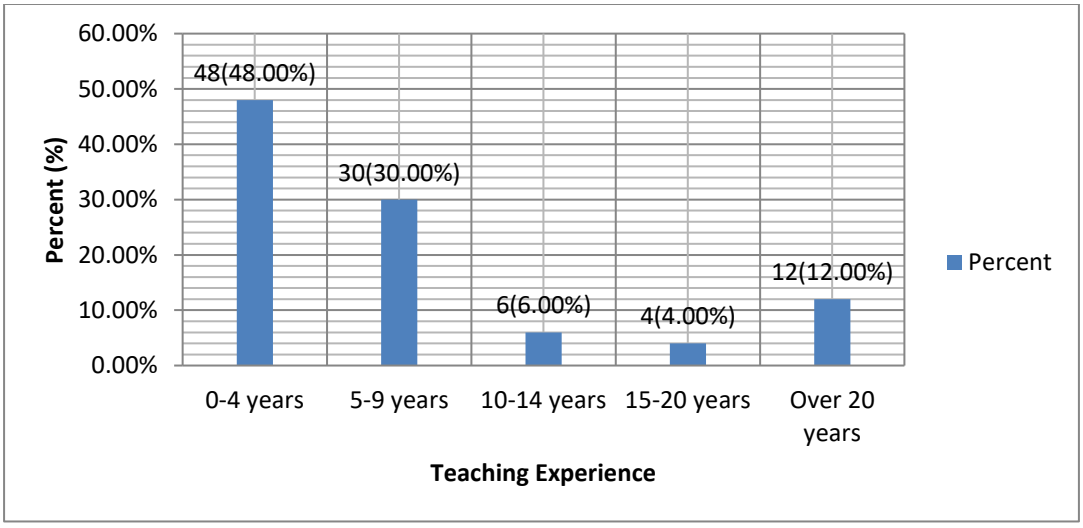


Figure 4.3 Teaching Experience of the Respondents

The findings of the research, as illustrated in Figure 4.3, demonstrates that the majority of teachers in Voi Sub – County had 0 – 4 years of teaching experience, followed by

30 (30.00%) with 5 – 9 years, 12 (12.00%) with over 20 years, 6 (6.00 %) with 10 – 14 years, and 4 (4.00 %) with 15 – 20 years of teaching experience.

4.3 The impact of Schools' Provision of Teaching Staff on KCSE Performance

The first research objective sought to determine whether the provision of teaching staff by schools had an impact on KCSE performance in secondary schools in Voi Sub County. The respondents were asked to react to eight items on a five – point likert scale ranging from strongly disagree (1) to disagree (2), not sure(3), agree (4), and strongly agree(5), all of which asked for their opinions on the provision of teaching staff by the schools in question. The responses obtained were used to compute frequency distributions, percentages, mean scores, and standard deviations for each of the eight statements, as well as a global mean score and standard deviation that rated the respondent's overall agreement on a scale of 1 to 5, based on their level of agreement. The mean scores were interpreted as follows; 1.00-1.80 strongly disagree. 1.80-2.60 disagree, 2.60- 3.40 not sure, 3.40-4.20 agree, and 4.20-5.00 strongly agree. The independent variable was the availability of teaching staff, and the dependent variable was the performance of students in KCSE. According to the hypothesis, there was no statistically significant difference of school provision of teaching personnel on KCSE performance in secondary schools in Voi Sub County. Pearson correlation coefficient for the independent and dependent variable were calculated in order to establish this relationship. In the data presentation, tables, bar graphs, and narrations were all utilized. Table 4.1 summarizes the data on the influence of school provision of teaching staff on KCSE performance, which were obtained through questionnaires and focus groups.

Table 4.2. Provision of Teaching Staff

	Statement	SD	D	NS	A	SA	$\bar{x}$
1.	According to the school's CBE, we have a sufficient number of teachers.	14 (14.3%)	56 (57.2%)	8 (8.2%)	18 (18.4%)	2 (2.1%)	2.37
2.	To help alleviate the issue of teacher inadequacy, the BOM hires skilled and certified graduate teachers.	4 (4.1%)	4 (4.1%)	4 (4.1%)	48 (50.0%)	38 (38.8%)	4.14
3.	When teachers leave our school, the TSC provides us with immediate replacements.	26 (28.3%)	48 (52.2%)	8 (8.7%)	6 (6.5%)	4 (4.4%)	2.07
4.	According to the Ministry of Education's guidelines, our school's teacher – to – student ratio is adequate (each class has the expected number of students)	22 (22.5%)	38 (38.8%)	16 (16.3%)	16 (16.3%)	6 (6.1%)	2.45
5.	To address the shortage of teachers, the school employs form four graduates with top qualifications as teachers.	72 (73.5%)	18 (18.4%)	0 (0.0%)	6 (6.2%)	2 (2.0%)	1.45
6.	When teachers transfer from our school, BoM employs immediately replacement	6 (6.0%)	38 (38.0%)	8 (8.0%)	36 (36.0%)	12 (12.0%)	3.10
7.	The schools BOM employs a teacher to stand in for a teacher who may be away for one week or more.	48 (48.0%)	24 (24.0%)	22 (22.0%)	2 (2.0%)	4 (4.0%)	1.90
8.	The BOM employs a teacher to stand in case a teacher retires or exits service while awaiting TSC replacement.	8 (8.0%)	14 (14.0%)	8 (8.0%)	52 (52.0%)	18 (18.0%)	3.58

According to the data analysis presented in Table 4.2, when respondents were asked if the school, according to its CBE, had a sufficient number of teachers, the majority, 56(57.2%) disagreed, 14 (14.3%) strongly disagreed, 18 (18.4%) agreed, 8 (8.2%) were not sure, and 2(2.1%) strongly agreed. On a general scale, the mean score ($\bar{x}$ = 2.37) was obtained which suggested that the respondents were in undecided over whether the number of teachers was sufficient. On whether the BOM's hiring of skilled and certified

graduate teachers helped alleviate the problem of teacher in adequacy, the majority of respondents 48(50.0%) agreed, 38(38.8%) strongly agreed, and the responses were equal for each of the other three categories, namely strongly disagreed, disagree, and not sure each with 4 (4.1%). The computed mean score ($\bar{x}$ = 4.14) for this statement indicates that the majority of respondents agreed with the statement's thesis in the majority of cases. On whether the TSC provided schools with immediate replacements when teachers left our school, the majority 48(52.2%) disagreed, 26(28.3%) strongly disagreed, 8(8.7%) were unsure, 6(6.5%) agreed and 4(4.4%) strongly agreed. In this statement, the mean score ($\bar{x}$ = 2.07) revealed that the majority of respondents disagreed with the statement that when teachers leave their positions, the TSC offers prompt replacements.

