EDUCATION STAKEHOLDERS' PERCEPTIONS ON THE EFFECT OF INTERNAL QUALITY AND STANDARDS ASSESSMENTS ON ACADEMIC ACHIEVEMENT OF PUBLIC SECONDARY SCHOOLS IN KAKAMEGA COUNTY, KENYA

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A research thesis submitted in partial fulfillment of the requirements for the award of the Degree of Doctor of Philosophy in Educational Management and Policy Studies of Masinde Muliro University of Science and Technology.

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DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

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This research project has been submitted for examination with our approval as the Masinde Muliro University of Science and Technology supervisor entitled "***Education stakeholders' perceptions on the effect of Internal Quality and Standards assessments on Academic achievement of public Secondary Schools in Kakamega County, Kenya".***

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To my family: beloved husband Antony Aura Saisi, and our children; Lyvia Amayoka, Corrine Aurelia Kharumi and Laville Omwangala.

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ABSTRACT

Though internal quality and standards assessments has the potential to improve the academic achievement of public secondary schools, there are no clearly laid down procedures on how to manage internal quality standards in public secondary schools in Kakamega county. Consequently, the structures and procedures that are followed during the external quality and standards assessments are absent in the internal quality and standards assessments. The problem then is that internal quality and standards assessments are not taken seriously in public secondary schools in Kakamega County The purpose of this study was; to analyze the education stakeholders' perceptions on the effect of internal quality and standards assessments on students 'academic achievement in public secondary schools in Kakamega County, Kenya. This study specifically investigated the i)To determine education stakeholders perceptions on the effect of schools' teaching practices on academic achievement in public secondary schools in Kakamega County, Kenya, ii) To determine the education stakeholders perceptions on the effect of examination practices on academic achievement in public secondary schools in Kakamega County, Kenya, iii)To examine the education stakeholders perceptions on the effect of schools' quality control practices on academic achievement vi) To analyze the relationship between the KCPE and KCSE perfomance of the students in public secondary schools Kakamega County, Kenya v) To assess the education stakeholders perceptions on the effect of government education policies on the academic achievements of public secondary schools in kakamega county Kenya. The study was guided by School-Based Management Theory. A descriptive research design was used. The target population was 415 principals, 415 Deputy Principals, 415 directors of studies, and 33296 form four candidates of 2022. Stratified and purposive sampling technique was used. The sample comprised of; One hundred principals, 100 deputy principals, 100 directors of studies, and 400 students were chosen as the sample. The research instruments were; 3 Questionnaires, an interview schedule, and document analysis schedule. Descriptive analysis was done using frequencies and percentages while inferential analysis was performed using Chi-square Analysis and Pearson product moment. The Chi-square analysis indicated a significant difference between schools' teaching practices and academic achievement at a p value $p < 0.05$.The chi-square analysis showed that there was a significant difference in the perceptions of the education stakeholders 'effect of examination practices, with a p value of $p<0.05$. The chi-square analysis revealed no significant difference in stakeholder's perceptions on the effect of schools' quality control practices and academic performance in public secondary schools in Kakamega County, Kenya at a p value $p > 0.05$. The correlation analysis results revealed a positive and a strong significant relationship between KCPE students' marks and KCSE performance in secondary schools in Kakamega County, Kenya, with a p value $p<0.05$.Lastly there was no significant difference in the education stakeholders 'perceptions on the effect of government policies at a $p>0.05$. In conclusion the stakeholders perceived that internal quality and standards assessments in secondary schools in kakamega county Kenya made a difference in academic achievement of learners. The study recommended that a personnel in charge of quality and standards assessment be posted in schools to do the monitoring, reporting and follow ups of recommendations on quality and in public secondary schools in Kakamega County.

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LIST OF ABBREVIATIONS AND ACRONYMS

ABA	Audited Books of Accounts
AP	Admission Policy
AS	Admission Scores
CAR	Classroom Assessment Research
CBM	Conveyor Belt Marking
CPD	Checking Professional Documents
COP	Classroom Observation Protocol
CT	Competent Teachers
DI	Digital instruction
DQASs	Directorate of Quality Assurance and Standards
EFA	Education for All
EMS	Examination Moderation System
ES	Exam Supervision
ESL	English as Second Language
ESP	Education Strategic Plan
FSE	Free Secondary Education
GD	Group Discussion
GDP	Gross Domestic Product
GOK	Government of Kenya
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
I	Incentives
ICT	Information and Communication Technology

IEM	Internal Examination Measures
KCSE	Kenya Certificate of Secondary Education
ME	Marking of Exams
MIE	Monthly Income and Expenditure
MT	Marked Tests
LR	Learning Resources
NACOSTI	National Commission for Science, Technology and Innovations
ODL	Open Distance Learning
PI	Procurement Involvement
PL	Practical Lesson
PM	Prompt Marking
PMO	Planning Management Organization
PS	Primary and Secondary
PR	Positive Reinforcement
PT	Printed Tests
PTA	Parents Teachers Association
QASOs	Quality and Standards Officers'
QA	Question and Answer
QASs	Quality Assurance and Standards
QCRs	Quality Compliance Requirements
QP	Qualified Personnel
RAA	Resources and academics
RT	Reflective Teaching
RP	Reward and Punishment

SBM	School Based Management
SE	Safe Environment
TA	Time table Adherence
TM	Team marking
TP	Tendering Process
VTM	Varied Teaching Methods

CHAPTER ONE

INTRODUCTION

This chapter introduced the study by looking at the background of the study, the problem statement, research objectives, research hypothesis, and significance of the research study, scope of the study, limitations justification of the study, theoretical framework, conceptual framework, and operational definitions of terms.

1.1 Background of the Study

Different educationists define internal quality assurance (IQA) in education differently. For example, O'Bryne et al (2015), define IQA in education as the efforts harnessed with the vision to promote the internal environment and processes to meet the effectiveness of teaching and learning for targeted educational goals. Generally internal quality and standards assessments are critical in the overall quality assurance and improvement of an institution.

Besides the student's cognitive development, students' social development also counts. Students are expected to relate well in society, while schools are supposed to help the students to nurture their talents and to bring the best out of themselves. What the students achieve after undergoing the education process is revealed clearly by the quality of education that they get from these institutions (Gibbs, 2010).

Scheerens et al (2011), found out that a student's achievements in education was a very important part of quality because it is the product of the education process. Quality assurance encompasses the methodical evaluation of educational programs seen in the student's academic results, transition from school to work and the

processes that maintain and improve their quality, equity, and efficiency (Obiekwe et al, 2019).

The common objective of quality assurance mechanisms is to improve teaching and learning with the view to support the best outcomes for learners even as the tools, processes, and actors vary across national contexts. The mechanisms used in quality assurance approaches can be both external and internal to schools. According to DeLuca and Bellara (2013), external mechanisms comprise of either national or regional school evaluations and large-scale student assessments.While the internal mechanisms can comprise of the following forms;school self-evaluation, staff appraisal, and the classroom-based student assessments.

Studies that were conducted about a drop in education standards in Pakistan attributed the decline in education standards to: the outdated teaching methods, defective administration, ineffective evaluation systems, inflexible curricula, and the flawed inspection systems (Lodhiand 2011).

In several other emerging countries, education has generally been viewed as the keystone supporting economic growth and development (Oredein and Oloyede, 2017). For instance, Nigeria's administration was confident that to live in the competitive world economy, quality education was the vital variable. Anchored on this belief, informative reforms were directed toward improving the quality of education. These models stressed the importance of continuous improvement for both the teacher and the student in equal measure.

The Kenyan Basic Education Act of 2013, requires that schools in Kenya follow the Ministry of Education (MOE) guidelines regarding the expected quality and standards procedures. However, the implementation of these quality and standard guidelines depends on the individual school's internal quality and standards structures.

The sessional paper No.1 of 2019 of the Government of Kenya (GOK) details the initiatives taken by the government to enhance secondary school education in Kenya (GOK,2019).In an endeavour to ensure that there is an equitable allocation of teachers, and by extension their usability, the Kenya Education Staff Institute (KESI) has put in place capacity building programs to strengthen the capacities of the education administrators (GOK, 2019)

The government of Kenya also funds subject-specific in-service training for educators in an effort to raise the standards of teaching across the board and to simplify the curriculum for both students and teachers. Despite the state's best efforts, there are still obstacles in the secondary school sector that threaten to undermine the quality of education offered in the country. It was observed that the managerial study program for head teachers in Kenya placed less emphasis on: departmental supervision, self-evaluation, and class visits, but more emphasis on reviewing teachers' professional records. In addition there was an obvious monetary barrier to overcome, which had unfavourable effects on classroom settings, student resources, and the educator practices (Mobegi et al 2010).

Wango (2010), suggested that the school principals and their teams should engage in ongoing self-evaluations, occasionally supplemented by external assessment so that the learner outcomes in their schools can improve.And that, a school can maintain its high standards and address any potential issues through self-evaluation after an external standards assessment. These internal review procedures include; meeting regularly as a department, examining student notes, and implementing a rigorous testing and examination policy (Ogamba, 2011).

According to Chepkuto (2012), schools with strong internal management procedures tend to offer high-quality instruction on a predictable routine to students. These cumulatively yield positive results in the students' character development over time. And that the institutions that manifest the foregoing tend to improve their own internal quality and standards practices.

Internal quality and standards assessments do not require expensive resources or personnel.This is because, it is done by the school's senior management team comprising of the principal, the deputy principal, and senior teachers. However, in some other schools, they may include the heads of departments. The internal quality assessments and standards in schools are meant to point out the areas of weakness in the learning process and then improve on the outcomes in the national examination. However, the irony is that, although the internal quality and standards assessment is not expensive, most schools have not embraced it in Kakamega County. Secondly, the few schools that observe it are very casual about it. Therefore in view of the foregoing, it was imperative to carry out a study to examine the perceptions of the various stakeholders about the role of internal

quality and standards assessments on the students' achievement in public secondary schools in the county.

1.2 Problem Statement

Though internal quality and standards assessments has the potential to improve the academic achievement of public secondary schools, there are no clearly laid down procedures on how to manage internal quality standards in public secondary schools in Kakamega county. The structures and procedures that are followed during the external quality and standards assessments are absent in the internal quality and standards assessments in the schools. That internal quality and standards assessments are not taken seriously in public secondary schools in Kakamega County makes one to wonder whether the concerned persons do understand the significance of internal quality and standards assessments in a students' academic achievement or not. Thus this far, the question that remained unanswered was; what are the perceptions of the education stakeholders on the effect of internal quality and standards assessments on the academic achievement of public secondary schools in Kakamega County? It was necessary to answer the foregoing question in order to ensure that the stakeholders in the education sector appreciate and embrace internal quality and standards assessments in the County. As a matter of fact institutionalizing a robust internal quality and standards assessment culture would immensely complement the cash strapped external quality and standards assessments; an exercise that is carried out by the ministry of education.

1.3 Research Objectives

The following objectives guided the study;

1.3.1 Purpose

To analyze the perceptions of the education stakeholders on the effect of internal quality and standards assessments on students' academic achievements in public secondary schools in Kakamega County, Kenya

1.3.2 Specific objectives

The study was guided by the following objectives:

i) To determine the education stakeholders' perceptions on the effect of the teaching practices on the academic achievement of public secondary schools in Kakamega County, Kenya.

ii) To determine the education stakeholders' perceptions on the effect of examination practices on the academic achievement of public secondary schools in Kakamega County, Kenya.

iii) To examine the principals'and deputy principals' perceptions on the effect of quality control practices on the academic achievement of public secondary in schools Kakamega County, Kenya.

iv) To analyse the relationship between the KCPE and KCSE results of the students in public secondary schools in Kakamega County, Kenya.

v) To assess the principals' perceptions on the effect of the education school policies on academic achievement of public secondary schools in Kakamega County, Kenya.

1.4 Research Hypothesis

Ho_1: There is no statistically significant difference in the education stakeholders perceptions on the effect of the teaching practices on the academic achievement of public secondary schools in Kakamega County, Kenya

Ho_2: There is no statistically significant difference in the education stakeholders perceptions on the School's examination practices on the academic achievement of public secondary schools in Kakamega County, Kenya

Ho_3: There is no statistically significant difference in the education stakeholders' perceptions on the effect of quality control practices on academic achievement of public secondary schools in Kakamega County, Kenya

Ho_4 :There is no statistically significant relationship between the KCPE and KCSE results of the students in public secondary schools in Kakamega County, Kenya

Ho_5: There is no statistically significant difference in the education stakeholders' perceptions on the effect of education policies on academic achievement of public secondary schools in Kakamega County, Kenya

1.5 Significance of the Research Study

This study has suggested to the government policy measures that can be embraced to improve internal quality and standards assessments in schools.The perceptions of the stakeholders will enable the policy makers to formulate accurate policies that will promote the academic performance of public secondary schools across the country.Adoption of the recommendations of this study, will enable the managers of public secondary schools to institutionalize internal quality and standards assessments.

1.6 Scope of the Study

For the purpose of manageability,the study was delimited in the following ways:

i) The study was confined to public secondary schools in Kakamega county.This was due to the fact that, the government invests heavily in public secondary

schools and on the whole the public secondary schools in kakamega county perfom dismally academically,when compared with the private secondary schools.

ii) The education stakeholders comprised of the form four students of the 2022 cohort, director of studies(DOS), deputy principals, and principals.Data was collected from; principals ,deputy principal, director of studies and the students.This was because a principal of a secondary school is the agent of the teachers' employer and disseminates the policies on quality teaching and learning to other stakeholders in school.The deputy principal implements the schools' policies on quality and standards assessment ,through the role of curriculum implementation and supervison.The DOS directs all the academic activities in a school such as keeping the records of all the exams done in school, while the students are the ones who sit the exams and are the beneficiaries of the benefits of quality and standards assessments.

iii) Data was collected from the public secondary schools in Kakamega County for the period 2019 to 2022. The internal quality and standards assessment constituted the asseements on the schools' teaching practices,the schools examination prctices,control practices and how the schools articulated and implemented the government policies.The reason being that a student joining form one had a basic requiremnt of sitting the KCPE examination.The students will school in a secondary school where different teaching practices, examination practices using different control practice wth the basis of the government policies will be applied in four yerars where the students graduate after sitting the KCSE examination.

iv) The KCSE scoreor meangrade constituted the academic achievement.Because it is the exam done after fourth form.

1.7 Limitations

The study was conducted under certain conditions that in one way or another limited the generazability of its findings.

i) The sample size of 400 form four students of the year 2022 cohort was rather small, as compared to the cohort's population of 33,200.However,the representativeness of the sample was enhanced by the stratified random sampling that was used to ensure that schools of all cadres.

ii) Some of the information that was gathered by the questionnaires and the interviews was subjective. However,by using multiple tools in data collection mitigated this issue.

1.8 Justification of the Study

The education stakeholders' perceptions on the role of internal quality and standards assessments on academic achievement is critical with regard to embracing the practice in public secondary schools. Also the government of Kenya through the ministry of education invests a lot of resources in education; so high academic achievement is expected, but that is not the case. The academic achievement is dismal. Through the programme of free day secondary education, each secondary student is entitled to Kshs. 22,240. This translates to nearly Kshs .2.6 billion per year in Kakamega County considering the current student enrolment of 116,732 in public secondary schools. Apart from the capitation that goes to operational and tuition cost of education, the ministry of education also disburses funds annually that go into infrastructure development, laboratory equipment, sanitary care, information communication

technology and teaching and learning resources. The government further invests in education by employing teachers and education officers besides maintenance of offices. Apart from government investment, there is the private cost that goes into education. Parents provide uniform, pay for boarding expenses; provide personal effects to the students. Students also forego many other economic opportunities while schooling.

1.9 Theoretical Framework

School-based management (SBM) theory was the basis of this study. This theory is about the systematic decentralization of authority and responsibility on decisions and significant matters related to school operations within a centrally determined framework of goals, policies, curriculum, standards, and accountability. The theory was started at the end of the 1980s by Yin Cheong Cheng. Malen and Kranz (1990), as cited by Babara (2015), ascertained that school-based management could be perceived conceptually as a form of decentralization or formal alteration of governance structure. This theory identified the individual school as the key unit of improvement, and the reorganization of the decision-making authority as the primary means through which the improvement could be motivated as well as continued.

The current study set out to determine the education stakeholders' perceptions on the effect of internal quality and standards assessment on the academic achievement of public secondary schools in kakamega County.The internal quality and standards assessments carried out in school involves; parents, students, teachers, and principals who make decisions and implement them as guided by the

school policies set out by the board of management.The SBM was used in this study because the independence, responsibility, and accountability of individual schools pertaining to the academic achievement of its learners is important.Unfortunately in Kenyan secondary schools there are no specific personnel in charge of monitoring quality and required standards.

Moradia et al (2012), conducted a study guided by the school-based management theory whose philosophies are; school-based, student-centered, and quality focused. Cheng (1991), as cited by Kamla (2012), developed the concept of school based managemnt to support the reforms which mapped the characteristics of school functions to facilitate the management of the reforms in local or international contexts. In his study, Cheng(1991), as cited by Mapunda(2011), described that school-based management utilized the theories of equifinality and decentralization. It assumed that a school is a self-managing system and regarded the initiative of human factor as well as the improvement of an internal process as important. In this concept, Cheng (1991), maintained that school management strategies should encourage participation and give full play to the members initiative.In a nutshell,, the SBM theory transfers the authority to manage activities to the school management.Some of the activities of relevance to this study are the maintainance of and monitoring of student perfomance through the implementatin of the correct curricullum (Mercy and Ujiro, 2012).