When asked if the schools teacher –pupil ration was adequate in line with the Ministry of Education's guidelines 38(38.8%) disagreed, 22(22.5%) strongly disagreed 16(16.3%), 16(16.3%) agreed and 6(6.2%) strongly agreed. The mean score ($\bar{x}$ = 2.45) indicated that the respondents disagree with the statement. The majority of respondents 72(73.5%) strongly disagreed that in order to address the shortage of teachers, the school employs form four graduates with top qualifications as teachers; 18 (18.4%) percent, disagreed; 6(6.2%), agreed; and 2(2.1%), strongly agreed. In response to this remark, the mean score ($\bar{x}$=1.45) indicated that the respondents strongly disagreed with the assertion.

When asked if the Board of Management immediately hired a replacement when teachers transferred from their schools, 38(38.0%) disagreed 36(36.0%) agreed, 12(12.0%) strongly agreed, percent strongly agreed, 8(8.0%) were not sure, and 6(6.0%) strongly disagreed. The mean score ($\bar{x}$=3.1) of this statement indicated that the respondents were not sure of this statement. When asked if the schools BOM employs

a teacher to stand in for a teacher who may be away for one week or more, 48(48.00%) strongly disagreed, 24(24.0%) disagreed, 22(22.0%) were not sure,, 2(2.0%) agreed and 4(4.0%) strongly agreed. The mean score ($\bar{x}$=1.90) for this statement suggested that the majority of respondents disagreed with the statement's meaning. On whether or not the BOM employed a teacher to serve as a stand – in in the event that a teacher retired or left the service while awaiting TSC replacement, the majority agreed with 52(52.0%), 18(18.0%) strongly agreed, 14(14.0%) disagreed, and those who disagreed and were unsure were each 8(8.0%) each. Following the principals' interview schedule, the results revealed that most principals (71.4%) believed that the number of teachers in their respective schools were insufficient. One principal who participated in the study stated thus,

> For quite some time, we have been experiencing acute teacher shortages in the school; as a result, we rely on teachers employed by the Board of Management (BoM) to fill in the gaps or intern teachers posted by the Teachers Service Commission (TSC) to supplement subjects where there are shortages. As a result of their low levels of enthusiasm, high rates of turnover, and a lack of coverage of the curriculum, these teachers typically get poor academic results in national exams.

According to the results of the analysis, respondents agreed that the BoM hired skilled and qualified teachers to help alleviate the issue of teacher inadequacy, and that the BoM employed a teacher to act as a stand-in in the event that a teacher retired or left service while awaiting TSC replacement.

4.3.1 Influence of Schools' Provision of Teaching Staff on KCSE Performance

The first null hypothesis ($H0_1$) of the study was to determine whether there was a statistically significant relationship between the availability of teaching staff and KCSE results. The first null hypothesis stated thus.

$H0_1$: There is no statistically significant influence of schools' provision of teaching staff on KCSE performance in secondary schools in Voi Sub – County.

To test this hypothesis a Pearson correlation coefficient was computed to assess the linear relationship between provision of teaching staff and KCSE mean scores. The findings were provided on Table 4.3

Table 4.3 Correlations between Schools' Provision of Teaching Staff on KCSE Performance

		KCSE mean score	Provision of Teaching Staff
KCSE mean score	Pearson Correlation	1	.442
	Sig. (2 - tailed)		.035
	N	70	68
Provision of Teaching Staff	Pearson Correlation	.442	1
	Sig. (2 - tailed)	.035	
	N	68	70

Table 4.3 shows that there was a moderate positive correlation between provision of teaching staff and KCSE performance, r (68) = + .442, p = .035. As a result of these findings, the null hypothesis was rejected. The study concluded that KCSE performance was influenced by the availability of teaching staff in schools.

4.4 The Influence of Schools' Provision of Instructional Resources on KCSE Performance

For the second research objective sought to examine the influence of schools' provision of instructional resources on KCSE performance in secondary schools in Voi Sub – County. The respondents were provided with 16 items on a five – point likert scale that ranged from; Strongly Disagree (SD), Disagree (D), Not Sure (NS), Agree (A) and

Strongly Agree (SA). The scale was used to assess the provision of instructional resources in schools. The researcher computed the frequencies, mean scores, and standard deviations for each statement as well as a global mean score for all of the 16 statements combined. Table 4.4 illustrates a summary of the responses and their distribution.

Table 4.4 Schools' Provision of Instructional Resources

Statement	SD	D	NS	A	SD	$\bar{x}$
There are adequate facilities in the laboratory for teaching	14(14.0%)	30(30.0%)	18(18.0%)	32(32.0%)	6(6.0%)	2.86
There are adequate books and facilities in the library	14(14.0%)	36(36.0%)	8(8.0%)	38(38.0%)	4(4.0%)	2.82
There are adequate facilities in the agriculture/home science/computer room for teaching	30(30.0%)	38(38.0%)	14(14.0%)	18(18.0%)	0(0.0%)	2.20
There are adequate facilities in the play field to enhance co-curricular learning	22(22.5%)	34(34.7%)	12(12.2%)	30(30.6%)	0(0.0%)	2.51
There are adequate reference books for teachers and students	16(16.3%)	42(42.9%)	4(4.1%)	32(32.3%)	4(4.1%)	2.65
There are adequate text books for the teachers and students in all subjects	10(10.0%)	10(10.0%)	12(12.0%)	58(58.0%)	10(10.0%)	3.48
There are adequate set books for teachers and students	6(6.0%)	14(14.0%)	6(6.0%)	58(58.0%)	14(14.0%)	3.61
There are adequate teachers guides in the school	6(6.0%)	30(30.0%)	12(12.0%)	48(48.0%)	4(4.0%)	3.14
There are adequate teaching aids, maps, charts and models for teaching	10(10.0%)	38(38.0%)	12(12.0%)	40(40.0%)	0(0.0%)	2.82
There are adequate mathematics kits in the school	12(12.2%)	30(30.6%)	34(34.7%)	22(22.5%)	0(0.0%)	2.67
There are adequate facilities in the computer labs	28(28.0%)	42(42.0%)	16(16.0%)	14(14.0%)	0(0.0%)	2.16
There are adequate recreational facilities to entertain students	34(34.0%)	40(40.0%)	6(6.0%)	16(16.0%)	4(4.0%)	2.16
There is adequate internet connectivity in the school	50(50.0%)	10(10.0%)	2(2.0%)	32(32.0%)	6(6.0%)	2.34
There is adequate use of excursions/field trips in teaching	42(42.0%)	42(42.0%)	2(2.0%)	12(12.0%)	2(2.0%)	1.90
There is adequate use of resource persons in teaching	14(14.0%)	48(48.0%)	10(10.0%)	22(22.0%)	6(6.0)	2.58
Teaching resources such as manilas, dusters, chalk, models, charts, are adequate	8(8.0%)	14(14.0%)	6(6.0%)	54(54.0%)	18(18.0%)	3.60

The findings of teachers' surveys on the availability of instructional materials in schools are presented on Table 4.4. Responses show that the teachers disagreed that there were adequate facilities in the; agriculture/home science/computer room for teaching (68.0%); play field to enhance co-curricular learning (57.2%); computer labs (70.0%); entertain students (74.0%); internet connectivity in the school (60.0%) and use of excursions/field trips in teaching (84.0%). However, the teachers agreed on the adequacy of the following facilities: text books for the teachers and students in all subjects (68.0%); set books for teachers and students (72.0%); teaching resources such as manilas, dusters, chalk, models, charts (72.0%). The responses from the principals' interview schedule, revealed that the majority of principals indicated that the following resources were adequate; number of books in their schools (92.9%), teaching aids (64%), radios (42.9%), CD players (50.0 %) and LCD projectors (57.1%). The majority of principals stated that their schools had deficiencies of the following resources; digital screens in the classrooms (71.4%), computers (50.0%), and charts (64.3%).

According to the findings of the study, the following facilities in the schools were found to be insufficient: laboratory, books in the library, agriculture, home science, computer room, play field, reference books, teaching aids, maps, charts, models, mathematics kits, computer labs, recreational facilities, and internet connectivity (indicate a percentage for each of these facilities). However, according to the findings of the study, the following materials were sufficient: textbooks for teachers and students in all subjects, set books, teachers' manuals, and instructional resources such as manilas, dusters, chalk, models, charts, and soon, among other things.

The principals observed that the inadequacy of these instructional resources resulted in compromised methods of teaching and learning; for example, there was a marked inability to deliver instruction in ICT lessons when several students shared one

computer, an over reliance on teacher demonstrations, students and teachers scrambling for resources, several students congregating around a given resource during teaching, and teachers spending a significant amount of time preparing for lessons and assessments. In order to address these shortages, the principals stated that they ensured that the timetable was constructed taking into consideration the available resources, that teachers were encouraged to improvise, that they collaborated with schools in the neighborhood to borrow critical apparatus, that practical lessons were conducted in shifts, that classes were held under trees, and that they attempted to source funding from the county government Constituency Development Fund (CDF). As a result of these circumstances, students had poor learning experiences, which in advertently affected their performance in national examinations.

4.4.1 Correlations between Schools' Provisions of Instructional Resources and KCSE Performance

It had been hypothesized that the provision of instructional resources in schools had no statistically significant influence on students' results in KCSE. The instructional resources were the independent variable, and KCSE performance was the dependent variable in this study. The null hypothesis ($H0_1$) stated thus;

$H0_2$: There is no statistically significant influence of schools' provision of instructional resources on KCSE performance in secondary schools in Voi Sub - county.

To test this hypothesis a Pearson correlation coefficient was computed to assess the linear relationship between provision of teaching staff and KCSE mean scores. The findings were provided on Table 4.5

Table 4.5 Correlations between KCSE Mean Score and Instructional Resources

		KCSE Mean Score	Instructional Resources
KCSE Mean Score	Pearson Correlation	1	.451
	Sig.(2 - tailed)		.033
	N	70	64
Instructional Resources	Pearson Correlation	.451	1
	Sig.(2 - tailed)	.033	
	N	64	70

Table 4.5 shows that there was a moderate positive correlation between provision of teaching staff and KCSE performance, r (68) = + .451, p = .033. As a result of these findings, the null hypothesis was rejected. These findings led to the rejection of the null hypothesis, which led to the conclusion that KCSE performance was influenced by the provision of instructional resources. An increase in the provision of instructional resources results in an increase in KCSE mean scores and vice versa, according to the findings. As a result, high levels of provision of instructional resources were found to be associated with higher KCSE scores in this study.

4.5 Influence of Provision of School Facilities on KCSE Performance

The third research objective sought to determine the influence of schools' provision of school facilities on KCSE performance in secondary schools in Voi Sub – County. The provision of school facilities was assessed using sixteen (16) items on a likert scale ranging from strongly disagree (1) to disagree (2), not sure (3) to agree (4), in which the respondents were asked to provide their opinions on the provision of school facilities. The researcher computed the mean scores and a global mean score for all 16 items combined, which reflected the provision of school amenities on a scale from 1 to 5, and then averaged the results. Table 4.6 displays a summary of the responses and their distribution.

Table 4.6 Provision of School Facilities

Statement	SD	D	NS	A	SA	$\bar{x}$
Pupils have adequate classrooms set standard is 40:1	16(16.0%)	52(52.0%	4(4.0%)	24(24.0%)	4(4.0%)	2.48
Pupils do have adequate sanitary facilities for girls 1:25 and for boys is 1:40	8(8.0%)	42(42.0%)	20(20.00)	24(24.0%)	6(6.0%)	2.78
Desks and chairs in the classrooms are adequate the set standard is 1:3	10(10.0%)	24(24.0%)	8(8.0%)	52(52.0%)	6(6.0%$)	3.20
Classroom furniture is both practical and appealing.	16(16.0%)	22(22.0%)	10(10.0%)	50(50.0%)	2(2.0%)	3.00
The staffroom is adequate for teachers	28(28.6%	40(40.8%)	2(2.0%)	28(28.6%	0(0.0%)	2.31
There is adequate playground for all the students in the school	10(10.2%)	38(38.8%)	4(4.08%)	46(46.9%)	0(0.0%)	2.88
In science laboratories, utilities such as gas, water, and electricity are readily accessible and in working order.	16(16.0%)	14(14.0%)	18(18.0%)	48(48.0%)	4(4.0%)	3.10
The eating place is appealing, with ample seating, storage, and food preparations pace.	38(38.0%)	32(32.0%)	8(8.0%)	20(20.0%)	2(2.0%)	2.16
The school does have a dispensary that is fully equipped to address the needs of students.	60(60.0%)	34(34.0%)	0(0.0%)	4(4.0%)	2(2.0%)	1.54
The overall style is appealing to the eye and age – appropriate for the students.	20(20.0%)	22(22.0%)	16(16.0%)	42(42.0%)	0(0.0%)	2.80
Vandalism is easily fixed, and proper maintenance (exterior and interior) of the school buildings is a priority.	10(10.0%)	28(28.0%)	18(18.0%)	44(44.0%)	0(0.0%)	2.96
In the classes, a ventilation system ensures that clean air is circulated effectively.	4(4.0%)	16(16.0%)	2(2.0%)	70(70.0%)	8(8.0%)	3.62
Lighting systems ensure that the right amount of light is produced and distributed.	0(0.0%)	14(14.3%)	0(0.0%)	78(78.6%)	6(6.1%)	3.78
For students and visitors, there is a suitable reception area.	20(20.4%)	26(26.5%)	2(2.004%)	44(44.9%)	6(6.1%)	2.90
In the school buildings, there are no visible signs of roof leaks.	4(4.1%)	22(22.5%)	14(14.3%)	50(51.0%)	8(8.2%)	3.37
School has a supply of clean drinking water and facilities for hand washing conveniently located per building codes	8(8.2%)	14(14.3%)	4(4.1%)	58(59.2%)	14(14.3%)	3.57