1.10 Conceptual Framework

The conceptual framework shows the relationship between the independent and dependent variables figuratively.

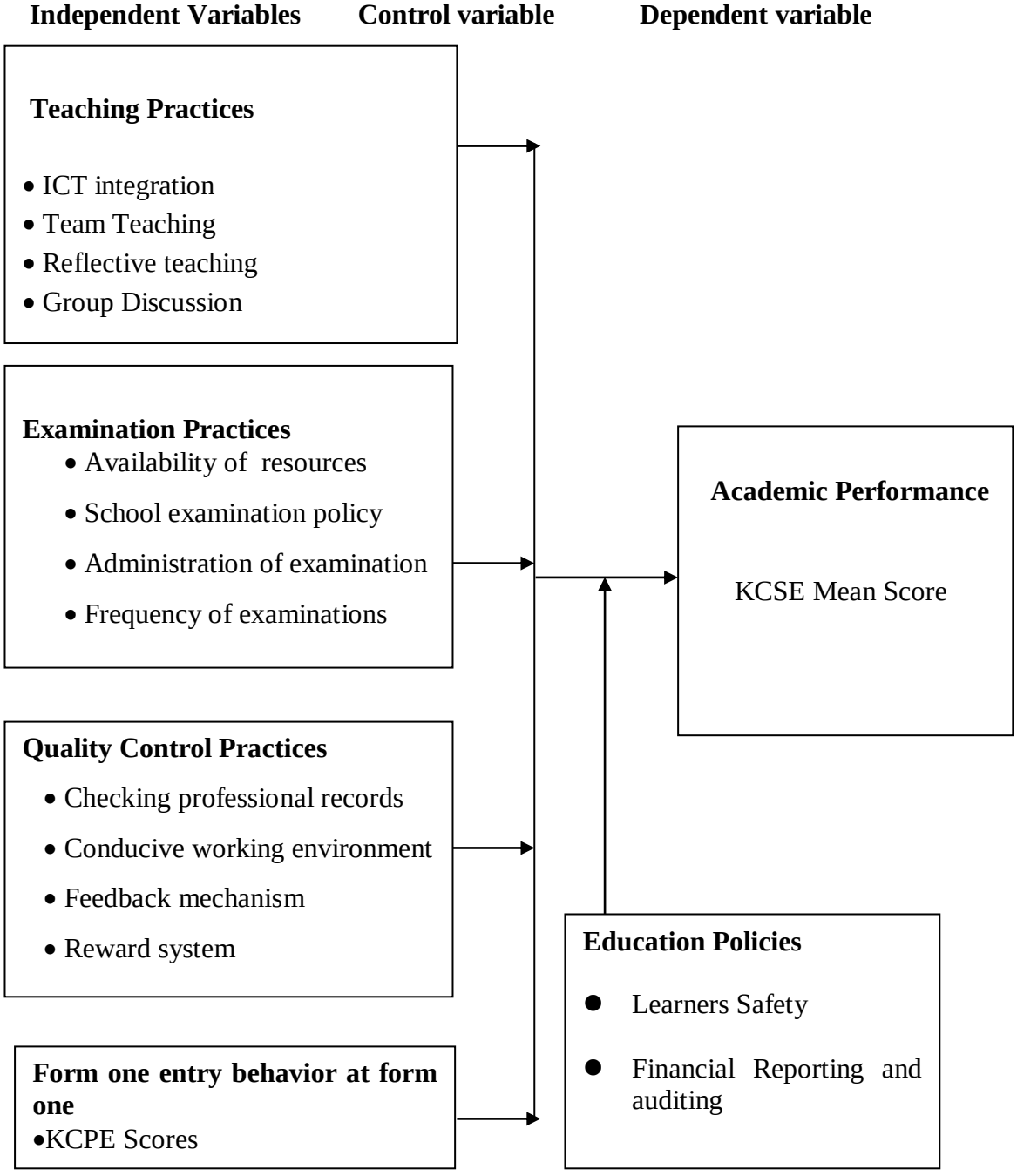

Figure 1.1: Conceptual framework
Source: the Author 2023

Fig1.1: Conceptualization of the education stakeholders' perceptions on the effect of internal quality and standards assessments on academic achievement of public secondary schools in Kakamega County.

The foregoing conceptual framework is anchored on the school based management theory (SBM).This theory is based on the decentralization of functions and authority from the ministry of education to schools. In this study, the stakeholders were: the form four students, director of studies, deputy principals and the principals. The aforementioned conceptual framework articulates the conceptualized interaction between the independent variable and the dependent variable. The independent variables comprised of the following components; school's teaching practices, school's examination practices, school's quality control practices and form one entry marks. The dependent variable was academic achievement measured by the KCSE score. The government education policies formed the control variable. In this study, the opinions or perceptions of the various education stakeholders with regard to the conceptualized interactions between the variables were sought. The education stakeholders' perceptions was measured on a five point likert scale as amplified in chapter three. This made it possible to know how the different segments of the stakeholders perceived the effect of internal quality and standards assessment in the academic achievement of public secondary schools in Kakamega County. Knowing the perceptions of the various education stakeholders was critical with regard to promoting their support and participation in internal quality and standards assessment as a tool for managing academic matters in public secondary schools.

1.11 Operational Definition of Terms

The following terms, as used in this study were to be understood as follows:

Academic Performance: Refers to the test scores and grades achieved by learners in internal primary or secondary school evaluations and the two national examinations in primary school and secondary school levels.

Academic Achievement: Refers to the academic or scholastic scores attained by the primary or the secondary school learners in the internal or external examinations.

Education Stakeholders: Refer to the persons who have an interest, can be affected or can influence the decisions and activities carried out in an educational institution such as a public secondary school in Kenya. These persons comprised of the principals, deputy principals director of studies and the form four students.

Effect: Refers to the change in the academic achievement of public secondary schools in Kakamega county as a result of implementing the internal quality and standards measures.

Form one entry behaviour: Refers to the marks or grade attained by the pupil in the terminal national examination after completing the eight years of study at the primary school education level.

Internal Quality and standards:	Refers to the institutional set actions done purposively with the intent to improve academic standards. They entail efforts undertaken by the school management to ensure that quality and standards are enhanced.
Perceptions :	Refer to the way the respective stakeholders regard the teaching practices, the examination practices and any other school activity on the academic achievement of the students.
Quality Assurance Systems:	Refer to the systematic review of educational provision and processes, aiming at maintaining and improving its quality, equity and efficiency.
Quality control practices:	Refer to the actions taken by the administration of public secondary schools to ensure that high standards are observed in the management of activities and services
Teaching practices:	Refer to the different ways the public secondary school in Kakamega county conducts the instruction and learning procedures on their students.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature related to quality control and standards assessment in education and academic achievement. The sections in this chapter are: schools' teaching practices and academic performance, examination practices and academic performance, schools' quality and control practices and academic performance, relationship between KCPE and KCSE students 'scores, government education policies and academic performance, and a summary of the research gap.

2.2 Teaching Practices and Academic Achievement

The amount of time that teachers are scheduled to spend and the amount of time that they actually spent, varies from school to school based on the methods they employ in the process of teaching. Soodmand et al (2018), conducted a study in Iran to investigate the effect of a teacher's teaching experience, and the level of education on understanding reflective teaching in Iranian English, as well as the teachers' perceptions of the barriers to students' reflective thinking. The findings of this study indicated that; while Iranian teachers self-reported a medium level of reflective teaching; knowledge deficit, teaching situation inhibitors, and affective-emotional inhibitors all acted as barriers to teachers' reflective practice. It was also established that, the affective emotional and cognitive situation learning inhibitors, acted as barriers to the students' reflective thinking. The main difference of this study and the current one was that it was being studied in Iran and on the teaching practices as an indicator of quality. Further to this, the study didn't examine internal quality and standards assessment.

The study conducted by McCabe and O'Connor (2014), at a university in Trinidad revealed that a student-centered technique to learning emboldens students to have more obligations for their learning and that, these procedures are keenly on

professional sureness to 'let go' the traditional teaching errands. The research study amalgamated semi-structured interviews with five lecturers, who approved of the student-centered learning in their instruction. In addition, focus group meetings with 36 students who were involved in a student-centered segment, and two classroom observations were also employed. The study acknowledged the existence of a specific mutual understanding in the student-centered approach, although the emphasis contrasted slightly between students and the lecturers, underlining some consequences for the ongoing practice. The difference with this study is that it was conducted at the University level while the present study was done in public secondary schools in Kenya, with the student centered teaching practices as an indicator of quality.

Tsang (2011), conducted a study at the University of Queensland in Australia to determine the perceptions of three cohorts of third year undergraduate students on class reflective group discussions. The findings of the study indicated that the incorporation of reflective group discussions into the curriculum was widely praised by the students, though not as a replacement for, but as an equivalent to reflective writing. Different students cited different benefits attributed to engaging in reflective group discussions and writing. On the whole, the students were more drawn to the group conversations that encouraged collaboration, provided reassurance, and included multiple points of view. The difference between the foregoing study with the present study is that, the current study investigated the perceptions of the education stakeholders' on the effect of internal quality and standards assessment on academic achievement , and that reflective teaching was an indicator in one of the objectives.

In the subsequent studies, it was established that when ICT is integrated into the teaching and learning process, the students were exposed to a myriad of opportunities associated with technology, thus making it fun to instruct similar concepts in different formats. In a quantitative study that was done using the 4th-grade participants from an elementary school in central Illinois, Harris et al (2016), investigated that the one on one influences of technology on the academic achievement of students, and its outcome on a student's motivation to learn. The outcomes of this study indicated that one-on-one technology was a factor in student motivation and academic achievement. The Scholars Strategy Network (2014), looked at how using digital content and resources affected student outcomes. The dissemination, retrieval, and maintenance of digital educational programs formed the basis of the findings. The state's investment in educational technology, for example, could have a direct impact on the caliber of television shows broadcast to children. The Scholars Strategy Network (2014), conducted in-depth evaluations to prove that, even when all the necessary technology was in place and easily accessible, digital content still improved classroom outcomes.

Momanyi (2019), investigated how the different teaching management practices had an effect on student performance in Nyamira County's secondary schools, by specifically focusing on those in Manga Sub County. The specific goal of the research was to evaluate the effectiveness of different classroom management techniques, instruction techniques, and evaluation techniques on student achievement. Both descriptive and explanatory research methods were used in this investigation. The results of the study showed a positive and direct correlation

between the academic performance and teacher-centered management, student-centered management, and assessment methodologies. According to Momanyi, the academic performance was found to be significantly associated to three management approaches, namely: those that put students first, those that put teachers first, and those that focus on assessment. The joint teaching management techniques were found to be able to predict up to 53.5 % of the change in performance, consequently the study recommended that schools should incorporate these techniques in teaching.

Through collaborations with international organizations and agencies, the government of Kenya gave precedence to using information and communication technology (ICT) in teaching and learning at both the primary and higher education levels. The national ICT policy of 2006, was revised resulting in the development of the national ICT policy of 2019.The revised policy sought to establish a knowledge based society and to ensure the availability, reliability, and affordability of ICT services (Mariga et al, 2017).

Mutua (2014), discovered that the school culture was more associated to students' accomplishment than any other variable in his research study on the effect of school culture on students' performance in the KCSE examination in Matungulu district, Machakos county, Kenya (Watson, 2001). The specific objective of the research was to determine how frequent announcements through school assemblies and motivation through prize awards affected student performance in the KCSE examination. A descriptive research design was applied. The target population comprised of 37 principals. The findings of this study showed that there was a

correlation of 0.63 units between the mission, vision, values and students' performance. A positive relationship between communications through school assemblies and the students' KCSE performance, as indicated by a coefficient of 0.69 was revealed from the findings. This implied that communication through school assemblies significantly influenced the performance in KCSE. A positive correlation of 0.72 units was realized between motivation through prize giving and students' performance in KCSE.

The foregoing findings on students' performance in the KCSE examination in Matungulu revealed that, elements of the school culture affect the results. Consequently, it was recommended that the administration of schools should have more assemblies with teachers and students to share information and discuss on how to improve their academic performance. And that the school administration should challenge students and teachers to embrace motivational methods for instruction in order to boost performance. In recent studies Burbules and Hansen (2018) alluded that teaching provided stimulus, encouragement to students, and direct guidance to the learning the process. And that, it is meant to offer a learning system that allows continuity. Therefore, in some cases learners were stimulated to learn using other teaching methods that were not digital.

Mutia (2018), concluded that team teaching accommodated a group of instructors working resolutely, frequently, and cooperatively to aid a group of learners of any age to learn. The primary role of teachers entails setting goals for a course, designing the syllabi to be used, preparing personal lesson plans, educating students, and evaluating the results. Teachers, through arguments share insights

and perhaps even challenge students to decide which approach is better for learning. Due to the increasing number of science classes in high schools, team teaching by specialized teachers has been of essence. Apart from the three main branches of science: Biology, Chemistry and Physics, many high schools offer geosystems classes. The purpose of these teams was to achieve the same goal with students within a specified period, be it within a single discipline or within a school. The experienced teachers were paired with new teachers. According to the findings improvements increased, and the class size, location, and time alterations were acceptable.

Imbega (2017), conducted a study on the impact of quality assurance practices on students' academic performance in public secondary schools in Trans Nzoia west sub-County. Precisely the study sought to evaluate the effects of external quality assurance practices on student's achievement in schools. In addition it sought to assess how internal quality assurance practices affected student's academic performance in schools, as well as to determine the relationship between standards and quality assurance practices, and realization of quality grades in KCSE examination. Lastly to identify the intrusion measures that enrich external and internal QAS practices in schools. The theoretical basis was derived from the capital theory of school effectiveness and the human capital theory. The study embraced a descriptive survey design that guaranteed qualitative and quantitative data collection. A total of 58 public secondary institutions in the Trans-Nzoia West Sub-County were included in the analysis.

The research by Imbega found out that, while some quality assurance techniques and procedures were lacking on the outside, they were sufficient on the inside.

Most people agreed that external quality assurance techniques had an effect on student achievement in school. And in cases where internal quality assurance procedures were inconsistent with the external standards the students' performance in the classroom would not be affected .The major difference of the study by Imbega is that he looked at the impact of quality assurance on academic performance. While this study focused on education stakeholders' perceptions on the effect of internal quality and assessment on academic achievement. It clearly emerge that if internal quality and standards assessments was done the way the external one was done, then the learners' academic achievement would immensely improve.

Khaombi (2016), found out that, just like other subjects, Chemistry required a teacher to prepare well in advance in order to present the content in a manner that could inspire a student to understand the content well. And that, various teaching methodologies could be used to teach Chemistry, namely: the practical approach, lecture method, demonstration, and fieldwork. It also emerged that a practical approach was more appropriate for teaching a science subject compared to the other teaching methods. Apparently, practicals cultivated the students' skills, such as observing, performing regular laboratory assignments, and the problem-solving abilities. The present study that was focused on internal quality and standards assessment and academic achievement unlike the study carried out by Khaombi, whose main concern was the students' performance in Chemistry.

Mbugua et al (2012), conducted a study in Baringo County on teaching methods that improved academic achievement. The findings of their study indicated that

64.2% of the teachers used discussions, 5.6% used lectures, 6.5% used discovery, 3.4% used projects, and 27% used the question and answer method. According to Costello (1991), the lecture method turned the learners into passive members of the learning process, and therefore, was ineffective. Nevertheless, the lecture method conveniently covered a massive amount of content (SMASSE, 2007), while the discovery methods, discussions, and projects fashioned an enabling environment for the learners and warranted that personal differences were sorted .Mbugua's study was different from the present study because it studied the teaching methods and performance. The current study is on education stakeholders' perceptions on the effect of internal quality and standards assessment on academic achievement.

In Kenya, most teachers did not use teacher centered methods and did not prepare adequately for lessons (SMASSE, 2007). Teachers had substantial workload per week and taught big classes. The workload stalled suitable preparations and assessment for the acquired concepts. According to Costello (1991), teachers needed to create ample learning resources that supported learning so as to avoid teacher-centered teaching methods. The heavy workloads of per week 27 lessons per week TSC (2012), and the large classes delayed teachers from making meaningful engagements with students during the learning process. The absence of these engagements negated the learners' understanding of the topics they studied.

In conclusion, all the foregoing studies were different from the current one which considered the education stakeholders' perceptions on internal quality and standards assessments in public secondary schools in Kakamega County, Kenya. Hence the need to conduct this the study.

2.3 Examination Practices and Academic Performance

Worldwide, students are subjected to a battery of tests and examinations which are designed to assess the effectiveness of the curriculum and to gauge their level of mastery. National exams are extremely important for the student's future (Nicholas and Berliner 2007). Examination preparation has become the sole focus of education for many kids and their families. This is because of the worth of a curriculum was to be gauged by looking at how students performed on tests, evaluation had been the source of much discussion and contention over the years (Rortberg, 2004).