Responses provided on Table 4.6 on provision of school facilities indicates that the teachers disagreed that; pupils have adequate classrooms set standard of 40:1 (68.0%), the staffroom is adequate for teachers (68.0%), the eating place was appealing, with ample seating, storage, and food preparations pace (70.0%) and that the school had a dispensary that was fully equipped to address the needs of students (94.0%). However, ther teachers agreed with the following statements; desks and chairs in the classrooms are adequate the set standard is 1:3 958.0%), science laboratories, utilities such as gas, water, and electricity are readily accessible and in working order (52.0%), in the classes, a ventilation system ensures that clean air is circulated effectively (78.0%), lighting systems ensure that the right amount of light is produced and distributed (84.0%), students and visitors, had a suitable reception area (52.0%), in the school buildings, there are no visible signs of roof leaks (58.0%) and school had a supply of clean drinking water and facilities for hand washing conveniently located per building codes (72.0%). Classrooms, sanitary facilities, a staffroom, a playground, a dining area, a dispensary, and proper upkeep (both exterior and interior) of the school buildings were all found to be inadequate, according to the findings of the study. The study also established that, desks and chairs in classrooms were appropriate, and the furniture was both functional and visually appealing. Utility services such as gas, water, and electricity were readily available and in good working order in research facilities. A ventilation system was installed in the classrooms to guarantee that clean air was circulated adequately. Using lighting systems, you can ensure that the proper amount of light is created and distributed throughout the space. Roof leaks were not found in any of the school buildings. Finally, it was found out that that the schools had a reliable supply of clean drinking water as well as facilities for hand washing that were easily positioned in accordance with building requirements. Physical facilities in effective schools should

be responsive to emerging educational needs in order to support the achievement of expected learning outcomes; they should provide comfort and security, as well as being easily accessible, well – lit and ventilated, and aesthetically pleasing to students.

4.5.1 Correlations between Schools' Provisions of Facilities and KCSE Performance

It had been hypothesized that the provision of facilities in schools had no statistically significant influence on students' results in KCSE. The facilities were the independent variable, and KCSE performance was the dependent variable in this study. The null hypothesis ($H0_3$) stated thus.

$H0_3$: There is no statistically significant influence of schools' provision of school facilities on KCSE performance in secondary schools in Voi Sub - county.

To test this hypothesis a Pearson correlation coefficient was computed to assess the linear relationship between provision of school facilities and KCSE mean scores. The findings were provided on Table 4.7

Table 4.7 Correlations between KCSE Mean Score and School Facilities

Table 4.7 Correlations between Provision of School Facilities and KCSE Performance

		KCSE Mean Score	School Facilities
KCSE mean score	Pearson Correlation	1	.380**
	Sig.(2 - tailed)		.010
	N	70	70
School Facilities	Pearson Correlation	.380**	1
	Sig.(2 - tailed)	.010	
	N	70	70

Data reported in Table 4.7, indicate that there was a moderate positive correlation between the independent (availability of school facilities) and dependent (KCSE mean

scores) variables r (68) = +.380, p=.010). As a result of these findings, the null hypothesis was rejected, which led to the conclusion that KCSE performance was influenced by the provision of school facilities. An increase in the provision of school facilities resulted in an improvement in KCSE performance, according to the findings. As a result, high levels of availability of school amenities were found to be positively associated with KCSE performance in this study.

Combined Impact of the Independent Variables on the Dependent Variable

The study further sought the combined impact of the independent variables and the dependent variable. Regression analysis was used to compute a composite link between the independent factors (provision of teaching personnel, instructional resources, and school facilities) and the dependent variable (KCSE performance). Tables 4.8, 4.9, and 4.10 summarized the findings of the research.

Table 4.8 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.323[a]	.104	.058	.9028083

a. Predictors: (Constant), Provision of school facilities, Provision of teaching staff, Provision of instructional resources

In Table 4.8, it is shown that the value for R square was 104. This meant that the joint variation in the independent factors explained 10.4% of the variation in the dependent variable (KCSE performance), which was the case (provision of teaching staff, instructional resources and school facilities).

Table 4.9 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.514	3	1.838	2.255	.032[b]
	Residual	47.274	58	.815		
	Total	52.788	61			

a. Dependent Variable: KCSE mean score
b. Predictors: (Constant), School Facilities, Teaching Staff, Instructional resources

Table 4.9 shows that the value of F for the model was 2.255, and the accompanying p – value was significant (p = 0.032), indicating that the model was valid. As a result, it was determined that the regression model was statistically significant at the 0.05 level. This demonstrates that the model is an accurate representation of the relationship between the dependent and predictor variables.

Table 4.10 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.455	.680		5.078	.000
	Provision of Teaching Staff	.060	.136	.063	.445	.658
	Provision of Instructional Resources	.209	.088	.421	2.368	.021
	Provision of School Facilities	.212	.089	.457	2.385	.020

a. Dependent Variable: KCSE mean score

The coefficients given in Table 4.10 revealed that the regression coefficient on the provision of teaching staff (0.060), and the association KCSE mean scores was not statistically significant (*p = 0.66*). The correlation between the provision of instructional resources and KCSE performance was positive (0.209), and the association between the provision of instructional resources and KCSE performance was statistically significant (*p = 0.021*). The provision of school facilities had a positive regression coefficient (.212), and the association between KCSE performance and provision of school was statistically significant (*p = 0.02*). In accordance with this paradigm, KCSE success has a great deal to do with the provision of instructional resources and school infrastructure but has little to do with the provision of teaching staff. The predictive capacity of the model on the association among variables is

represented by the beta coefficient. As a result, when the regression equation is re – modeled, it looks like this:

$Y = 3.455 + 0.209\ X_1 + 0.212X_2$

Y = KCSE Performance

X_1 = Provision of Instructional Resources

X_2 = Provision of School Facilities

These results suggest that the provision of instructional resources and school facilities had a positive impact on academic performance in secondary schools in Voi Sub – County; however, further research was required to determine why the provision of teachers had no significant impact on academic performance in secondary schools in Voi Sub – County.

CHAPTER FIVE

DISCUSSION, SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The study sought to determine the influence of school management practices on students' performance in Kenya Certificate of Secondary Education in Voi Sub – County, Kenya. Participants were asked to complete questionnaires whose analysis provided insights into association among the variables of the study. In this study, questionnaires were used to obtain quantitative data from teachers, and an interview schedule was employed to acquire qualitative data from school principals. The data acquired was analyzed using descriptive and inferential statistics in order to successfully provide answers to research questions as well as in order to evaluate the hypothesis that had been expressed earlier. As a result, the summary, conclusions, recommendations, and potential areas for additional investigation are presented in this chapter.

5.2 Discussion of the Findings

This section discusses the results and analysis of data (in chapter four) as per the three objectives.

5.2.1 Influence of Schools' Provision of Teaching Staff on KCSE Performance

The first research objective of the study sought to investigate the influence of schools' provision of teaching staff on KCSE performance in secondary schools in Voi Sub – County, Kenya. In reference to section 4.3, majority (70.0%, $\bar{x}$= 2.37) of teachers disagreed that according to the CBE the school had a sufficient number of teachers. Further, the study found out that majority (74.0%, $\bar{x}$= 2.07) of teachers indicated when teachers left the school, the TSC failed to provide immediate replacements. The teachers (60.0%) also disagreed that according to the Ministry of Education's

guidelines, their school's teacher – to – student ratio was adequate (each class has the expected number of students). These findings concur with Hattle (2009) who asserts that small classrooms foster student innovation while simultaneously increasing instructor enthusiasm. Teachers to student ratios, according to Adams (2014), determine the distribution of resources to schools, and the smaller the class size, the greater is the achievement gap between students and their teachers. Majority (90.0%) of teachers disagreed that to address the shortage of teachers, the school employed form four graduates with top qualifications as teachers. Also (62.0%) of teachers indicated that their schools BoM did not employ a teacher to stand in for a teacher who may be away for one week or more. Similarly, majority (72.0%) of teachers disagreed that the school's BoM employed a teacher to stand in for a teacher who may be away for one week or more. Teachers' replacements were not provided as quickly as they should be when they leave the school, the pupil: teacher ratio were insufficient in accordance with Ministry of Education guidelines. To achieve strong academic performance, it is critical for a school to have a suitable number of teaching staff; when the number of teachers falls below the specified threshold, teaching and learning are hampered, and students ultimately fail to achieve their educational goals. These findings point at gaps in provision of teaching staff in schools in the study area which can have an influence in teaching and consequently KCSE performance among students. This suggests that the BoM in secondary schools were perhaps not doing enough to guarantee that there were an adequate number of teachers in the classrooms they were responsible for. This could be attributed in part to the financial implications of employing teachers, as well as the fact that teacher recruitment is a mainly a prerogative of the TSC. Hypothesis testing revealed a moderate positive correlation between provision of teaching staff and KCSE

performance, r (68) = + .442, p = .035. As a result the study concluded that KCSE performance was influenced by the availability of teaching staff in schools.

These concurs with the Ministry of Education (2011) report which identified equitable teacher distribution as a major concern in Kenya's public secondary schools and as a major challenge that remains unaddressed. This has occurred because of a variety of circumstances, the most significant of which is the rate of student enrolment that has not kept pace with the rate of teacher recruitment, resulting in an enormous growth in pupil – to –teacher ratios. Consequently, academic performance is adversely affected.

The study also established that majority (86.0%) of teachers agreed that to help alleviate the issue of teacher inadequacy, the BoM hired skilled and certified graduate teachers. Also most (70.0%) teachers agreed that when teachers transferred from their school, the BoM immediately employed a replacement. These findings indicate that schools were trying within their ability to alleviate the teacher shortage in their schools. These findings are in agreement with Atkins, Carter and Nichole (2012) whose study findings of their study established that it is critical for school administrators who wish to see improved academic results to guarantee that the teacher establishment is strong. Their study found out a relationship between teachers' workload and the number of learners performance; found an inverse relationship existed between the two variables.

5.2.2 Influence of Schools' Provision of Instructional Resources on KCSE Performance

The second research objective sought to examine the influence of schools' provision of instructional resources on KCSE performance in secondary schools in Voi Sub-county. In reference to section 4.4, the teachers' responses clearly indicated that there was widespread deficiencies in provision of several instructional resources. The teachers

indicated that the following resources were inadequate in their schools, facilities in the; agriculture/home science/computer room for teaching (68.0 %), play field to enhance co-curricular learning (56.0%), reference books for teachers and students (58.0%), computer labs (70.0%), recreational facilities to entertain students (74.0%), internet connectivity in the school (60.0%), excursions/field trips in teaching (84.0%) and use of resource persons in teaching (62.0%). Instructional resources promote learners' acquisition of information, competencies, and abilities by facilitating richer teaching/learning experiences. Hypothesis testing indicated that there was a moderate positive correlation between provision of teaching staff and KCSE performance, r (68) = + .451, p = .033. As a result, these findings, it was concluded that KCSE performance was influenced by the provision of instructional resources.

According to the findings of this study, instructional resources were severely lacking in most secondary schools in Voi Sub – County. According to the Organization for Economic Cooperation and Development (2017), the provision of instructional resources in schools is important to improve learners' acquisition of knowledge, competencies, and skills by facilitating enriched teaching/learning activities; they are powerful instruments for introducing new concepts that may be difficult for your students to comprehend. According to Ogbu (2015), insufficient instructional resources prevent the teaching learning process from responding quickly to new difficulties in education, so compromising the quality of education, the efficiency with which it is delivered, and the desired outcomes. According to the findings of the Bukoye (2018) study, the majority of schools lacked instructional materials, which had a detrimental impact on teaching methods and resulted in poor academic attainment.