In African countries public examinations tended to be narrow in the information and abilities they tested, despite the fact that most curriculum revisions placed emphasis on relevant learning outcomes (competencies) like critical thinking. Examinations rarely tested the students' ability to apply, analyze, or synthesize information, and they rarely evaluated their preparedness for life beyond the classroom. Though exit exams are helpful, they are not enough on their own Barrett and Bainton (2016), to determine whether or not a student has mastered the material.

Globally, the performance in national examinations was a profound issue because it defined the direction and future of an individual (UNESCO, 2002). The standards of the content of the national curricula are vital in determining a country's national examinations. In 2000, the Ministry of Education, Science, and Technology in the Republic of Kenya noted that performance in examinations was a measure of educational effectiveness. However, in many secondary schools it

was established that many exams helped students grasp content and pave the probability of good results (GOK, 2019).

Worldwide, discussions on how often students should be tested continued. Several reasons had been proposed by researchers as to why frequent testing could improved classroom instruction. Khalaf et al (1992), found that students who were subjected to frequent tests worked harder overall in the course.

Moloko et al (2014), investigated causes that led to the drop in students' academic Performance in lower secondary schools in Botswana. The findings of this study indicated that numerous factors were attributed to the students' low academic performance ranging from low staff morale to student's unpreparedness for the examinations. According to this study, elevated teacher morale, accessibility of resources, and parental engrossment were acute for realizing high-class education in secondary schools in Botswana. Additionally, the conclusions of the study had effects on research and practice.

In addition, Kasowe (2014), sought to find out the benefits and drawbacks of the conventional centralized marking, and investigated the opportunities and threats associated with adopting team marking at the Zimbabwe Open University. The undergraduate and graduate students in the faculties of arts and education, commerce and law, applied social science, science and technology were interviewed one-on-one. There was a deliberate selection of lecturers who had participated in team marking to fill out the questionnaires. It was found that students who were understudied were more enthusiastic about employing team marking than lecturers who had warned of too many difficulties. It also emerged

that learners' achievement in a particular school depended on the school's examination culture. Consequently the school beliefs, for that reason, had a slightly more overall effect on students' attainment than the other variables (Watson, 2001). Moreover, Tandberg and Hillman (2014), reported that the state should offer and control critical education services to its population. The government, without knowing, frequently promoted examination dishonesty by being incapable to finance education well. The decreasing backing of the education segments was a prime pioneer in examination malpractice.

Omirin and Ale (2008), also delved into the analytical validity of Mathematics and English in the mock examination marks of senior secondary school students' performance in West African School Certificate (WASCE) in the Ekiti-state, Nigeria. A simple random sampling method was used to choose 360 students from 12 public secondary schools in 6 local government regions of Ekiti State, Nigeria. The mock results were obtained through document analysis from various carefully chosen schools. The mock results in English and Mathematics assisted significantly in predicting the triumph in academic performance of students in WASCE. However, English was a better predictor of success than mathematics.

According to Chuachua and Mafumiko (2013), the organization and administration of the marking process were cited as difficulties in team marking. It was noted that a significant difficulty in belt marking was attributed to: the widely variable levels of dedication among markers, discipline, speed of marking, and knowledge of the information relevant to particular questions. Those in charge of belt marking had to mark their own writings while also moderating those of their colleagues and

handling a variety of other administrative duties. Identifying subject specialists throughout the University's departments, recruiting staff, and in-service training for staff were all part of the solutions. In order to ensure that the marking sessions went off without a hitch, it was necessary for department chairs and subject coordinators from different Faculties to communicate with one another. Training, rationalizing employment, and hiring permanent staff would all need to be implemented across the board in open and distance learning schools if belt marking were to be implemented (Kasowe, 2014).

The core idea behind providing reliable national exams was to make it easier, faster, and more accurate to make conclusions about individuals. This had huge consequences for their future. Examination results were used to determine job placement, participation in training programs, and college admissions. Educators' attention to the needs of taxpayers was a focus of national examinations, which were state tools prepared in accordance with Acts of Parliament. Thus, levels of performance were stronger markers of the success or failure of an education system. Therefore, it was crucial that test results accurately reflected the effort put forward by both students and instructors. Similarly, it was crucial that the test method used to make selection and placement decisions was foolproof. The examination takers' abilities were thus correctly reflected in the outcomes (Omari, 2012).

The examination outcomes had been emphasized by all parties involved in educational matters, including the teachers. The ministry of education in Kenya, has continued to use test scores as a proxy for a school's effectiveness. Kenya National Examinations Council (KNEC) was founded by the Kenyan government

to aid in the management of examinations. In accordance with subsection (10) of the KNEC Act (GOK, 2012), Kenya National Examination Council (KNEC) was charged with the mandate of evaluating learners summatively and award certificates. Therefore, it was the responsibility of the KNEC to guarantee high-quality testing at the elementary, secondary, and vocational levels in Kenya. Hill (2010), found that despite this, governments still employed tests as gatekeepers. This implied that tests were required for admission to more advanced educational institutions. The learning outcomes were steered by test scores. The findings also served as an effective quality assurance tool.

Otieno (2017), indicated that the number and quality of teaching and learning tools determined whether or not the national education system worked. Both students and instructors relied heavily on reference materials to aid their education. The instructional and pedagogical resources included lesson plans, textbooks, set books, models, reference books, charts, field excursions, computers, calculators, and the internet. The learning aids and teaching resources aided learners and teachers to work independently and even do references when needed. The records ensured good planning and preparation of the execution of the curriculum hence better teacher Performance in addition to students' achievement (Ngure, 2012).

In his scholarly study, Karimi (2011), observed that physical resources like libraries and laboratories were inadequate in public day secondary schools in Mathioya district, Kenya. And that this affected the performance of students in KCPE. The data that was collected revealed that the library facilities were absent in many schools. The unavailability of libraries was predominant, even though the

development of school libraries was on a superior foothold in Kenya than in other African countries (Makuwi, 1990).

Ochieng (2012), used a sample size of sixty students drawn from four different public secondary schools in Kenya to investigate the validity of internal examinations in predicting students' academic performance. An excellent research strategy was applied in this study. The students' test scores from the first year of study in 2007 through to the fourth year of study in 2010 were used. The study found out a significant correlation between the outcomes of internal summative exams and the outcomes of the public summative exams. The students' grades in mathematics were a strong indicator of their future success. Results on the first year's internal summative exam was a better indicator of how students will do on the final year's external exam. Performance in the final external assessment was most strongly predicted by the performance in the fourth year, followed by Performance in the third year and Performance in the second year.

Assessment and evaluation methods allowed teachers to gauge the progress and Performance of students. The assessment done in Kenya was purely based on the traditional written tests of factual knowledge that promoted memorization rather than thinking skills. Academic scores were used for placement in the next level of education. The literature reviewed under this objective showed preliminary studies on examination practices in secondary schools. The above mentioned studies were related to examinations, mode of marking and the frequency of administering the examinations but not on Education stakeholders' perceptions on internal quality and standards assessments. This was the gap the present study addressed.

2.4 Quality Control Practices and Academic Achievement

The school's quality control practice was done by the school's quality and standards department comprising of the heads of departments, deputy principal, and principal. Some schools have a teacher specifically appointed by the principal to serve as a quality and standards officer. The quality and standards officer or department provides a supervisory role in activities contributing to high-quality learning (UNICEF, 2000).

Akhimienmhonan (2015) conducted a study in Nigeria's Edo central district to determine if there was a correlation between high school students' study habits and their grades. Based on his findings, he concluded that the pupils' academic achievement was average and that the average number of hours spent on academic activities each week in high schools were 5 hours. The average time spent studying each week at high school was 6 hours and 30 minutes, with the private high schools using fewer study hours than public ones. It was argued that in order to improve the students' academic performance, secondary school principals should make sure teachers are being closely monitored during class time and that educators should be committed to their jobs by making efficient use of the time allotted for scholastic activities.

Abebe (2014), investigated the state of school-based supervision in the public high schools of Kamashi zone in Ethiopia and found out that the various supervisory options used by these schools' supervisors, the methods used in secondary school classroom observation, the extent to which school-based administrators fulfilled their responsibilities, and the challenges presented in the implementation of school-

based supervision were the focus of five essential questions. Descriptive survey approach was used to gather data for this investigation. One supervisory coordinator from the zonal education office and five from the Woreda education office were chosen at random. There were ten public secondary schools in the zone; five were chosen at random to serve as a representative sample. Results showed that supervisors did not have the expertise to carry out the procedures necessary for classroom observation, teachers needed more information and guidance on the activities central to school-based supervision, and supervisory options were not being used that were suitable to each teacher's developmental stage. Lack of relevant training programs, a lack of competent supervisors in school-based supervision activities, a lack of supervision manuals in schools, and a lack of allotted funding for supervisory activities are all factors that impacted on the quality of supervision in schools.

Reche et al (2017), sought to look into what affects students' academic success in public secondary schools in the Matungulu Sub-county of Machakos County. The objective of the study were to: (1) determine the impact of available learning resources on student achievement, (2) assess the effectiveness of current administrative practices in improving student achievement, (3) investigate the impact of teacher-related factors on student achievement, and (4) investigate the impact of students' socioeconomic context on student achievement. A descriptive survey methodology was used in this study. The target population in this study comprised of 32 principals from public secondary school, 2,300 form three pupils, 385 instructors, and the entire Matungulu Sub County. The sample was made up of ten principals, forty teachers, and 230 pupils who were selected by applying

stratified sampling technique. The study revealed that, the effect of administrative practices on academic performance was statistically significant and positively robust (r =.844, P≤ 0.05), and that the learners' socioeconomic background and teacher-related factors had a statistically significant impact on academic performance (P≤0.05). According to the research, principals needed to do a better job by ensuring that teacher's professional documents were regularly checked and the relevant learning materials were being purchased by the school administration for use in the classroom. Reche and the other researchers were finding out the importance of monitoring the output of teachers by looking at the indicator of preparation for delivery of lessons. Proper preparation of professional documents like lesson notes, lesson plans, schemes of work and record of work covered made a teacher deliver learning well and . Their discovery that principals needed to check the availability of these documents meant that the principals were not checking the documents; or the teachers lacked these important documents meaning that quality learning was lacking.

Mavindu (2013), analyzed the students' results in KCSE exam to determine the impact of the principals' instructional management strategies in the Trans-Mara west district. The primary goal of the study was to determine whether or not the principals of secondary schools in the Trans-Mara west district engaged in clinical supervision activities such as frequent classroom visits, teacher observation, post-observation conferences, and the review of teachers' professional records. The study used a descriptive survey for data collection. All public secondary schools that presented candidates for KCSE for the years 2009 and 2012 constituted the target population. Fifteen principals from those schools participated in the research.

The findings of this study revealed that about 86% of principals made classroom visitations, 98% examined teachers' work records, 99% ensured adherence to the school schedule, and 13 % recorded lessons. The Schools with the highest mean score grade in KCSE were found in Kilgoris central division. These results could be credited to the high proportion of instructional supervision practices.

Osiri et al (2019), conducted a study on the KCSE performance and school administration of students attending public secondary institutions in the Kamukunji Sub-County of Nairobi County, Kenya. The work was based on the system theory of organizations developed by Ludwig Von Bertalanffy. The results showed that the duty of instruction supervision at the best schools had an impact on the students' grades. These responsibilities included monthly classroom visits, inspecting student notebooks, examining records of work, schemes of work, lesson plans, and the attendance registers, and conducting the classroom observations of actual teaching and learning taking place. Based on the findings it was concluded that the Teachers Service Commission should prioritize hiring principals who have experience in supervising classroom instruction. This would ensure that their responsibilities are properly planned, organized, and carried out.

Muasya et al (2017), conducted a study in Machakos County that sought to determine the magnitude to which the leadership practices of head teachers contributed to students' academic performance. Some of the selected instructional leadership approaches were: articulating the school's mission, managing the curriculum, creating a positive learning atmosphere, and rewarding good teaching. A survey methodology was used for the research. A stratified sample approach,

was used to select 38 principals, 190 instructors, and 345 students from among the 176 public secondary schools that took part in the study. In this study, questionnaires were filled out by students (reliability = 0.75), teachers (reliability = 0.74), and principals (reliability = 0.78). The Bolman and Deal's (2003), multidimensional theory of leadership was applied, this theory posited that following four leadership stances (frames) were essential: The structural framework, in which the leader advocates for well-defined positions within the company and the importance of role coordination.

In Masaba South Sub-county of Kisii County, Denis and Mudulia (2019), assessed the impact of enough staffing on students' academic performance in the K.C.S.E. examinations. Scientific management theory guided the research. The study used a mixed-methodologies strategy, incorporating elements of both quantitative and qualitative research methods. Both principals and instructors were given questionnaires to fill out. 25% of the principals admitted that there weren't enough teachers to go around; some 12.5 percent abandoned teaching altogether; 50 percent relied on unpaid volunteers; and 37.5 percent held combined classes. Poor student outcomes were linked to the fact that not all teachers were adequately trained. The majority of educators reduced their participation in professional development opportunities, according to the survey. The study found that student performance on the KCSE was negatively impacted by a lack of sufficient personnel, insufficient in-service training via courses and seminars, and poor levels of professional growth. Contrary to the findings the teachers employer in Kenya that deploys teachers to teach in secondary schools in Kakamega county do deploy

teachers who are trained and are registered (TSC 2012).The dismal results then could be due to other factors that the present study is looking at.

In Marakwet west district, Korir (2010), sought to find out how to improve KCSE performance in public secondary schools with effective cost-saving measures. All in all, the research scrutinized the issuance of resources, and the implication the resource allocation had towards improving KCSE performance and uncovering if the phenomenon of KCSE performance was precisely related to this puzzle. The study stated that in 1986, the Kenya government published Sessional Paper No. 6 on economic management for restitution progress which saw the introduction of cost sharing in all quarters. The document was crucial to high repeated expenditure on education and training. Therefore, it suggested control measures reduce such expenses to manageable levels to be taken. Cost-saving measures were rated 57.1% effective by all schools in the District. This score indicated the possibility of improving students' performances in KCSE for a healthier future. Cost effectiveness was part of quality control practices that the present study didn't venture into. The scope of the present study was on internal quality and standards assessment with regards to the teaching and learning process; the teaching practices and examination practices that the learner interacted with directly.

Macharia (2013), analyzed the management policies for improving K.C.S.E. performance in public secondary schools in the Nakuru district and the factors affecting the performance of students in KCSE. The specific goal of the study was to; 1) determine how indiscipline among the students affected their performance in the Kenya Certificate of Secondary Education (KCSE), 2) examine how the

school's management style affected students' KCSE results in Nakuru district's public secondary schools,3) assess the effectiveness of various approaches to improving students' K.C.S.E. results, and 4) reveal the ratio of teachers to students at those schools. The research used a descriptive survey approach using structured questionnaires to gather information from the 12 Public Secondary Schools that were studied. The results showed that most educational institutions had implemented some form of resource mobilization and were making use of it to help achieve their aims and it was shown that managerial tasks including staffing, organizing, planning, and budgeting had a positive effect on students' grades.

Orina and Omariba (2017), studied the influence of the principal's leadership behavior on students' academic performance in secondary schools in Manga division, Nyamira district, and Nyanza province. They observed that the need to outshine had been there from when formal education was presented in Kenya at the time of the African search for quality education comparable to that of the Europeans that prepared them to pursue it with great interest. This created a need for good school management and leadership style. In schools, better performance was comparatively equivalent to sound administration. Moreover, the administrative position of the principal entailed directing and controlling the management of all issues relating to education improvement in the school. This indicated that all happenings done in the school were executed on behalf of the principal. Sound and efficient leadership was associated with schools that performed well.

In addition, the success of the school could not have been accomplished without strong leadership. A principal's job was to create an environment where employees worked together and held each other in high esteem. This would help to foster an atmosphere where leaders learned from each other, and to inspire their pupils to give their all. School administrators should routinely inspect classrooms, review teacher attendance and performance records, and enforce the established schedule. While they were monitoring teachers in the classroom, they made no notes during post-observation conferences or while reviewing lesson plans. There should be a high percentage of instructional supervision practices. Other control practices that enhance quality learning focused on the learner should be emphasized. Learners should remain in school without interruption to ensure quality learning. Fuller et al. (1999), said that a child's exposure to learning significantly influenced accomplishment and interaction with the curriculum from being regularly in school. Ensuring learners were in school was a control measure that adversely affected quality learning and outcomes. The quality control practice that enhanced quality learning was the implementation of discipline policies in the schools. Well-managed schools and classrooms contributed to educational quality (Craig et al, 1998). Order and reinforcement of positive behavior, communication of a seriousness of purpose to students, and encouraging quality outcomes also contributed to improved academic achievement. Schools existed because students in a particular school radiated the quality of that school. Schools that set high expectations of learners, believed that learners could meet them and produced learners who achieved high-quality grades. However, the tests were usually paper

and pen, which required learners to memorize rather than apply high-order thinking skills (Colby, 2000).

Waweru et al (2017), conducted a controlled experiment in a public primary school in the Subukia sub-county of Kenya to determine the impact of quality assurance techniques in schools on students' academic outcomes. The research was grounded in the value-added education and production-function theories. Using a census-based ex post facto study approach, researchers administered questionnaires to all 42 principals of public primary schools in Subukia Sub County. The academic performance of students in public primary schools in Subukia sub-county Kenya, was found to be positively related to the following variables: head teachers' planning activities ($r=.573$, $p<0.05$), coordinating practices ($r=618$ $p<0.05$), staffing practices ($r=689$ $p=.00<.05$), and controlling practices ($r=.667$, $p<0.05$).The study recommended that, Subukia's public elementary school principals should hold meetings as a quality assurance practice in order to filter the perspectives of different stakeholders on quality assurance and incorporate them into the various facets of the school management. Primarily, the P.T.A meetings were used to regulate administrative processes in order to accelerate effective teaching and learning. The PTA and school administration must work together to launch long-term initiatives, repair crumbling facilities, and educate teachers about best practices. The major purpose of this research was to analyze how the quality assurance procedures implemented by principals in public primary schools in Subukia sub-county, Kenya, affected student achievement. The study found that, in addition to principals holding school-wide meetings, quality assurance practices had a favorable impact on students' academic achievement. Students' academic

performance was found to be significantly impacted by the head teacher's roles in planning, coordinating, staffing, and controlling practices in public primary schools in Subukia sub-county, Kenya. There was a clear and statistically significant relationship between the planning, coordinating, staffing, and regulating procedures of principals and the academic success of their charge. Waweru et al studied quality assurance practices in primary schools in Subukia Sub County in Kenya and the present study sought to find out education stakeholders' perceptions on quality and standards assessments effect on academic achievement of public secondary schools in Kakamega County. The study by Waweru et al was conducted using an ex post facto research strategy, which indicated the researcher had no control over the factors they studied. The present study used descriptive design, which noted what the education stakeholders perceived on the tenets of quality and standards assessment.

In conclusion: Akhimienmhonan (2015), conducted a study in Nigeria's Edo Central Senatorial District to determine if there was a correlation between high school students' study habits and their grades; Abebe (2014) investigated the state of school-based supervision in the public high schools of Kamashi Zone, Ethiopia; Reche et al (2017) sought to look into what affects students' academic success in public secondary schools in the Matungulu Sub-county of Machakos County; Mavindu (2013), analyzed the students' results in KCSE exam to determine the impact of the principals' instructional management strategies in the Trans-Mara West District; Osiri et al (2019) conducted a study on the K.C.S.E. performance and school administration of students attending public secondary institutions in the Kamukunji Sub-County of Nairobi County, Kenya; Korir, (2010) sought to find out

how to improve K.C.S.E. performance in public secondary schools with effective cost-saving measures in Transmara west sub county;. Macharia (2013) analyzed the management policies for improving K.C.S.E. performance in public secondary schools in the Nakuru district and the factors affecting the performance of students in K.C.S.E; and Orina and Omariba (2017) studied the influence of the principal's leadership behavior on students' academic performance in secondary schools .In all these studies none was on education stakeholders' perceptions on internal quality and standards assessments instead they were on quality control practices which is an indicator in the present study.

2.5 Relationship between Students' KCPE and KCSE Results

Previous researchers have suggested that several internal factors in a school impact higher academic performance and the establishment of quality education in a school. Different circumstances were most commonly linked to the academic performance of high school students (UNICEF 2000).

A case of Nyandarua County Kenya Gitogo (2016) studied the relationship between KCPE and KCSE examination performance among secondary school students with public and private primary school backgrounds. He used a random sample of 520 secondary school students with a public primary school background and 340 with a private primary school background, respectively. The Pearson's correlation coefficient was used to establish the relationship between the KCPE examination and the KCSE examination among the dual groups of students. The study found a statistically significant relationship between KCPE and KCSE examination among the two groups of students, even when disintegrated according

to gender KCPE examination means score was found to be a better predictor of KCSE examination scores among the students from both private and public schools and also from both gender. The findings tally with what the present study sought to find out. That KCPE students marks had a positive relation with KSCE grade.

Jagero (2013), opined that success in the educational institute was gauged by students' performance in the external assessment. The assessments were used to gauge the level of candidates' achievement. Exams were utilized for certification and advancement in education for both teachers and students. Both the quality assurance personnel and policymakers relied on these tests to gauge the extent to which their respective curricula were being implemented in classrooms. Moreover, assessments enhanced the quality of teaching and learning, so the outcomes would be communicated to institutions of higher education in the form of a report outlining how the students fared on and what they, as well as their teachers, could do to improve for future tests. Students were assigned to different secondary schools based on their KCPE scores on the theory that these scores would predict how well they would do in the final secondary school exam, the KCSE. After eight years of compulsory schooling in Kenya, students were required to sit for standardized tests. Many of the secondary school performance issues, as alluded to by Adrian (2008), could be traced back to elementary school.

Karue and Amukowa (2013), carried out a study in Embu District that looked into the causes of low scores in the Kenya Certificate of Secondary Examinations. The study sought to achieve the following (1) determine the relationship between the K.C.P.E. score of students' admission score at form I and their subsequent

performance in K.C.S.E. in Embu district's day secondary schools; (2) determine the relationship between the qualifications of head teachers and performance in K.C.S.E. in Embu District's day secondary schools; (3) determine the relationship between home environments and performance in K.C.S.E. in Embu District's day secondary. The findings revealed that the schools that admitted more students who scored well in the Kenya Certificate of Primary Education did better in the Kenya Certificate of Secondary Education. The descriptive statistics from the surveys of teachers and principals were in agreement with the results of this correlation study. The poor results of Embu District's day secondary schools was attributed to the selective admissions process. According to conversations with principals, the inability of day secondary schools to participate in student selection processes similar to those at the national, provincial, and district boarding secondary schools had resulted in the admittance of weak pupils. Due to their smaller student bodies compared to the boarding schools, the day secondary schools should be allowed to recruit top K.C.P.E. students from the feeder elementary schools. It was also determined that an increase of one percent in the average admission score of students at day secondary schools would enhance performance by 0.3941.

Obwoge and Matara (2013), analyzed the Kajiado North Sub County secondary schools' KCPE and KCSE results side by side. The study set out to answer several questions about the KCPE and KCSE results of secondary schools in Kajiado North Sub-County, besides determining the impact of the category of a school has on the students' performance in these exams, and the factors could account for any differences in performance. The results showed that regardless of the school from which a student took the KCSE there was a significant positive linear association

between KCPE scores and KCSE performance (r= 0.701). The median score on the KCSE was 42.32, making it about the same as the median score on a regular exam. In contrast, the descriptive statistics of the KCSE performance analysis showed that the entrance marks of the KCPE results had an above-average performance of 297.88, which equated to 59.58 points B-(Minus). The study found that in Kajiado North Sub-county, KCPE results strongly predicted the KCSE performance of boys and girls, and that pure boy's secondary schools or pure girl's secondary schools outperformed their mixed-gender counterparts. In the Kajiado North sub-county, the boys-only secondary schools outperformed their female counterparts. Students in Kajiado North Sub County, Kenya, who attend secondary schools for four years receive little in the way of value added from their teachers and the schools itself, and the KCSE performance of learners of both sexes is profoundly influenced by their subject selections.

Agingu (2016), investigated the effectiveness of KCPE as a secondary school admissions assessment instrument. The purpose of the study was to examine the analytical validity of KCPE in terms of school differences, and the gender among the students in public secondary schools in Kisii central Sub-county, Kenya. The goals of this research were to look at the correlation between KCPE and KCSE scores, to see if there were any gender differences in this correlation, to see if there were any differences between KCPE and KCSE scores in different types of schools, and to see if there were any differences between KCPE and KCSE scores in different sized schools. The research methods used were a correlational analysis and an after-the-fact analysis. The study incorporated KCPE scores from 2006 and also considered K.C.S.E. scores from the same students taken in 2010. The

researcher-created pro forma was used to compile the data. The results showed that the KCPE and K.C.S.E. scores were highly correlated with one another ($r=0.693$; $n=1391$; $p <0.05$).The results showed that the KCPE scores were an acceptable predictor of the K.C.S.E. results across the gender, school type, and student body size. The KCPE test should continue to be used as a criterion for secondary school admission and that, male and female students should receive equal praise in order to boost their performance.

Kyalo and Kuthuka (2012), opined that examinations were the means by which the academic performance was evaluated in Kenya and argued that authentication should do more than merely make sure a candidate meets all of the criteria. Those who did well academically had a better chance of finding stable employment and were more productive in their chosen fields. Students' majors in college were determined by their performance on standardized tests. Most high achievers went into respected professions like medicine and engineering. These jobs paid much because their employees were seen as more valuable to society. They saw that academic success might be defined in two ways: operationally and conceptually. They were using the operational meaning of academic performance, which equates performance to a student's total grade point average. A conceptual definition, on the other hand, involves gauging the student's spoken presentation skills. Scores and grades earned on the Primary and Secondary School Kenya National Examinations were commonly used as indicators of academic success in Kenya.

In conclusion, Agingu (2016), investigated the effectiveness of K.C.P.E. as a secondary school admissions assessment instrument. Agingu used correlation

analysis to find out the relationship between KCPE and KCSE results in Kisii County. The difference with the present study is that, the Pearson's correlation was used to compare the KCPE and KCSE results of students in public secondary schools in Kakamega County. Obwoge and Matara (2013), analyzed the Kajiado North Sub County secondary schools' K.C.P.E. and K.C.S.E. results side by side using the correlation statistic. Karue and Amukowa (2013) looked into the causes of low scores in the Kenya Certificate of Secondary Examinations in Embu Sub County. The study determined the relationship between the K.C.P.E. score of students' admission score at form I admission and their subsequent performance in K.C.S.E. in Embu district's day secondary schools. Gitogo (2016) studied the relationship between K.C.P.E. and K.C.S.E. examination performance among secondary school students with public and private primary school backgrounds in Nyandarua County Kenya. The only difference with the present study is that the present study was carried out in Kakamega County and Gitogo's was done in Nyandarua County. Jagero (2013), and Kyalo and Kuthuka (2012) did not measure the relationship of KCPE and KCSE results but discussed descriptively, a gap that this study sought to address.

2.6 Relationship between Government Policies and KCSE Academic Performance

In South Africa, a study reviewed by Bisschoff (2003), and cited by Wanjala (2012), revealed that school principals are answerable to the Ministry of Education, the Board of Management, and the parents. In terms of managing finances, an emphasis was placed on being open and honest with everyone involved. The school's headmaster and governing board were expected to be fiscally careful with

school money. The school's principal made sure that records were kept on a monthly and quarterly basis. The annual financial results were summarized and presented to the Board of Management for approval. It was emphasized that accounting and reporting were crucial components of efficient monetary procedures in educational institutions. Although a bookkeeper may be hired to handle accounting, the principle and Board of Management would still be held responsible for all school funds.

In addition, Munguti (2016), argued for more fair allocation of teaching materials and classroom space in South Africa's scientific classrooms a national policy be developed to ensure that no secondary school in the country had a financial disadvantage while teaching science, mathematics, and technical courses to its students. However, the study did not examine the issues of the variety of learning resources used in teaching and learning or the training of teachers on the use, production, or care of learning resources, even though they were related to student achievement.

According to Macharia (2013), a government policy was a declaration of intent to take action. Indeed, every country's educational procedures are mapped out according to its national policies. The environment, resources, political and economic capacity, and the implementation process all play a role in how successful they become. Since Kenya's independence, governmental directives had shaped the country's educational system. Commissions, presidential working parties, committees, and development plans had previously served as the policy papers to direct education practice.

Kenya's education system has been heavily reliant on government funding and support since the country's independence. But as time passed, both the available resources and the growing number of those in need diminished. The expansion of public schools to accommodate population growth had been difficult because of stagnant funding. The government's answer was to develop and implement legislative measures like cost sharing to ensure that education would still be accessible, despite the many obstacles faced by families from lower-income backgrounds (Macharia, 2013).

Odude (2013), found that students were less engaged in their studies when the school's physical environment was deemed unappealing. There was a mismatch between the learning environment and the student. As a result, students' academic performance suffered. Better academic results and increased access to resources like computers were the results of class sizes that were reduced. A well-maintained building was an asset to any school. Having a clean, well-lit, modest, quiet, comfortable, and secure space to study in has been found to improve academic performance.

The Kenyan Basic Education Act of 2013 stipulated that the school board of management had to provide the auditor with access to all books of accounts and other documents, as well as any other information necessary for the auditor to do an audit. Every school's finances are audited at the end of the fiscal year, as required by law. At the end of each year, parents were given audited financial report compiled from weekly or monthly statements. In addition, this was sent to the department of education each year.

The manual for public procurement in secondary schools and colleges (2009) stated that all public education schools should spend public money in a transparent way that is overseen by different committees at all levels of procurement. The Public Procurement and Disposal Act (2015), underlined the need of competitive bidding for all products and services purchased by government agencies. Suppliers submitted bids for the opportunity to supply goods and services throughout the tendering process. The tender Committee oversaw the entire bidding procedure.

Makuto (2014), conducted a study into the effect of principal leadership on students' performance on the Kenya Certificate of Primary Education exam in the Teso North District of Kenya. Descriptive research methodology was used for this study. Quantitative data was broken down into categories and reported, while qualitative information was categorized into overarching themes for analysis. He concluded that the lack of transparency in financial concerns had an impact on the educational process since essential stakeholders were not participating in the procurement process

2.7 Summary of Research Gap

From the literature that was reviewed, it clearly emerged that a number of studies have been done in the area of quality assurance and academic achievement. For example, Waweru et al (2017), conducted an empirical study to determine the impact of school-based quality assurance practices on the academic performance of students in public primary schools in the Subukia sub-county. However, the present study was about the perceptions of education stakeholders; on internal quality and standards assessments in secondary schools in Kakamega County Kenya. The

current study looked at what the stakeholders perceived of the various components of internal quality and standards assessments with regard to academic achievement, Waweru's study was on quality assurance as conducted by the officers from the MOE, and was limited to public primary institutions in a smaller area (Sub County). Mwangi (2014), sought to determine the impact of instructional supervision practices on students' performance in Kenya Certificate of Secondary Education in Matuga District, Kenya. The study found out that the students' KCSE performance was influenced by the principals' goal-setting. This study did not determine the connection between quality control practices in institutions and academic performance. While, Imbega (2017), evaluated the impact of quality assurance practices on the academic performance of students in public secondary institutions in Trans Nzoia west sub-County. The foregoing studies were different from the present one because, the present study sought to find out the perceptions of education stakeholders on the effect of internal quality and standards assessment on the academic achievement in public secondary schools of Kakamega County. Apart from the difference in the areas of study, the regions where the studies were conducted differed.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was used by the researcher to carry out the study. The following sections are addressed in this chapter namely; the research design, research paradigm, location of the study, target population, sampling techniques and sample size, research instruments, data collection procedure, pilot study, validity, reliability of the instruments, data analysis and ethical considerations.

3.2 Research Paradigm

The research used the pragmatism approach since it was a mixed method type of study. Both qualitative and quantitave data were collected analyzed and used in conclusions and recommendations (Feilzer, 2010).The research questions developed in this paradigm were answered by integrating the results of quantitative and qualitative. According to Huang and Yan (2016), pragmatics involves the interpretation of meaning in context, taking into account factors such as the speaker's intention, the listener's expectations and the social and cultural norms of the communication situation.

3.3 Research Design

This research problem was studied using a descriptive research design. A descriptive research design gathers information about a particular group or phenomenon and it has the advantage of collecting data from a large number of participants, and it is also cost effective. In addition it has the ability to allow for the standardization of interview questions (Setia 2016).The design provided a detailed and accurate perceptions of the characteristics and behaviors of the education stakeholders. The descriptive research design was relevant because it

made it possible for the researcher to collect data about the stakeholders' perceptions on the effect of internal quality and standards assessments on the learners' achievement in public secondary schools in Kakamega County (Schmidt and Brown, 2019).

3.4 Location of the Study

The research was carried out in Kakamega County,in the Republic of Kenya. Kakamega County is located in Western Kenya and covers an area of 3,224.9Km^2. According to the 2019 Kenya population and housing census, the population was 1,867,579. The County borders; Vihiga County to the South, Siaya County to the West, Bungoma and Trans Nzoia counties to the North, and Nandi and Uasin Gishu Counties to the East. Kakamega County is on latitude 0.283333^0 N and longitude 34.75^0 E. The County has 415 public secondary schools which comprised of; 2 National schools, 26 Extra County schools, 20 County schools and 367 Sub county schools. The southern part of the County is hilly and made of granite. The Nandi escarpment is on the eastern border with steep cliffs. The main economic activity in Kakamega County is sugarcane production. According to Uwezo-Kenya (2013), students in the public secondary schools had low levels of reading, writing, and arithmetic proficiency, giving an impression that the quality of education in the county was rather low. Consequently, there was need to conduct a study of this kind in the County with a view to assess the stakeholders' perceptions on the role of internal quality and standards assessment on academic achievement.

3.5 Target Population

The target population comprised of 415 Principals, 415 Deputy Principals, 415 directors of studies, and 33,296 students, from four hundred and fifteen (415)

public secondary schools in Kakamega County, Kenya. The public secondary schools that were selected included the national schools, extra county schools, county schools and sub county secondary schools as shown in table 3.1.