The findings of this study are consistent with those of Lowe (2009), who found that the availability of a broad pool of acceptable textbooks that were in accordance with the curriculum was a significant factor in improving learners' academic performance.

This concept is confirmed by research conducted by Akomolafe and Adesua (2016) in Nigerian public secondary schools, which revealed that there was a statistically significant relationship between a student's motivation and test performance and the instructional materials used in the school. On the basis of this research, it is advised that secondary schools in Voi Sub County investigate ways in which instructional resources can be made available to enable better educational outcomes among learners in secondary schools.

5.2.3 Influence of Schools' Provision of School Facilities on KCSE Performance

The study third objective sought to determine the influence of schools' provision of school facilities on KCSE performance in secondary schools in Voi Sub-county. In reference to section 4.5, the teachers indicated deficiencies in the following areas, classrooms set standard is 40:1 (68.0%), pupils' sanitary facilities for girls 1:25 and for boys is 1:40 (50.0%), staffroom for teachers (68.0%), eating places, with ample seating, storage, and food preparations pace (70.0%), dispensary that is fully equipped to address the needs of students (94.0%). The quality of school facilities fosters a sense of belongingness, safety, and ownership among students. Physical facilities are emerging educational needs that support the achievement of expected learning outcomes; they include provision of comfort and security, as well as being easily accessible, well – lit and ventilated, and aesthetically pleasing to students. Hypothesis testing revealed that there was a moderate positive correlation between the independent (availability of physical facilities) and dependent (KCSE mean scores) variables r (68) = +.380, p=.010). As a result of these findings, it was concluded that KCSE performance was

influenced by the provision of school facilities. In the opinion of Lackney (2018), the physical amenities of a school are an essential component of the teaching and learning process. Facilities that are designed and laid out well create an academic environment that allows both students and teachers to have a "place experience." Similarly, UNESCO (2012), asserts that physical condition of a school's physical facilities can either impede or enhance educational attainment; effective learning occurs when schools ensure student safety, hygienic conditions, reasonable levels of comfort, and an environment that stimulates the learner's cognitive abilities. This concept is confirmed by research conducted by Akomolafe and Adesua (2016) in Nigerian public secondary schools, which revealed that there was a statistically significant relationship between a student's motivation and test performance and the instructional materials used in the school. In a similar vein, a study conducted in Tanzania by Mvuyekule (2017) on a sample of 56 schools discovered that the provision of physical amenities increased academic achievement.

Finally, the regression analysis showed that the joint variation in the independent factors (provision of teaching staff, instructional resources and school facilities) explained 10.4% of the variation in the dependent variable (KCSE performance mean scores). The value of F for the model was 2.255, and the accompanying p – value was significant (p = 0.032), indicating that the model was valid at ($\alpha = .05$), thus the model is an accurate representation of the relationship between the dependent and independent variables. Provision of Teaching Staff did not have a statistically significant influence on KCSE performance in secondary schools in Voi Central Sub County ($\beta = .060$, $t = .445$, $p > 0.05$). Provision of instructional resources had a statistically significant influence on KCSE performance in secondary schools in Voi Central Sub County ($\beta = .209$, $t = .445$, $p < 0.05$). Provision of school facilities had a statistically significant influence on

KCSE performance in secondary schools in Voi Central Sub County (β = .212, t = 2.385, p< 0.05).

5.3 Summary of Findings

This section presents the summary of the study findings in accordance to the objectives. With regard to provision of teaching staff, study, the study established that the provision of teaching staff by schools had an impact on KCSE performance, as evidenced by a positive association between the provision of teaching staff and students' academic achievement. The study further revealed that majority of the schools had insufficient numbers of teachers, when teachers left the school, the TSC failed to provide immediate replacements pupil: teacher ratio were inadequate, the BoMs failed to address the shortage of teachers, the school by employing form four graduates with top qualifications as teachers. Also the schools BoM did not employ a teacher to stand in for a teacher who may be away for one week or more or to stand in for a teacher who may be away for one week or more.

Concerning provision of instructional resources, the study established that provision of instructional resources by schools had a beneficial impact on KCSE performance. There was a favorable relationship between the availability of instructional resources by schools and students' academic achievement. However, the research revealed that the following resources were inadequate in majority of schools, facilities in the; agriculture/home science/computer room for teaching, play field, reference books for teachers and students, computer labs, recreational facilities to entertain students, internet connectivity, excursions/field trips in teaching and use of resource persons in teaching.

The study further established that provision of physical facilities, had a favorable impact on KCSE performance. However, the majority of schools had deficiencies in the following areas, classrooms set standard of 40:1, pupils sanitary facilities for girls 1:25 and for boys is 1:40, staffroom for teachers, eating places, with ample seating, storage, and food preparations pace, and a dispensary that is fully equipped to address the needs of students.

5.4 Recommendations

It is clear from the study's findings that provision of teachers, instructional resources, and school infrastructure was inadequate in majority of schools, and that these variables were positively associated with academic achievement as evaluated by the KCSE mean scores. The following recommendations have been made in light of the findings of this study:

i. The Ministry of Education recommends that secondary school administrations put in place procedures to ensure that the number of teachers is adequate at all times.
ii. School administration should include representatives from all educational stakeholders in order to ensure that enough instructional resources are available.
iii. Secondary school administrations should investigate methods of raising funds for the purpose of improving the physical facilities in secondary schools.

5.5 Suggestions for Further Research and Development

Based on the findings of this study, the following areas of investigation are recommended for further investigation.

i. A study should be conducted to examine the impact of school management practices on students' performance in the Kenya Certificate of Secondary Education (KCSE) according to school category.

ii. A study can be undertaken to determine the most effective management practices that have a beneficial impact on a learner's academic achievement.

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APPENDICES

APPENDIX 1: RESPONDENTS LETTER OF INTRODUCTION

Dear Sir/Madam,

REF: AUTHORITY TO ADMINISTER RESEARCH INSTRUMENTS

I am a student at African Nazarene University (ANU), where I am enrolled in the Department of Educational Administration. Currently, I am conducting research on ***"The Influence of School Management on Students' Performance in Kenya Certificate of Secondary Education in Voi Sub –County, Taita Taveta County, Kenya"*** In this regard, I would like to respectfully beg that you please spare some of your valuable time to assist me in achieving my aim by completing the questionnaire. If you offer information in the questionnaires, please know that it will only be used for academic purposes, and that your name will be kept in strictest confidence at all times. Please feel free to express your thoughts because no response will be seen as in correct.