Table 3.1: Categories of secondary schools in Kakamega County

Category	No. of Public Secondary Schools	Percentage (%)
National	2	0.5
Extra-County	26	6.5
County Schools	20	5
Sub-County Schools	367	88
Total	**415**	**100**

Source: Kakamega County Education office (2022)

3.6 Sample Techniques and Sample Size

3.6.1 Sampling techniques

The stratified random sampling techniques were used to select the sample for the study. The strata were made of the following categories of public secondary schools in Kakamega County: Sub County schools, County, Extra County and National schools. The stratified random sampling was advantageous because it ensured that all the strata of the target population had an equal opportunity of being included in the study, while keeping the size (Kothari 2004), as quoted by (Hassan 2017). There were two sampling frames which comprised of; a list of all the public secondary schools in the and a list of all the form four students of the 2022 cohort in each of the selected public secondary schools in Kakamega County.

3.6.2 Sample size determination

The sample sizes for the various categories of the population are as shown in table 3.2

The sample sizes of the principals, deputy principals and the director of studies were determined on the basis of Nassiuma (2009) formula as presented below:

$$n = \frac{Nc^2}{c^2 + (N-1)e^2}$$

Where: n = sample size, N = population size, c = coefficient of variation (≤ 50%), and e = error margin (≤ 5%). Substituting into the formula:

$$n = \frac{34541 * 0.5^2}{0.5^2 + (34541 - 1) * 0.05^2} \cong 100$$

A sample size of 100 schools was obtained using the above formula (Nassiuma, 2000) as cited by (Hungi and Thuku, 2010).The sample size of the form four students of the 2022 cohort was determined by the Cochran formula (1977).The formula is as shown:

$$n_0 = \frac{z^2 pq}{e^2}$$

Where; e was the margin of error (≤5%), p was the estimated proportion in the estimated population (67%), q is (1-p), and z was the value found in the z table (1.96) (Israel, 2018).

Substituting to the above equation:

$$n_0 = \frac{1.96^2 * 0.67 * (1 - 0.67)}{0.05^2} \cong 340$$

Table 3.2: Population and sample

	Population(N)	Sample size(n)	% of Sample
Principals	415	100	24
Deputy principal	415	100	24
DOS	415	100	24
Students	33296	400	
Total	**34541**	**700**	

Source: Kakamega County Education office (2022)

3.7 Data Collection Instruments

The study relied on primary and secondary data, which was collected using three sets of questionnaires and an interview schedule. These tools were; the Principal's interview schedule (PIS), the deputy principal's questionnaires (DPQ), the Director of studies questionnaire (DOSQ), and the Students' questionnaire (SQ).

3.7.1 Principals interview schedule

This instrument (Appendix II) had 13 open-ended items that collected different types of data from principals of public secondary schools in the County. The data that was obtained comprised of the following: perceptions of the principals with regard to the effect of teaching practices on academic achievement in public secondary schools in Kakamega County.

3.7.2 Deputy principal's questionnaires

The Deputy Principal's Questionnaires (Appendix III) had open ended and close ended items. The instrument has 3 sections with twenty four items which collected

quantitative data. The instrument collected information on the perceptions of the deputy principals on the effect of; teaching practices, examination practices and the quality control practices on academic achievement.

3.7.3 Director of studies questionnaire

The director of studies questionnaire (appendix VI) had three sections; section A had questions that sought for data on objective two. This data was about the perceptions of the DOSs on the effect of examination practices on academic achievement. Section B of the questionnaire collected data on the KCPE marks for students in the years 2019, 2018, 2017, 2016, and 2015. The directors of studies were also requested to fill in students' corresponding KCSE exit results for the period 2022, 2021, 2020, and 2019.The internal examination scores at the end of each class were collected. This data was gathered by carrying out document analysis, whose main purpose was to provide the background information and cover comprehensive data (Bowen, 2009).

3.7.4 Students questionnaire

The student's questionnaire (appendix V) had 3 sections. Quantitative data was collected using this instrument. The data comprised of open ended questions from objective one and two. It was used to collect data on the student’s perceptions on the effect of teaching practices and examination practices academic achievement.

3.8 Pilot Test

Prior to data collection, a pilot study was performed. Its purpose was to evaluate the efficacy of the data collection instruments. Abdinoor (2012), recommended,

1% to 10% of the Sample as adequate for piloting. Hence, the pilot sample comprised 10% of the sample schools. Out of the 100 respondents targeted in this study, ten respondents from Trans Nzoia County were sampled. Modifications was done in the students' questionnaire and the director of studies questionnaire after the pilot exercise.

3.8.1 Validity test

Fraenkel and Wallen (1993), observed that an instrument could be constructed to measure multiple things; thus, its validity must be established. Validity referred to how accurately a method measured what it intended to measure. According to Grinnell (1993), as referenced by Mwangi and Nyaga (2010), the difficulty of the questions was of more concern during the pretest of the research tools. This research relied on both content and face validity. The term content validity was used to describe how well a test's elements represented the concept being assessed. The questionnaires were given to my supervisors at Masinde Muliro University of Science and Technology to conduct content and face validity of the instruments. The instruments' contents were enhanced based on the supervisors' recommendations and comments. The questionnaires were then reconstructed to relate to each research question. Validity in the interview was ensured through a one-to-one correspondence between interview questions and underlying competency. The purpose of validity was to assess the extent to which the instruments would measure what they were was designed to measure. (Robson, 2011)

3.8.2 Reliability test

Reliability refers to how consistently a research instruments measured the same aspect although administered at different times. According to Amisi (2016), similarly, reliability relates to the stability of test results across administrations, item pools, and other contextual factors. In order to determine whether or not the responses were consistent amongst themselves, the Cronbach reliability coefficient was used to test the reliability of instruments. The reliability estimate known as Cronbach's alpha takes on values between 0 and 1, because it covered the range of internal consistency. If the values were more than the threshold of 0.7, established by Nunnaly (1978), and cited by Aroni (2013), then the reliability of the instrument is high. In this study, the interview schedules were reviewed to increase dependability. Table 3.3 displays the Cronbach alpha coefficients for the items of the following objectives instruments with questions from the objectives; Teaching Practices, Examination Practices, and Quality Control Practices, KCPE and KCSE students' Performance scales. The values ranged from 0.786 to 0.836, 0.713 to 0.743. George and Mallery (2008), stated that a Cronbach alpha coefficient greater than or equal to 0.7 was acceptable. All the instruments were therefore retained for the study.

Table 3.3: Reliability test

Study Variable	No of Test Items	Cronbach's Alpha
Schools' teaching practices	7	0.786
School's examination practices	7	0.763

Schools quality and control practices	5	0.836
KCPE entry behavior	10	0.713
Government policies	7	0.826
KCSE Performance	5	0.743

3.9 Data Collection Procedure

Before proceeding to the field, the introductory and the proposal approval letter was obtained from the Directorate of Postgraduate studies at Masinde Muliro University of Science and Technology. This letter facilitated for the application for a research permit from the National Commission for Science, Technology, and Innovations (NACOSTI). Upon receipt of the research permit No: NARCOSTI /221347(Appendix XI), the County Commissioner for Kakamega County, and the County director of education were notified of the proposed study.Subequently,the, the county director of education wrote an introductory letter to introduce the researcher to the principals of the selected public secondary schools in the county. The following instruments were used to collect data: principals interview schedule, deputy principals' questionnaire, director of studies questionnaire, and the student's questionnaire. Data was collected over a period of six consecutive months starting from the month March 2022 to September 2022.

3.10 Data Analysis and Presentation

The raw data was appropriately coded tabulated and subjected to analysis. Both the descriptive and inferential statistics was used to analyze the collected data. The data was presented in frequency tables, frequency curves and pie charts

i) Analysis of objective one; To determine the education stakeholders' perceptions on effect of schools teaching practices on academic achievement in public secondary schools in Kakamega County, Kenya.

The data collected on this objective was qualitative and quantitative. The principal's interview schedule (Appendix II), the deputy principals' questionnaire (Appendix III), and the student questionnaire (Appendix V) were used to collect data. The responses from the 67 principal's interviews were grouped into themes in line with the studies' objectives. The themes were coded and subjected to further analysis. Descriptive statistical analysis was done using frequencies and percentages to describe the essential characteristics of the data. The 77 deputy principal's gave quantitave data that was analyzed using Chi-square test. The 268 students had items giving out quantitative data that was analyzed by the Chi-square test. The chi square value was significant because it showed if there was a difference between the education stake holders, perceptions on the effect of education policies on academic achievement. The chi square value was significant because it showed if there was a difference between the education stake holders, perceptions on the effect of teaching practices on academic achievement of public secondary schools in Kakamega County, Kenya.

ii) Analysis of objective two; to determine the Education stakeholders' perceptions on schools examination practices effect to academic achievement in public secondary schools in Kakamega County, Kenya.

The data that was collected for this objective was qualitative and quantitave. The principal's interview schedule (Appendix II), the deputy principals' questionnaire Appendix III), the director of studies questionnaire (Appendix IV) and the student questionnaire (Appendix V) were used to collect data. The responses from the 67 principal's interviews were grouped into themes in line with the objectives of the study. The themes were coded and subjected to further analysis. Descriptive statistical analysis was done using frequencies and percentages to describe the essential characteristics of the data. The responses from the 77 deputy principals was analyzed descriptively using means and standard deviations before being subjected inferentially to the Chi-square test. The responses from the 72 director of studies was analyzed descriptively using means and standard deviations before being subjected inferentially to the Chi-square test. The responses from the 268 students was analyzed descriptively before being subjected to the Chi-square test analysis to determine the level of significant difference in the stakeholder's perceptions. The chi square value was significant because it showed if there was a difference between the education stake holders, perceptions on the effect of examination practices on academic achievement, of public secondary schools in Kakamega County, Kenya.

iii) Analysis of objective three; to examine the education stakeholders' perceptions on schools quality and control practices effect on academic achievement in public secondary schools in Kakamega County, Kenya.

The data collected on this objective was both qualitative and quantitative in nature. The principal's interview schedule (Appendix II) and the deputy principals' questionnaires (Appendix III) were the instruments used. The responses from the 67 principal was grouped into themes in line with the studies' objectives. The themes were coded and subjected to further analysis. Descriptive statistical analysis was done using frequencies and percentages to describe the essential characteristics of the data. The data from the 77 deputy principals was analyzed descriptively using means and standard deviations before being subjected inferentially to the chi-square test analysis. The chi square value was significant because it showed if there was a difference between the education stake holders, perceptions on the effect of quality control practices on academic achievement of public secondary schools in Kakamega County, Kenya.

iv) Analysis of objective four; To analyse the relationship between KCPE and KCSE results of students in public secondary schools Kakamega County, Kenya.

The DOSs questionnaire (Appendix IV), had a section that requested for the KCPE results of students from the year 2016 to 2019 and the KCSE results of the same learners of the year 2019 to 2022. The DOSs also provided internal examination scores of the ten students in their schools as per the schedule. This was quantitative data. A Comparison between KCPE mean mark and KCSE mean mark by applying the Pearson Product Moment Technique.

v) Analysis of objective five; to assess the education stakeholders' perception on the effect of education policies on schools academic achievement in public secondary schools in Kakamega County, Kenya.

The data collected for this objective was quantitative. The 67 principals responded to the items on this objective. The principals' interview schedule; section three was used to collect the data (Appendix II). The data was analyzed descriptively statistics and inferentially by applying the Chi-square Test analysis. The chi square value determined the level of significance was significant difference in the education stake holders, perceptions on the effect of education policies on academic achievement on public secondary schools of Kakamega County, Kenya.

3.10.1 Hypothesis testing

Table 3.4: Hypothesis testing matrix

Hypothesis	Independent Variable	Dependent Variable	Statistics	Decision Rule
Ho_1There is no statistically significant difference between Education stakeholders' perceptions on the effect of schools' teaching practices and KCSE performance of public secondary schools in Kakamega County, Kenya	Teaching practices	Perception on performance in KCSE	Chi-Square Test	P< 0.05 reject p>0.05 accept Rejected
Ho_2 There is no statistically significant difference between Education stakeholders' perceptions on the effect of school's examination practices and KCSE performance of public secondary schools in Kakamega County, Kenya	Examination practices	Perception on performance in KCSE	Chi-Square Test	P< 0.05 reject p>0.5 accept Rejected

Ho_3 There is no statistically significant difference between Education stakeholders' perceptions on the effect of schools quality control practices and KCSE performance of public secondary schools in Kakamega County, Kenya	Schools 'control practices	Perception on performance in KCSE	Chi-Square Test	P< 0.05 reject p>0.05 accept Not rejected
Ho_4 There is no statistically significant relationship between the KCPE and KCSE results of public secondary schools in Kakamega County, Kenya	KCPE performance	Perception on KCSE performance	Pearson product moment	P< 0.05 reject p>0.05 accept Rejected
Ho_5There is no statistically significant difference between Education stakeholders' perceptions on the effect of government education policies and KCSE performance of secondary schools in Kakamega County, Kenya	Government education policies	Perception on performance in KCSE	Chi-Square Test	P< 0.05 reject p>0.05 not Rejected

3.11 Ethical Considerations

The researcher took into account a number of ethical issues to ensure that ethical requirements were upheld in the study. This was achieved by observing the following aspects of research etiquettes: informed consent by explaining to the respondents what the study set out to do and achieve, privacy and confidentiality by making sure their identity was sealed, anonymity and personal responsibility. The respondents were informed of the intended research and were only required to respond if willing. The information given was confidential, and no school identity or name of a person was on the research instruments. The respondents were assured of no psychological or physical harm while giving their responses. The study findings were open to all interested parties with the belief that they helped to improve the academic achievement of secondary schools in Kenya.

CHAPTER FOUR
RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents the results of the study that was carried out to analyze the perceptions of education stakeholders on the effect of internal quality and standards assessments on the academic achievement of public secondary schools in Kakamega County of the Republic of Kenya. The objectives of the study are as stated below:

i) To determine the education stakeholders' perceptions on the effect of the teaching practices on the academic achievement of public secondary schools in Kakamega County, Kenya.

ii) To determine the education stakeholders' perceptions on the effect of examination practices on the academic achievement of public secondary schools in Kakamega County, Kenya.

iii) To examine theprincipals' and deputy principals' perceptions on the effect of quality control practices on the academic achievement of public secondary in schools Kakamega County, Kenya.

iv) To analyze the relationship between the KCPE and KCSE results of the students in public secondary schools in Kakamega County, Kenya.

v) To assess the principals' perceptions on the effect of the education school policies on the academic achievement of public secondary schools in Kakamega County, Kenya.

4.2 Information

4.2.1 General and information

In this study, data was collected on the following: the teaching methods employed by the teachers in public secondary schools in Kakamega County, the examination policies and practices in the public secondary schools in Kakamega County, the

quality control practices in the secondary schools in Kakamega County, the internal examination scores, the KCPE results and KCSE results of the form four students from five different cohort (2018-2022). The number of public secondary schools that were visited were 100 out of the 415 secondary schools in the County. The education stakeholders comprised of the principals, the deputy principals, the director of studies and the form four students in the 2022 cohort. The response rate were as follows: 67% for the principals, 77% for the deputy principals, 72% for the DOSs and, 67% for the students.

4.2.2General demographic information

With regard to gender 67 of the principals who were interviewed, 70% were male, while 30% were female. As for the 77 deputy principals, 33% were male, while 67% were female. Lastly, out of the 72 directors of studies interviewed, 70% were male while 30% were female. In terms of the highest level of education attained by the principals; it was established that: 65%, were holders of a university degree,22% were holders of a master's degree, and 13% were holders of a diploma in education. Of the deputy principals who were interviewed, 81% were holders of a university degree, 10% were holders of a master's degrees, while of 6% of them were holders of a diploma in education. Of the director of studies who were interviewed, 80% of them, held a bachelor’s degree and 20% had a master’s degree.

4.3 Type of Secondary School

This section shows the distribution of public secondary schools in Kakamega County by the different types of schools categorization. The details are tabulated in table 4.1.

Table 4.1: Categorization of public secondary schools in the county.

Type of school	Number	Percent
National	1	2.0
Extra-County	17	27.0
County	16	24.0
Sub-county	32	47.0
Total	**66**	**100.0**

Source: Kakamega County Education office (2022)

According to table 4.1, forty seven percent (47%) of the public secondary schools are sub county schools, twenty seven percent (27%) are Extra County schools, twenty four percent (24%) were County schools, while two percent (2%) are National schools.

4.4 The Education Stakeholders' Perceptions on the Effect of Schools' Teaching Practices on Academic Achievement

The first objective was to investigate the perceptions of the education stakeholders on the effect of teaching practices on the academic achievement of their schools. The stakeholders comprised of the principals, deputy principals and the form four students. The teaching practices that were considered in this study were: digital instruction, team teaching, reflective teaching, group discussion, practical lessons, questions and answer method and the varied teaching methods used in their

schools. The principals were interviewed and their responses grouped in themes then analyzed thematically. While the students' and the deputy principals' rated their responses on a 5 point likert scale. These responses were in form of perceptions as elaborated below.

1: No effect (N)

2: A negative effect (NE)

3: A low positive effect (L)

4: A moderate positive effect (M)

5: A high positive effect (H)

4.4.1 Students' perceptions on the effect of teaching practices on academic achievement in public secondary schools.

This section presents the findings on the students 'perceptions on the effect of the various teaching practices on academic achievement in their schools. This is as detailed in table 4.2.

Table 4.2: A summary of the students' perceptions on the effect of teaching practices

Teaching practices	Perceptions					
SN	**H**	**M**	**L**	**NE**	**N**	**TOTAL**
1.DI	92(34%)	140(52%)	14(5%)	21(8%)	1(1%)	268(100%)
2.TT	96(36%)	68(25%)	102(38%)	2(1%)	0(0%)	268(100%)
3. ME	91(34%)	147(55%)	28(10%)	0(0%)	0	268(100%)
4. GP	101(38%)	65(24%)	101(37%)	1(1%)	0(0%)	268(100%)
5. VTM	74(28%)	55(21%)	120 (44.7%)	8(4%)	7(3%)	268(100%)
6.PL	100(37%)	100(37%)	23(9%)	25(10%)	20(7%)	268(100%)
7.Q .A	84(31%)	100(37%)	50(19%)	34(11%)	0	268(100%)
Total	**638(34%)**	**675(36%)**	**413(22%)**	**94(5%)**	**56(3%)**	**1876(100%)**

Source: Students Questionnaire (2022)

Key

DI: Digital Instruction
TT: Team Teaching
RT: Reflective teaching
ME: Marking of exams
GD : Group discussion
PL : Practical Lesson
QA : Question and answer
VTM: Varied teaching methods

Table 4.2, shows the perceptions of the form four students with regard to the effect of the different teaching practices on academic achievement. From the findings, it emerged that 34% of the students were of the view that the teaching practices engaged by the teachers had a very high positive effect on the academic achievement of the learners. While 36% and 22% of the students felt that the teaching practices had a moderate positive effect and low positive effect respectively. Lastly, 3% of the students opined that teaching practices did not in

any way affect the learners' academic achievement. As far as the individual teaching practices were concerned; 38% of the students felt that group discussions had the highest positive effect on their academic achievement. While 37% of the students felt that the practical lessons had the highest positive effect.

4.4.2 Deputy Principal's perceptions on the effect of teaching practices on academic achievement.

This section presents the findings on the perceptions of the deputy principals on the effect of the various teaching practices on academic achievement of public secondary schools. The descriptive data from the deputy principals with regard to their level of agreement with the statements on the schools' teaching practices, was rated on a 5 point likert scale. The details of their responses are shown in table 4.3. The rating was categorized as follows;

1: No effect (N)

2: A negative effect NE)

3: A low positive effect (L)

4: A moderate positive effect (M)

5: A high positive effect (H)

The perceptions of the deputy principals with regard to the effect of the different teaching practices on academic achievement was summarized in table 4.3.

Table 4.3: A summary of the deputy principal's perceptions

Teaching practices	Perceptions					
	H	**M**	**L**	**NE**	**N**	**TOTAL**
1.DI	28(37%)	23(30%)	25(33%)	1(1%)	0(0%)	77(100%)
2.TT	20(26%)	28(37%)	13(2%)	6(8%)	9(12%)	77(100%)
3. RT	27(39%)	23(31%)	25(33%)	2(5%)	0(0%)	77(100%)
4.GD	36(46%)	22(29%)	19(1%)	0(0%)	0(0%)	77(100%)
5 VTM	20(26%)	25(26%)	29(12%)	2(2%)	1(1%)	77(100%)
6. PL	20(26%)	22(29%)	31(40%)	2(5%)	2(5%)	77(100%)
7 QA	22(29%)	20(26%)	20(26%)	9(12%)	6(8%)	77(100%)
Total	**173(32%)**	**163(31%)**	**162(30%)**	**23(5%)**	**18(2%)**	**539(100%)**

Source: Deputy Principals' Questionnaire (2022)

Key

DI: Digital Instruction GD : Group discussion

TT: Team Teaching PL : Practical Lesson

RT: Reflective teaching QA : Question and answer

MT: Marking of exams VTM: Varied teaching methods

Table 4.3 shows that 32% of the deputy principals were of the view that teaching practices engaged by teachers had a very high positive effect on the academic achievement of the learner while 31% and 30% of the deputy principals felt that the teaching practices had a moderate positive effect and low positive effect respectively on the academic achievement. Lastly, 5% of the deputy principals opined that teaching practices did not in any way affect the learners' academic achievement. As far as the individual teaching practices were concerned; 46% of the deputy principals felt that students discussing in groups had the highest positive effect on their academic achievement. The perceptions of the deputy principals and

the students with regard to the effect of the different teaching practices on academic achievement are shown in detail in table 4.4.

Table 4.4: Weighted average of the deputy principals' and students' perception

Stakeholders	**Perceptions**					
	H	**M**	**L**	**NE**	**N**	**Total**
Students	34%	33%	29%	2%	1%	100%
Deputy principals	32%	31%	30%	5%	2%	100%
Weighted average	32.931%	31.931%	29.535%	3.604%	1.535%	100.000%

Source: Students and Deputy Principals' Questionnaires (2022)

Table 4.4 shows that on average, 32.931% of both the deputy principals and students who were of the view that teaching practices engaged by teachers had a very high positive effect on the academic achievement of the learner while 31.931% and 29.535% of them felt that the teaching practices had a moderate positive effect and low positive effect respectively on the academic achievement. Lastly, 3.604% of the respondents opined that teaching practices did not in any way affect the learners' academic achievement and lastly 1.535 perceived that the teaching practices had a negative effect on academic achievement.

4.4.3 Principals' perceptions on the effect of teaching practices on academic achievement

This section presents the findings on the perceptions of the principals concerning the effect of the teaching practices on academic achievement of their schools. The teaching practices that are implemented in their schools were grouped into themes as displayed in table 4.5

Table 4.5: Principals' perceptions

Theme	Percentage (%)
Motivational Speakers and Creaming	14
Remedial Programs	38
Internal Symposium	16
KNEC Facilitators	3
Inter-School Competition	8
Academic Counselling	5
Academic Families	16
Total	**100%**

Source: Principals Interview Schedule (2022)

According to Table 4.5, thirty eight percent (38%) of the principals were of the opinion that remedial programs do improve academic performance. While three percent (3%) of them felt that engaging KNEC facilitators had the least effect on performance. In addition, 16% of the principals felt that internal symposiums and academic families had an effect on academic achievement. This findings concurred with those of Schwartz (2012), who opined that for students to succeed in formal courses, the learners required short-term help in acquiring content or skills. These educational interventions addressed the learning needs of a specific group of children who lagged academically in incorporating knowledge or mastering specific skills. The findings also were in tandem with those of Bohn (2011), done in Brazil that found out that,

remediation of students was important and as part of their employment agreements, teachers in Brazil's public schools are required to offer either acceleration or remediation to students who need it. The use of symposia and academic families was said to be a teaching practice used by 16%each of the principals. These findings corroborated with the findings of a study done by Usha et al (2022), on the effect of symposia on learning compared to traditional lecture method on medical graduate students in India. According to them, symposia were a type of program that was competency based. The competency-based curriculum puts emphasize student-centered learning methods. Usha et al insisted that symposia was a learner-centered method emphasizing the acquisition of competencies and skills. The medical students felt that symposia increased their opportunities for active learning by 83.5%. Additionally 86.9% of the medical students were of the opinion that symposia boosted their public speaking abilities. Although symposia improves academic achievement, Usha et al (2022) observe that it generally benefits the students who actively participate. All students could not present topics due to limited time. The students presenting symposium topics benefited more from that content than those who listened passively. This finding corroborated the findings by Honjen et al (2016) in their study to examine the effects of the principals' invitation of mathematics specialists on Students' performance in mathematics in KCSE examination in Meru County, Kenya; that, 32 (34.8%) schools utilized group discussions. Regarding CATs, 13 minority (14.1%) principals asserted that they used it to improve performance. Mathematics contests were also cited by only nine (9.8%) of the principals and eight (8.7%)

also claimed that they organized symposiums for their students. Symposia were found to be rarely adopted strategies by the schools. According to this study, 70.65% of the schools performed poorly in mathematics, did not use symposia in teaching mathematics, while 3.3% of the schools that excelled in mathematics organized symposia for their students. It was consequently concluded that symposia were an excellent strategy for improving students' performance in mathematics. In the current study 14 % of the principals were of the opinion that engaging motivational speakers would help to improve KCSE scores. A study by Achieng (2018), on organizing joint activities was the most common strategy (74.1%), followed by awarding (66.7%), providing resource materials (63.0%), inviting motivational speakers (63.0%), and inviting role models (51.9%), with organizing trips being the least common strategy (0%). This research also focused on the perceptions of teachers regarding the influence of motivational strategies used by career teachers on students' choice of computer studies in secondary schools in Kisumu County, Kenya. Only 3%of the sampled principals engaged these examiners. These sentiments were expressed by Campbell and Malkus (2010), who reported that when external subject specialists were invited to schools, they gave students a new positive change on how they perform with time. However, most of the principals in these schools relied on their subject teachers as the subject specialists. The reason may be that the external examiners were expensive. If a school decided to get them, a minimum of fifteen examiners would be required out of the possible thirty; which is very expensive to some schools.

4.4.4 Testing the null hypothesis

H_{O1}: There is no statistically significant difference in the education stakeholders' perceptions on the effect of the teaching practices on the academic achievement of public secondary schools in Kakamega County. The hypothesis was tested by using a chi-square analysis using the statistical package for social sciences (SPSS).The results are as detailed in table 4.6.

4.4.4.1 Students' Perceptions on teaching practices.

Table 4.6: A Chi-square analysis of the students' perceptions.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	444.286[a]	24	.001
Likelihood Ratio	452.996	24	.000
N of Valid Cases	1870		

Source: SPSS Chi-Square analysis (2022)

Table 4.6 shows the results of the chi-square test for students' perceptions. The results reveals that there is a significant difference in the students' perceptions on the effect of the teaching practices on academic achievement with the p value of, $p < 0.001$. This result implies that the students were of the opinion that certain teaching practices were more effective than others with regard to achieving academic scores. These findings were in tandem with Mutia (2018), who opined that varied teaching methods meted out to students by teachers such as team teaching, reflective group discussion, multi perspective critical thinking, and peer learning purposefully, benefitted students. The key benefits perceived by students included content mastery, content retention and content delivery.

4.4.4.2 Deputy principals' perceptions on teaching practices.

This section dealt with the chi-square analysis results with regard to deputy principals' perceptions on the effect of teaching practices on the academic

achievement of students in public secondary schools.The details are as shown in table 4.7.

Table 4.7: A Chi-square analysis on the deputy principals' perceptions.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	59.720[a]	24	.004
Likelihood Ratio	59.209	24	.005
N of Valid Cases	536		

Source: SPSS Chi-Square analysis (2022)

Table 4.7 shows the chi-square test for the deputy principals' perceptions. The results showed that there was a significant difference in their perceptions on the effect of schools' teaching practices and academic achievement with a p value of $p < 0.004$. This implied that there was a difference in what the deputy principals perceived as affecting the academic achievement on matters to do with teaching practices. These results meant that the deputy principals' perceived that the teaching practices aforementioned had an effect on the academic achievement of the students. However, the deputy principals' perception on the effect of the teaching practices on academic achievement was lower compared to that of the students. This findings corroborate the findings in a study done at Manga Sub County by Momanyi (2019), which analyzed how different classroom management techniques influenced student achievement in secondary schools Academic performance was found to be favorably and significantly related to student-centered management, teacher-centered management, and assessment strategies. Assessment management technique, teacher-centered management, and student-centered management all worked together to make a big difference

in students' grades. The instructional management procedures anticipated a 53.5 percent improvement in student performance. In contrast, this research found that a 1% improvement in classroom instruction led to a 44% improvement in student achievement. The study concluded that Student-centered management, teacher-centered, and assessment strategies were positively and significantly related to academic performance. The Student-centered methods were discussed.

4.4.4.3 Comparison of deputies perceptions and students perceptions

This section shows the chi-square analysis results with regard to the perceptions of the education stakeholders on the effect of teaching practices. The details are shown in table 4.8.

Table 4.8: A Chi-square Analysis on students and deputy principals' perceptions.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	75.067[a]	24	.001
Likelihood Ratio	74.594	24	.000
N of Valid Cases	345		

Source: SPSS Chi square analysis (2022).

Table 4.8 shows the results of the chi-square test for deputy principals' and students' perceptions. The results indicated that there was a significant difference

in their perceptions on the effect of schools' teaching practices with regard to the effect of the academic achievement with the p value $p < .001$.The null hypothesis was consequently rejected. This implied that that the students and teachers perceived differently, the effect of the teaching practices on academic achievement. Their differences indicated by the chi-square values, with students showing a stronger difference ($\chi^2 = 444.286$) compared to deputy principals ($\chi^2 = 59.720$). This suggested that students' perceived that the teaching practices their teachers used to instruct them had a stronger effect to their academic performance than the perceptions of deputy principals' perceptions.

These findings concurred with McCabe and O'Connor (2014), who reported that a student-centered approach to learning encouraged students to have more responsibility for their learning and was a process that relied heavily on professional confidence to let-go of traditional teaching methods. The methods included question-and-answer techniques, group discussions practical lessons. These methods engaged the learner more, so the learner could learn specific competencies and retain content. Davis (2017), said that education should engage the Student. This meant that the student should be active, attentive, curious, optimistic interested in learning. This, in turn, increased the student's performance in examinations. Nganga (2010), studied factors contributing to low grades in mathematics in the KCSE examination in the Kiambu district and found that the methodology used in schools needed to be more problem-centered and Student-centered. The student should solve the problems and do what was learned. This required time since learners had different cognitive abilities, yet teachers had been given an ultimatum about syllabus coverage to

get the desired appraisal targets. That may be why there was a new shift to competence-based learning where the curriculum insisted on the learner gaining competencies instead of rote learning that tested memory. Wachanga and Mwangi (2004), Kibetand and Kathuri(2005), and Esra et al. (2009), as quoted by Chrilukovian et al (2017), reiterated that teaching methodology was a crucial factor in determining the academic performance of learners in whichever system of education. A methodology that enabled the leading players in the learners to do what was learned was the best, i.e. learner-centered teaching methods. Learner-centered teaching methods involve learners' senses and aid the learners in content retention. Learner-centered teaching methods included discussion and presentation by learners, Team teaching, and teachers' reflective teaching. Most examinations tested how much content the learner retained, which plainly explains the positive relationship. Momanyi (2019), looked at how different teaching management practices impacted the academic performance of secondary schools in Manga Sub County and found results consistent with those found above. Academic performance was found to be favorably and significantly related to both student-centered and teacher-centered management approaches, as well as assessment strategies. Assessment management technique, teacher-centered management, and student-centered management all worked together to make a big difference in students' grades. The instructional management procedures anticipated a 53.5 percent improvement in student performance.

4.5. Education Stakeholders' Perceptions on the effect of Examination Practices Effect on Academic Achievement.

The second objective sought to investigate the perceptions of the education stakeholders on effect of examination practices on academic achievement .The principals, deputy principals, director of studies and students were the respondents. While the examination practices comprised of the following: the availability of resources, marking process, quality of internal examination, and the administration of internal examination. Through an interview schedule the principals were required to explain their school's examination policies. Their responses were grouped into themes and analyzed descriptively. On the other hand, the students, the DOSs and the deputy principals were required to rate their perceptions on a 5 point likert scale regarding the effect of the different teaching practices on the academic achievement. The rating scale is as elaborated below:

1: No effect (N)

2: A negative effect (NE)

3: A low positive effect (L)

4: A moderate positive effect (M)

5: A high positive effect (H)

4.5.1 Students' perceptions on the effect of examination practices

This section represents the perceptions of students with regard to the effect of examination practices on academic achievement. Details are tabulated in the table 4.9.

Table 4.9: Students' perceptions on the effect of examination practices

Exam practices	**Perceptions**					
	H	M	L	NE	N	TOTAL
1. PT	130(49%)	50(19%)	70(26%)	9(3%)	9(3%)	268(100%)
2. R P	200(75%)	32(12%)	16(6%)	10(4%)	8(3%)	268(100%)
3. ES	250(93%)	5(2%)	4(1%)	1(1%)	8(3%)	268(100%)
4. MT	150(56%)	100(37%)	16(6%)	1(1%)	1(1%)	268(100%)
5.TL	100(37%)	48(18%)	60(22%)	40(15%)	20(8%)	268(100%)
6. QP	5(2%)	2(1%)	260(96%)	0	1(1%)	268(100%)
7. PS	78(29%)	88(32%)	100(37%)	1(1%)	1(1%)	268(100%)
Total	**560(30%)**	**812(43%)**	**350(20%)**	**84(4%)**	**56(3%)**	**1876(100%)**

Source: Student's Questionnaires (2022)

Key.

PT: Printed tests
RP: Reward &punishment
ES: Exam supervision
MT: Marked tests
PM: Prompt marking
QP: Qualified personnel
PS: Primary and secondary scores

Table 4.9, shows that 30% of the students were of the view that the examination practices engaged by their teachers had a very high positive effect on the academic achievement of the learner. While 43% and 20% of the students felt that the examination practices had a moderate positive effect and low positive effect

respectively on the academic achievement. Lastly, 3% of the students were of the opinion that the examination practices did not in any way affect the learners' academic achievement. As far as the individual examination practices were concerned; 93% of the students felt that supervision of their examinations had the highest positive effect on their academic achievement. While 75%of the students were of the opinion that the rewards and punishment accorded to them with regard to performance in class had a moderate effect on their overall academic achievement.

A study done by Salcedo (1989), found out that "punishment" was one of the most important factors in controlling behavior as an educational means; punishment was essentially corrective by leading the youth to a proper estimation of his fault and for a position change in his behavior.