Please accept my thanks in advance.

I am, respectfully, yours sincerely

A.W.Kigo

Tel. 0724 – 547 – 769

Email; annekigo63@gmail.com

APPENDIX II: QUESTIONNAIRE FOR TEACHERS

Greetings, respondent

The researcher is a student at Africa Nazarene University, where she is pursuing a Master of Education in Educational Administration and Planning degree (ANU). An investigation of the influence of school management on students' KCSE performance in secondary schools in Voi Subcounty, Taita Taveta County in Kenya is now being carried out by the researcher. The information you submit will be treated with strict secrecy and will only be used for the purposes of this study, unless otherwise stated.
Do not include **YOUR NAME OR THE NAME OF YOUR SCHOOL** on this form

Thank you.

Instructions

Please respond to ALL of the questions in sections A and B, as well as C, D, and E of the questionnaire.
There is no RIGHT or WRONG solution to this question.
Please take time to read the questions carefully and mark the box that best describes y our response to each statement provided with a tick ().

Section A: Background Information

There are two types of schools: private [ ] and public [ ].
Your sexual orientation.

1. Gender

   Male [ ]
   Female [ ]

2. What is the highest level of certification you have completed?

   Diploma [ ]
   Bachelor's degree [ ]
   Bachelor's diploma [ ]
   Master's degree [ ]
   Ph.D [ ]

Other. Pleases specify.....

3. Please describe your experience in teaching.

0 – 4 years old	[ ]
5 to 9 years old	[ ]
10 – 14 years old	[ ]
15 to 20 years old	[ ]
More than 20yrs	[ ]

5. **Please indicate the KCSE mean scores for your school for the years listed below**

Year	**2016**	**2017**	**2018**	**2019**
No. of candidates				
KCSE (mean score)				

Use the following instructions to respond to sections C, D and E

This section tries to assess key components of school administration practices. It is broken down into three sections: provision of instructional materials, provision of physical facilities, and teacher adequacy. Each section contains items on a likert scale, and you must tick () the response that best fits your view for each of the assertions supplied. Please do not forget to respond to any questions that you may have. Please express your thoughts on the following assertions in the next section. Strongly agree (SA), agree (A), not sure (NS), disagree (D) and strongly disagree (SD).

Section C. Provision of Teaching Staff

Use Strongly Agree (SA), Agree (A), Not Sure (NS), Disagree (D) and Strongly Disagree (SD)

	Statement	**SD**	**D**	**NS**	**A**	**SA**

1.	According to the school's CBE, we have a suitable number of teachers.					
2.	To help minimize the problem of teacher insufficiency, the BOM employ strained and competent graduate teachers.					
3.	When teachers leave our school, the TSC provides us with fast replacements.					
4.	According to the Ministry of Education's criteria, our school's teacher – to – student ratio is adequate (each class has the expected number of students)					
5.	To address the teacher shortage, the school recruits form four graduates with good grades as teachers.					
6.	When teachers leave our school, BoM instantly hires replacements.					
7.	BOM hires a teacher to cover for a teacher who is out of the classroom for a week or more.					
8.	In the event that a teacher retires or leaves service while waiting for a TSC replacement, the BOM hires a teacher to fill in.					

Section D. Provision of Instructional Resources

Use Strongly Agree (SA), Agree (A), Not Sure (NS), Disagree (D) and Strongly Disagree (SD).

	Statement	**SD**	**D**	**NS**	**A**	**SA**
1.	In the laboratory, there are suitable teaching equipment.					
2.	The library has sufficient volumes and resources.					
3.	There are adequate teaching facilities in the agricultural, home – science, and computer rooms.					
4.	The play field has enough facilities for enhancing co – curricular learning.					

5.	For teachers and students, there are sufficient reference books.					
6.	In all subjects, there are sufficient textbooks for teachers and students.					
7.	For both teachers and pupils, there are sufficient set books.					
8.	In the school, there are sufficient teacher guides.					
9.	For instruction, there are sufficient teaching materials, maps, charts, and models.					
10.	In the school, there are sufficient mathematics kits.					
11.	In the computer labs, there are adequate facilities.					
12.	There are many recreational facilities to keep students entertained.					
13.	In the school, there is enough internet access.					
14.	Excursions/field trips are used effectively in the school.					
15.	The employment of resource people in the classroom is adequate.					
16.	Manilas, dusters, chalk, models, and charts are suitable teaching resources.					

Section E. Provision of Physical Facilities

Use Strongly Agree (SA), Agree (A), Not Sure (NS), Disagree (D) and Strongly Disagree (SD)

	Statement	**SD**	**D**	**NS**	**A**	**SA**
1.	Classrooms are adequate for students. 40:1 is the set standard.					

2.	Pupils have appropriate sanitary facilities (1:25 for girls and 1:40 for boys).					
3.	Classroom desks and chairs are suitable; the set standard is 1:3.					
4.	Classroom furniture is both utilitarian and appealing.					
5.	Teachers have enough space in the staffroom.					
6.	There is enough playground for all of the school's kids.					
7.	In science labs, utilities such as gas, water, and electricity are available and in working order.					
8.	The dining hall is appealing, with ample seating, storage, and food preparation space.					
9.	The school features a clinic that is well equipped to handle the health needs of students.					
10.	The overall design is appealing to the eye and age – appropriate for the students					
11.	Vandalism is swiftly corrected, and proper maintenance (exterior and interior) of the school buildings is a priority.					
12.	In the classrooms, a ventilation system ensures that clean air is circulated effectively.					
13.	Lighting systems ensure that the right amount of light is produced and distributed.					
14.	In the administration area, there is adequate welcome space for students and visitors.					
15.	In the school buildings, there are no evident signs of roof leaks.					
16.	According to building requirements, the school has a supply of clean drinking water and hand – washing facilities that are easily located.					

Please state the KCSE mean scores for your schools for the following years

Year	**2017**	**2018**	**2019**	**2020**
KCSE mean score				

APPENDIX III: PRINCIPALS' INTERVIEW SCHEDULE

Thank you very much for affording me this important time to conduct an interview pertaining my research on schools. Any information that you will provide will be treated with ultimate confidence and cannot be traced back to you or yours chool.
Schools' provision of teachers.
Please explain how the training of teachers in your school in relation to the subjects offered in your school?