4.5.2 Perceptions of the director of Studies on the effect of examination practices.

This section presents the perceptions of the director of studies in public secondary schools on the effect of examination practices on academic achievements. The details are as tabulated in table 4.10.

Table 4.10: A summary of the director of studies perceptions.

Exam practices		**Perceptions**				
SN	H	M	M	NE	N	TOTAL
1. EA	20(28%)	40(55%)	5(13%)	2(3%)	3(4%)	72(100%)
2. PR	21(29%)	25(30%)	11(10%)	2(3%)	0(9%)	72(100%)
3. AP	23(30%)	33(46%)	12(7%)	4(6%)	0(6%)	72(100%)
4.IEM	30(42%)	28(39%)	14(7%)	0(13%)	0	72(100%)

5.AS	16(22%)	39(46%)	10(13%)	4(6%)	3(4%)	72(100%)
6.ES KCSE	24(31%)	27(29%)	27(16%)	1(13%)	1(3%)	72(100%)
Total	**134(31%)**	**192(44%)**	**86(20%)**	**13(3%)**	**7(2%)**	**432(100%)**

Source: Director of studies Questionnaires (2022).

Key.

EA: Extracurricular activities IEM: Internal examination measure

PR: Positive reinforcement AS: Admission score

AP: Admission policy ES: Examination scores

Table 4.10, shows that 31% of the directors of studies were of the view that the examination practices engaged by the teachers had a very high positive effect on the academic achievement of the learner. While 44% and 20% of the director of studies felt that the examination practices had a moderate positive effect and low positive effect respectively, on the academic achievement. However, 2% of the directors of studies opined that examination practices did not in any way affect the learners' academic achievement. As far as the individual examination practices were concerned; 42% of the directors of study felt that internal examinations had the highest positive effect on their academic achievement. This was closely followed by the examination scores at the primary school level closely at 31%.

4.5.3 Deputy principal's perceptions

This section presents the perceptions of the deputy principals with regard to the effect of examination practices on academic achievement. Details are as shown in table 4.11.

Table 4.11: Deputy principal's perceptions

Exam practices	**Perceptions**					
SN	H	M	L	N	NE	TOTAL
1. RAA	30(39%)	32(42%)	17(22%)	3(4%)	2(3%)	77(100%)
2. CM	20(26%)	27(35%)	20(26%)	5(26%)	2(3%)	77(100%)
3. EMS	20(26%)	29(32%)	22(29%)	4(13%)	3(4%)	77(100%)
4. IAA	24(31%)	27(35%)	17(22%)	3(4%)	2(3%)	77(100%)
5. EHE	22(29%)	28(23%)	20(26%)	3(14%)	2(3%)	77(100%)
6. TM	21(27%)	30 (39%)	19(24%)	4(6%)	3(4%)	77(100%)
7.CT	20(26%)	34(44%)	20(26%)	1(1%)	2(3%)	77(100%)
Total	**156(29%)**	**210(39%)**	**134(25%)**	**25(4%)**	**18(3%)**	**539(100%)**

Source: Deputy Principal's Questionnaires (2022)

Key.

RAA: Resources and academic achievement

CBM: Conveyor belt marking

EMS: Examination moderation system

EHE: Effective handling of exams

TM: Timely marking

CT: Competent teachers

Table 4.11, shows that 29% of the deputy principals were of the view that the examination practices applied by the teachers had a high positive effect on the

academic achievement of the student. On the other hand 39% and 25% of the deputy principals felt that the examination practices had a moderate positive effect and low positive effect respectively, on the academic achievement. Lastly, 3% of the deputy principals had the opinion that examination practices do not in any way affect the learners' academic achievement. As far as the individual teaching practices were concerned; 39% of the deputy principals were of the view that having enough examination resources had the highest positive effect on their academic achievement. While 31% of them felt that the proper invigilation was attributable to good academic performance.

4.5.3.1 Comparison of students, director of studies, and deputy principals perceptions

In this section a comparison of the perceptions of three different stakeholders namely; students, director of studies and deputy principals are as provided in table 4.12.

Table 4.12: Stakeholders' perceptions on the effect of examination practices

Stakeholders	**Perceptions**					
	H	M	L	NE	N	Total
Students	30%	43%	20%	4%	3%	100%
DOS	31%	44%	20%	3%	2%	100%
D/principals	29%	39%	25%	4%	3%	100%
average	29.977%	41.907%	21.782%	3.667%	2.667%	100.000%

Source: Students', Director of Studies', and Deputies' Questionnaires (2022)

From table 4.12 it was observed that 29 .977% of the stakeholders were of the view that the examination practices used by teachers had a high positive effect on the academic achievement of the student. While 41.907% and 21.782% of the stakeholders felt that the examination practices had a moderate positive effect and

low positive effect respectively on the academic achievement. Lastly, 3.667% of the stakeholders expressed that examination practices did not in any way affect the learners' academic achievement.

4.5.4 Principals' responses on the examination practices effect on academic achievement.

4.5.4.1 Internal examination policy

The principals were asked to enumerate what constitutes their schools' examination practice that is also known as the internal examination policy. The Figure 4.1, shows the various examination practices with regard to the effect of the different examination practices on academic achievement.

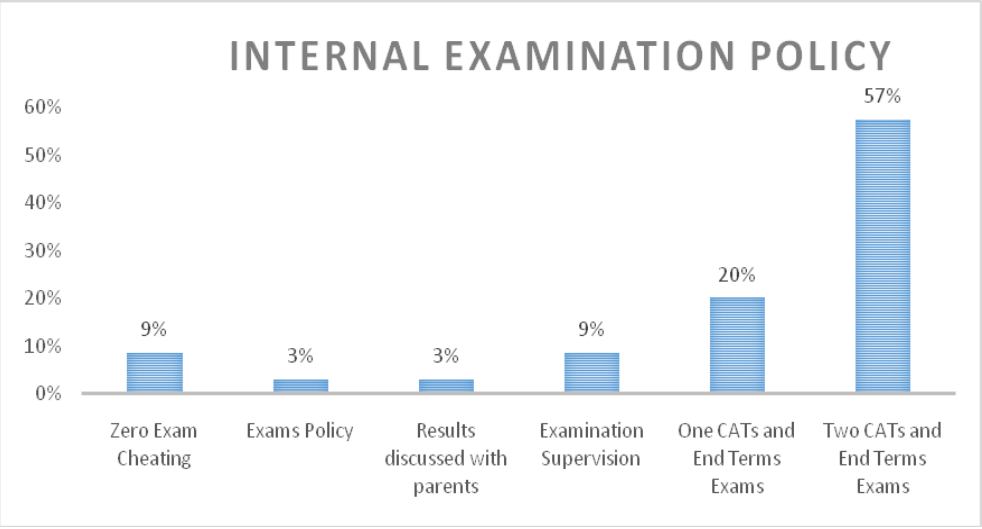

Figure 4.1: Internal examination policy

Source: Principals' interview schedule (2022)

Figure 4.1 shows that most schools undertook two continuous assessment tests and one end-term exam with a proportion of 57%. Also, the study established that other schools did one continuous assessment tests and one end-of-term exam, as indicated with a frequency of 20%.It was also established that 9% of the principals told of examination supervision and zero cheating in internal exams respectively, as part of the examination practice carried out in their schools. Principals' results showed that 3%, of them stated that having an exams' policy and discussed the results with parents respectively had an effect on academic achievement of the students. The higher the number of continuous assessment tests administered, the higher the probability of the learners' improved performance (Kyiv 2017). Moreover, the study revealed that other internal examination policies that the schools implement to ensure quality and standard are met include zero exam cheating and thorough examination supervision, as evidenced by a frequency of 9% respectively. The results supported those of Irira (2014), who claimed that without the implementation of determining factors (such as the setting of tests/exams, effective handling of tests/exams, effective invigilation of examinations, moderation of examinations, marking of students exams, and grading of scores), it may be impossible to successfully process the elements in inputs of managing examinations.

The schools were also keen on the strict examination policies and having the results discussed with parents, as evidenced by a proportion of 3%. The results corroborated those of a study on the educators' and students' perspectives by Mwebaza (2010), which found out that the adoption of the multiple continuous assessment methodologies was positively correlated with students' final test scores. Teachers can learn more about their own and their students' areas of improvement using evaluation tools. Student achievement could be raised with the use of such evaluation methods (Mutua, 2014). Students who were subjected to more frequent testing were more intrested in their academic success throughout the semester, as reported by Khalaf et al. (1992). Bangert-Drowns et al (1991), found that students benefited from frequent testing because it provided them with immediate feedback about their performance and gave them more time to address areas where they needed improvement.

The principals were asked about the relationship between internal examinations and KCSE. Their responses are shown in a pie chart in Figure 4.2.

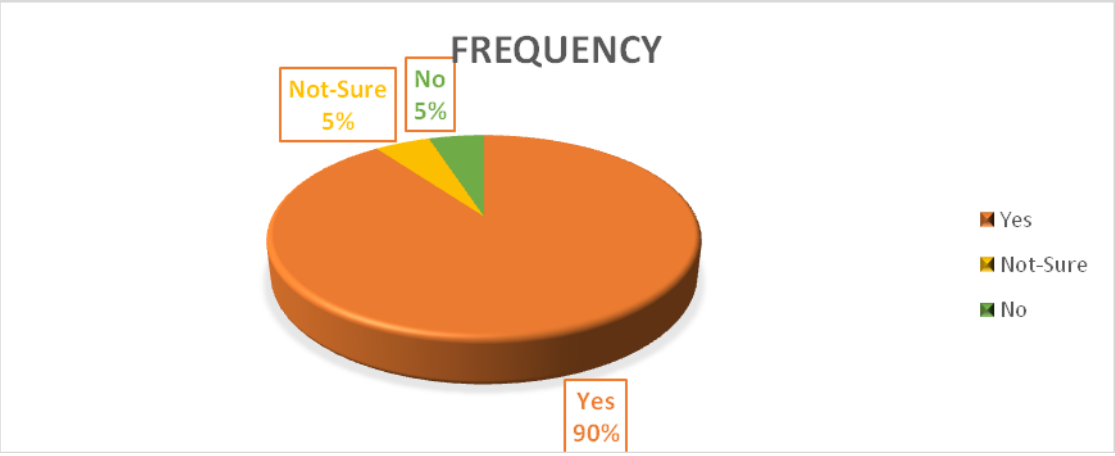

Figure 4.2: Correlations between Internal Exams and KCSE

Source: Principals' interview schedule (2022)

Figure 4.2, shows that (90%) of the principals were in agreement that there was a positive correlation between internal examinations and KCSE performance. These findings agreed with those of Laraib (2015), in a study that was conducted in Karachi to compare the students' scores between internal assessment and external assessments. Regarding internal assessment it was discovered that the consequently that the teachers within the school occasionally gave hints to students about the nature of the assessment, consequently the aim of assessment. A study by Ochieng (2012) found that internal examination scores directly predicted external examination scores. Ochieng's study pointed out that the scores in the fourth year of study were more predictive of the external scores, followed by scores in the third and second years. However, 5% of the principals were not sure whether the internal examinations reflected the actual marks at KCSE since they felt most students surpassed the grades they scored internally. An equivalent number of 5% reported that there was no correlation.

4.5.5 The null hypothesis testing

Ho_2 :There is no statistically significant difference in the education stakeholders perceptions on the School's examination practices on the academic achievement of public secondary schools in Kakamega County, Kenya.

The perceptions of form four 2022 cohort of students, director of studies and

To facilitate for the testing the above hypothesis the deputy principals, were subjected to a chi-square analysis.

4.5.5.1 A chi square analysis of students' perception on the effect of examination practices on academic achievement.

In this section the results of the chi-square test in students' perception on the effect of examination practices on academic achievement have been presented. The details are as shown in table 4.13.

Table 4.13: Chi-Square analysis of students' perceptions

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1405.375[a]	24	.001
Likelihood Ratio	1320.331	24	.000
N of Valid Cases	1784		

Source: SPSS Chi-square analysis (2022).

Table 4.13 shows the results of a chi square analysis for students' perceptions on the effect of examination practices on academic achievement. The analysis indicates that there was a significant difference in the students' perceptions on the effect of schools 'teaching practices and academic achievement with a p value of $p < 0.001$.This meant that the students perceived that the examination practices meted out in their schools were significantly different from each other with regard to their effect on academic achievement, That is, some of the examination practices were more effective than others in achieving good academic results.

4.5.5.2 A chi square analysis of the directors of studies' perceptions on effect of examination practices.

This section shows the inferential analysis results of director of studies perceptions on the effect of examination practices on academic achievement. Details are as shown in table 4.14.

Table 4.14: Chi-Square analysis of director of studies perceptions of examination practices

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	42.481[a]	20	.002
Likelihood Ratio	45.638	20	.001
N of Valid Cases	425		

Source: SPSS Chi-square analysis (2022).

Table 4.14 shows that there was a significant difference in the DOSs 'perceptions on the effect examination practices and academic achievement with the value of $p < 0.001$. The chi-square value for the DOSs meant that they perceived that the examination practices meted out in their schools had a high effect on the academic achievement of the students. The implication was that the DOSs perception on the effect of examination practices on students' academic achievement was high. However the chi-square value was lower than that of the students. It meant that the students perceived the effect of the examination practices was higher and highly had a positive effect than the DOSs.

4.5.5.3 A chi-square analysis on the deputy principals' perceptions on the effect of examination practices

In this section the results of the chi-square test in deputy principals' perception on the effect of examination practices on academic achievement have been presented. Details are as shown in table 4.15.

Table 4.15: Chi-Square analysis of deputy principals' perceptions

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.294[a]	24	.001
Likelihood Ratio	8.649	24	.000
N of Valid Cases	538		

Source: SPSS Chi-square analysis (2022)

Table 4.15 shows the deputy principals' perceptions on the effect of examination practices on the academic performance. It was established that there was a significant difference in the deputy principals' perceptions on the effect of examination and academic achievement with the p value of $p < 0.05$. This meant that the deputy principals perceived that the examination practices meted out in their schools had a high effect on the academic achievement of their students. The implication is that the deputy principal's perception on the effect of examination practices on students' academic achievement was high. However, the chi-square value was lower than that of the students and the DOSs. It meant that the students and the DOSs perceived the effect of the examination practices to be having a high positive effect than the deputy principals.

4.5.5.4 Chi-square values of the students, director of studies, and deputy principals.

This section shows the results of a chi-square analysis of the education stakeholders' perceptions on the effect of examination practices on academic achievement. Table 4.16 shows the details of the analysis.

Table 4.16: Chi square analysis of stakeholders' perceptions

	Value	**df**	**Asymptotic Significance (2-sided)**

Pearson Chi-Square	84.559[a]	16	.000
Likelihood Ratio	82.393	16	.000
N of Valid Cases	417		

Source: SPSS Chi-square analysis (2022)

Table 4.16 shows the stakeholders' perceptions on the effect of the examination practices on the academic achievement of the students in public schools of Kakamega County. According to the analysis, there was a significant difference in their perceptions on the effect of the teaching practices on academic achievement with the p value of p <0 .05. The null hypothesis was consequently rejected. The findings are in agreement with those of Ochieng (2012), whose study found out a significant correlation between the outcomes of internal summative exams and the outcomes of the public summative exams. The students' grades in mathematics were a strong indicator of their future success. Though the results of this findings differed with those of Makatiani et al (2017), whose study revealed that examinations oriented approach negatively affected pupils' learning achievement. They argued that, the examinations oriented model did not help school pupils to realize learning achievement as expected because it encouraged teachers merely concentrate on the impartation of knowledge through the traditional approaches that concentrated on theoretical skills. However the point of departure with Makatiani et al is that their study was carried out in primary schools. Generally primary schools are associated with the rote learning approaches whose main purpose is to enable pupils pass national examinations. The examination setup in primary schools was different from that of secondary schools. In primary schools the pupils have multiple choices questions while the examination questions in secondary schools range from recall to synthesis and evaluation. The finding of

the current study highlights the need for consistent and effective examination practices across all the schools. This is because discrepancies in stakeholder perceptions may lead to variations in the academic outcomes. The standardizing examination practices are crucial in ensuring fair and equitable academic performance throughout the county.

4.6 Education Stakeholders Perception on the Effect of Schools' Quality Control Practices on Academic Achievement in Secondary Schools in Kakamega County, Kenya.

The third objective sought to find out the education stakeholders' perceptions on the effect the quality control practices on academic achievement. The respondents were the principals and deputy principals. The quality control practices constituted of; checking professional records, lesson attendance, a conducive work environment and the feedback mechanism. The perceptions were rated on a 5 point likert scale as elaborated below.

1: No effect (N)

2: Negative effect (NE)

3: A low positive effect (L)

4: A moderate positive effect (M)

5: A high positive effect (H)

The details on the deputy principals' perceptions are as tabulated in table 4.17

Table 4.17: Deputy principals' perceptions on quality control practices.

Quality Control practices	**Perceptions**					
S.N	**H**	**M**	**L**	**NE**	**N**	**Total**

1.CPD	30(39%)	13(13%)	34(39%)	0(0%)	0(%)	77(100%)
2. TA	77(100%)	0	0	0	0	77(100%)
3. I	45(58%)	30(32%)	2(1%)	0	0	77(100%)
4.PMO	76(99%)	1(1%)	0	0	0	77(100%)
5. IE &KCSE	68(88%)	4(7%)	5(5%)	0	0	77(100%)
Total	**296(79%)**	**48(12%)**	**41(9%)**	**0**	**0**	**385(100%)**

Source: Deputy Principals' questionnaire (2022).

Key

CPD: Checking professional documents I: Incentives

TA : Timetable adherence IE: Internal exams

PMO: Planning, management, organization

Table 4.17 shows that 79% of the deputy principals were of the view that the quality control practices engaged by the teachers had a very high positive effect on the academic achievement of the learner. While 48% and 41% of the deputy principals felt that the quality control practices had a moderate positive effect and low positive effect respectively. As far as the individual control practices were concerned, 100% of the deputy principals felt that adherence to the timetable had the highest positive effect on academic achievement. While 99% of the deputy principals felt that proper management, planning and organizing has a high positive effect. In addition 58% of the deputy principals opined that incentives have a high positive effect on academic achievement. These findings corroborated those of a study by Mudassir et al (2015), who studied on the influence of school environment on the academic performance of secondary school students in Kuala Terengganu, Malaysia. In this study a regression analysis revealed that there was a

positive correlation between the schools' work environment and academic performance.

4.6.2 Principals' perceptions on Quality Control Practices

In this section the perceptions of the principals with regard to the effect of quality control practices on the academic achievement of their schools are presented. The details are as presented in figures 4.3 and 4.4

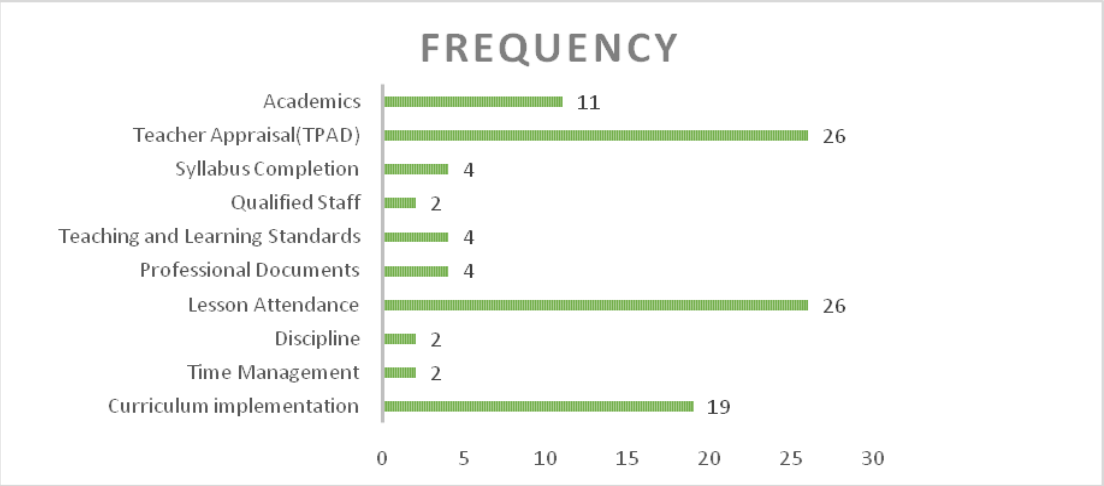

Figure 4.3: Quality and standards practices monitored

Source: Principals' interview schedule (2022).

According to figure 4.3, 26%of the principals were of the view that lesson attendance and teacher appraisal were critical elements of quality control in ensuring teaching. While 19% of them felt that the implementation of the curriculum was crucial in quality control.

Four percent (4%) of the principals reported that they were keen to ensure that the staff submit and update their professional documents, besides maintaining the

teaching and learning standards. These findings corroborated those of Mavindu (2013), who reported that 98% of principals in the Trans-Mara West District inspected the work records of their teachers and made sure that students kept to their timetables. Only 13% of educators reported that their classes had been watched. While neither educators nor the administrators said they had discussed or evaluated teaching plans afterward.

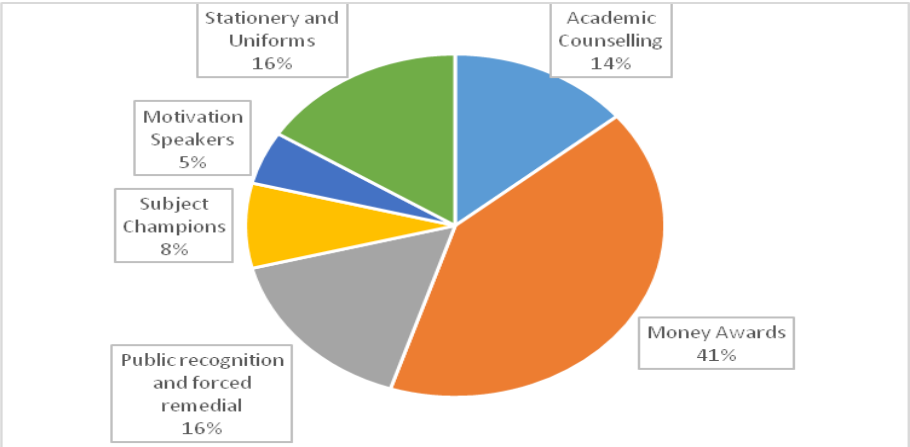

Figure 4.4: Reward and punishment policy

Source: Principals' interview schedule (2022).

Figure 4.4, shows that 41% of the school principals used money awards as a reward to the best-performing students, as evidenced by a proportion of 41%.On the other hand principals; 16% of the principals used public recognition, stationery and uniforms as a reward to the students. Schunk (2008), also found that students were more motivated when they were rewarded for their efforts in class. Students learned to link their good behavior with positive reinforcement from the teacher (Santrock, 2004). Based on a self-efficacy questionnaire, Isnadini and Rasmawan (2014), found that students had a high level of confidence in their abilities. It

demonstrates how kids with high self-efficacy will have better learning outcomes despite facing less challenges.

The learning process required both reward and punishment. Rather from being a form of torture meant to stifle individuality, Hamid (2006), argues that punishment was an educational endeavor meant to correct and direct students in the right way. In addition, Purwanto (2006), defined punishment as the intentional infliction of pain by an authority figure (e.g., parents or teachers) in response to an offence, crime, or mistake. The term “punishment” refers to a procedure in which an individual's response (wrong action or conduct) has consequences, as defined by Holth (2005). The frequency of the response drops not for any other reason than the response-consequence link. Lefrancois (2006), made a similar point, saying that punishment and reinforcement were equivalent in that both were decided by their effect. Punishment, on the other hand, entailed putting a stop to a behavior rather than encouraging it, which was the key distinction between the two.

Also, the study established that the respondents used public recognition and forced remedial and stationeries and uniforms to reward and punish the best and worst performers, respectively, as evidenced by a frequency of 16%. Moreover, the respondents stated that they used academic counselling as a policy to improve the performance of weak students, as evidenced by a frequency of 14%. In addition, the respondents reported keenness in identifying subject champions, as evidenced by 8% frequency. Finally, 5% of the respondents attributed the improvement in academic performance, to the invited motivational speakers, who they invited to their schools.

4.6.3Testing of the null hypothesis

$H0_3$ There is no statistically significant difference in the deputy principals perceptions on the effect of quality control practices on academic achievement of public secondary schools in Kakamega County, Kenya. To facilitate for testing the above hypothesis the perceptions of the deputy principals from the sampled schools were subjected to a chi-square analysis. The details of the results are shown in the table 4.18.

Table 4.18: Chi Square analysis of the deputy principals, perception.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.276[a]	16	.179
Likelihood Ratio	6.201	16	.185
N of Valid Cases	531		

Source: SPSS Chi-square analysis (2022)

Table 4.18 shows the chi-square test for deputy principals' perception. The results showed that there was no significant difference in the perceptions of the deputy principals on the effect quality control practices on academic achievement with a p value $p > 0.05$.Therefore the null hypothesis was not rejected. This implies that according to the deputy principals, the different quality control practices that are administered in public secondary schools are not attributable to the differences in the academic performance of their schools. The finding was against Adriana et al (2015), study findings on managerial practices and performance across six countries. They found that managerial practices at the school level were positively related to student outcomes in Italy. Learning in schools differed from what the

teachers were to do and what the learners could do. Therefore, learning involved the competencies learners can grasp and do by verifiable indicators (Amutabi, 2015).Learning was about learners and not teachers. Learning was about what the learners grasped by doing. This led us to competency-based learning and teaching, whose main aim was to ensure learners grasped the taught competencies. Orina and Omariba's (2017), study on the effect of the principal's leadership style on student achievement in secondary schools found similar results.

4.7 Relationship between KCPE Marks and KCSE Students' Performance in Secondary Schools

The fourth objective was to determine the relationship between the KCPE scores and KCSE scores of the students in a public secondary school in Kakamega County. Data was collected on the students 'scores at both the KCPE and KCSE levels. Ultimately ,the Pearson's' Product Moment Technique was applied to determine the relationship between the students' scores at the two levels of schooling .The details on the means of the students' performance at the two levels (KCSE and KCPE) have been tabulated in table 4.19.

Table 4.19: KCPE and KCSE mean scores of students

	Cohort1	Cohort 2	Cohort 3	Cohort 4	Cohort 5
KCPE	6.3503	6.202	6.4004	7.3157	7.1068
KCSE	5.3042	4.0960	4.3610	4.7474	5.1818

Source: Director of studies checklist list (2022)

Table 4.19, shows the means of cohort one that did their KCPE in 2015 and KCSE in 2018.Cohort two sat their KCPE in 2016 and their KCSE in 2019.Cohort three sat their KCPE in 2016 and their KCSE in 2020.Cohort four sat their KCPE in 2017 and then sat their KCSE in 2021.The fifth cohort sat there KCPE in 2018 and their KCSE in 2022.The results in table 4.19 reveal that there is a positive relationship in the KCPE and KCSE results.

4.7.1. Testing the null hypothesis

H_{04}:There is no statistically significant relationship between the KCPE and KCSE results of the students in public secondary schools in Kakamega County, Kenya.To facilitate the testing of the hypothesis, a correlation test was run between the KCPE and the KCSE results of the students who had successfully ,completed and exited the public seondary schools.The results of the correlation analysis are tabulated in table 4.20.

Table 4.20: Correlations between KCPE and KCSE student performance

		KCPE Entry Marks	KCSE Performance
KCPE Entry Marks	Pearson Correlation	1	.507**
	Sig. (2-tailed)		.000
	N	268	268
KCSE Performance	Pearson Correlation	.507**	1
	Sig. (2-tailed)	.000	
	N	268	268

Source: SPSS Pearson moment correlation (2022).

Table 4.20, reveals that there was a high positive significant relationship between the KCPE and KCSE performance of the students in public secondary schools in Kakamega County, with a p –value of P<0.05.This implies that the students who enroll in public secondary schools with good results in KCPE, are more likely to achieve better performance in KCSE. The findings of this study are in tandem with those of Karue and Amukowa (2013), who carried out a study that looked into the causes of low scores in the Kenya Certificate of Secondary Examinations in Embu District. The aforementioned study sought to determine the relationship between the K.C.P.E. score of students' at admission score in form I and their subsequent performance in K.SE after 4 years of study at the secondary schools in Embu district's. The findings revealed that the schools that admitted more students who scored well in the Kenya Certificate of Primary Education did better in the Kenya Certificate of Secondary Education. The descriptive statistics from the surveys of teachers and principals were in agreement with the results of this correlation study. The poor results of Embu District's day secondary schools was attributed to the selective admissions process. The admission process uses KCPE marks to place the primary school graduands to various strata of schools mentioned earlier; National,

Extra County, County and Sub County schools. The best performers are taken to the National schools, the next cadre of performers to the extra county schools, and the lowest performers are placed in sub county schools formerly known as district schools. This corroborates Agingu (2016), study that investigated the effectiveness of K.C.P.E. as a secondary school admissions assessment instrument. The purpose of the study was to examine the analytical validity of K.C.P.E. in terms of school differences, and the gender among the students in public secondary schools in Kisii central Sub-county, Kenya. The study incorporated K.C.P.E. scores from 2006 and also considered K.C.S.E. scores from the same students taken in 2010. The results showed that the K.C.P.E. and K.C.S.E. scores were highly correlated with one another ($r=0.693$; $n=1391$; $p <0.05$).The results showed that the K.C.P.E. scores were an acceptable predictor of the K.C.S.E. results across the gender, school type, and student body size.

Though the Kenya National Examinations Council (KNEC) exams are the same all over Kenya, including in the rural areas. The School-based evaluation needs to be standardized, before the current summative assessment at the conclusion of the secondary cycle can accurately reflect the students' abilities. Due to the scarcity of opportunities at the tertiary level of education, the current system of summative assessment has tended to put high premiums on examinations rather the inculcation development of skills and competencies in the learner (GOK).

4.8 The Principals' Perceptions on the Effect of Education Policies on Academic Achievements

The principals expressed their perceptions on the effect the education policies on academic achievements on a five point likert scale as elaborated below.

1: No effect (N)

2: A negative effect (NE)

3: A low positive effect (L)

4: A moderate positive effect (M)

5: A high positive effect (H)

The details on their perceptions are as presented in table 4.21.

Table 4.21: Principals' perceptions on government education policies.

Government policies	**Perceptions**					
	H	M	L	NE	N	Total
1. SE	60(90%)	4(6%)	3(3%)	0	0	67(100%)
2. LR	45(67%)	12(18%)	10(15%)	0	0	67(100%)
3. MIE	59(77%)	8(12%)	0	0	0	67(100%)
4. ABA	67(100%)	0	0	0	0	67(100%)
5. TP	67(100%)	0	0	0	0	67(100%)
6. PI	65(97%)	1(1%)	1(1%)	0	0	67(100%)
Total	**363(90%)**	**25(6%)**	**14(4%)**	**0**	**0**	**402(100%)**

Source: Principals' interview schedule (2022).

Key.

SE: Safe environment

LR: Learning resources

MIE: Monthly income and expenditure

ABA: Audited books of account

TP: Tendering process

PI: Procurement involvement

Table 4.21 shows that 90% of the principals were of the view that the education policies administered in their schools had a very high positive effect on the

academic achievement of the learner. While 25% and 14% of the respondents felt that the education policies had a moderate positive effect and low positive effect respectively.

As far as the individual education policies were concerned; 100% of the principals felt that having books of account audited at the end of each financial year and goods and services bought being subjected to a tendering process had the highest positive effect on their academic achievement. Stakeholders being involved in the procurement process closely followed at 97%.This findings are in agreement with a directive on public accounting and procurement procedures. The Public Procurement and Disposal Act (2015) underlined the need of competitive bidding for all products and services purchased by government agencies. Suppliers submitted bids for the opportunity to supply goods and services throughout the tendering process. The tender committee oversaw the entire bidding procedure.

The government in partnership with church world service in 2008 drafted the first edition of a safety standards manual that was a guide to the school managers on the safety of learners in their schools. The safety manual had guidelines on safety on school grounds, safety in physical infrastructure, health and hygiene safety , safety in school environment, food safety, safety against drug and substance abuse, teaching and learning environment ,socio-cultural environment of the school, safety of children with special needs/disabilities , safety against child abuse, transportation safety disaster risk reduction , school-community relations. Schools were instructed to form school safety committees that would assess the safety measures in schools and come up with mitigation measures that were given

timelines. The government also gave schools fire extinguishers and even trained some teachers on their use to help in keeping the schools safe from fires. The principals responded to complying with the governments' requirement on learners' safety.

4.8.1 Testing of the null hypothesis

Ho_5 There is no statistically significant difference in the principals' perceptions on the effect of education policies and academic achievement of public secondary schools in Kakamega County, Kenya.

The above hypothesis was tested using a chi-square analysis. The test was done at a significant level of 0.05.Table 4.22 shows the results in detail.

Table 4.22: Chi Square analysis on perceptions of principals

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.394[a]	20	.664
Likelihood Ratio	2.502	20	.644
N of Valid Cases	436		

Source: SPSS Chi-square analysis (2022).

Table 4.22 shows the results of the chi-square test for the principals 'perceptions that revealed no significant difference with a p value of p = 0.664.Therefore the null hypothesis was not rejected. This implies that according to the principals, the different government policies enforced in schools from the Ministry of Education and from the Teachers service commission are not attributable to the differences in the academic performance of the schools. This was because principals were obligated to adhere to the public procurement processes outlined by the ministry of education as outlined in the public procurement manual for schools and colleges when spending government funds or any other monies from other sources (GOK

2012).In addition every schools' finances were audited at the end of the fiscal year, as required by law (PPO, 2015).At the end of each year, parents were given a financial audited report compiled from weekly or monthly statements. In addition, this was sent to the Department of Education each year. The Education Act of 2012 required governing boards to oversee and control school spending.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the research findings as presented and discussed in chapter four. These are namely; summary of the study, the conclusions drawn, and the recommendations made from the findings.

5.2 Summary of the Study Findings

The purpose for this study was to determine the education stakeholders 'perceptions on the effect of quality and standards assessments on academic achievement in public secondary schools in Kakamega County. A summary of the findings of the study is outlined basing on the objectives.

5.2.1 Education stakeholders' perceptions on the effect of schools' teaching practices on academic achievement in secondary schools in Kakamega County, Kenya.

The first objective sought to determine