……
……
……

Please explain the adequacy of teachers in your school
……
……
……
How does the number of teachers compare with the student enrollment in your school? Briefly explain
……
……
……
What are the challenges you encounter in your attempts to get adequate number of teachers for your school? OK
……
……
……
Please explain on the adequacy of provision of the following instructional resources in your school.
Books
Teaching aids
Radio,
CD players,
Projectors,
Digital screens,
Television,
Charts
Computers

Please explain the incidents that determine that your school may behaving a shortage of instructional resources?
……
……
……
What measures do you take to address this challenge?

……
……
……

What are the challenges you encounter in your attempts to get adequate instructional resources for your school?

……
……
……

a)Please explain on the adequacy of provision of the following physical facilities in your school.

Classrooms
Libraries
Resources centers
Playgrounds
Laboratories
Resource persons
Fieldtrips
Conferences/workshops
Outdoor reading areas
Drinking water
Sanitation facilities

Please explain the adequacy of classrooms, libraries and resource centres in your school

……
……
……

Incidents that determine that your school may behaving a shortage of physical facilities?

……
……

What measures do you take to address this challenge?

……
……

What are the challenges you encounter in your attempts to get adequate physical facilities for your school?

……
……
……

Thank you very much for your cooperation

APPENDIX IV: MAP OF KENYA SHOWING TAITA – TAVETA COUNTY



APPENDIX V: MAP OF VOI SUB – COUNTY



APPENDIX VI: INFORMED CONSENT FORM

Name of the participating Unit: Teacher/principal

Title of Project: ***"Influence of School Management on Students' KCSE Performance in Secondary Schools in Voi Sub - county, Taita Taveta County, Kenya".*** The goal of this project is to look into the impact of school administration on students' KCSE results in Voi Sub – county.It is my aim that this study will aid in the documentation of particular elements related to school management practices that have an impact on student academic achievement in Voi Sub – County secondary schools.

Procedures:

I will gather material from a variety of sources, including open – ended interviews.

I am /we are inviting you to take part in an interview.

As indicated on the Interview Outline you received previously, the interview will cover a wide range of topics.

You are free to remove items from the list that you do not want to discuss or to add new items that you believe are pertinent.

The length of the interview will be determined by how much information you have to share, but typical interviews should last approximately an hour.

I/we may also contact you in the future with more inquiries.

Your interview will be tape recorded if you consent.

Dangers and Benefits: There are no known risks associated with participation in this study, and it is possible that you will not benefit directly from it.

However, I hope that by studying your replies, concrete recommendations may be made to improve academic performance in secondary schools in Voi Sub – County.

Confidentiality: The identities of those who take part in the interviews will not be revealed.

Your interview audio tape will be transcribed, and all tapes, transcripts, and additional documents will be indexed solely by a pseudonym or code.

Your story and comments will be included with those of everyone I speak with in any materials resulting from my research, and will only be recognized by a pseudonym.

I will make every attempt to keep each participant's identity hidden.

You will get the chance to read a preliminary report on my research.

Possibility of Asking Questions: You have the right to ask questions and have them answered.

Please contact me/us at; annekigo63@email.com or 0724-547769 if you have any questions at anytime.

If the researcher has not answered any of your questions about your rights as a study participant, you can contact the National Commission for Science, Technology, and Innovation (NACOSTI) via email or phone.

Your Legal Rights:

It is entirely upto you whether or not you participate in this study.

You have complete discretion over whether or not to engage in this study, and you can withdraw at any time without jeopardizing your connection with the researcher.

You will not be deprived of any benefits to which you are otherwise entitled as a result of your decision.

Your signature attests to the fact that you have read and comprehended the information provided.

A copy of this consent form will be supplied to you to retain.

Please notify the (NACOSTI) email address or phone number if you believe your rights have been abused in any way.

Signature of Research Participant:

_____Initial here if you agree to participate in this study

_____Initial here if you agree that your interview may be tape – recorded, according to the confidentiality agreement described above.

_____ _____

Printed Name Signature

Date _____

Name and Contact information for Investigator:----------

APPENDIX VII: RESEARCH AUTHORIZATION

REPUBLIC OF KENYA

OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT
County Commissioner's Office
Taita Taveta County
P.O. Box 1 - 80305
MWATATE

Email Address: cctaitataveta@yahoo.com
When replying please quote:
REF: CC/TVT/ADM.5/VOL.II (121)

25th June, 2021

The Deputy County Commissioner
VOI SUB COUNTY

RE: RESEARCH AUTHORIZATION - MS. ANNE WAKAGUYU KIGO

Reference is made to a letter License No. NACOSTI/P/21/11151 dated 21st June 2021 from the Director General/National Commission for Science, Technology and Innovation on the above subject matter.

The above named person of African Nazarene University has been authorized to carry out a Research on ***"Influence of School Management Practices on Students' Performance in Kenya Certificate of Secondary Education"*** in **Voi Sub County, Taita Taveta County** for the **period ending 21st June 2022.**

Kindly accord her the necessary support.

DAMARIS KIMONDO
FOR: COUNTY COMMISSIONER
TAITA TAVETA

Cc

The Director General
National Commission for Science Technology & Innovation
P.O. Box 30623 - 00100
NAIROBI. - Your letter License No NACOSTI/P/21/11151 dated 21st June 2021 refers.

The County Director of Education
TAITA TAVETA

Ms. ANNE WAKAGUYU KIGO

APPENDIX VIII: ANU INTRODUCTION LETTER

AFRICA NAZARENE
UNIVERSITY

27th May, 2021

RE: TO WHOM IT MAY CONCERN

Kigo Anne Wakaguyu (**13MO1CMED017**) is a bonafide student at Africa Nazarene University, in the Education Department. She has finished her course work and has defended her thesis proposal entitled: - ***"Influence of school management practices on students' performance in Kenya Certificate of Secondary Education in Voi Sub-County, Taita Taveta County, Kenya".***

Any assistance accorded to her to facilitate data collection and finish her thesis is highly welcomed.

Regards,

Dr. Titus Mwanthi.
Ag. Deputy Vice Chancellor, Academics.

APPENDIX IX: RESEARCH PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 707626

Date of Issue: 21/June/2021

RESEARCH LICENSE



This is to Certify that Ms.. Anne Wakaguyu Kigo of Africa Nazarene University, has been licensed to conduct research in Taita-Taveta on the topic: Influence of School Management Practices on Students' Performance in Kenya Certificate of Secondary Education in Voi Sub-County, Taita-Taveta ,Kenya. for the period ending : 21/June/2022.

License No: NACOSTI/P/21/11151

707626

Applicant Identification Number

23036 40

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION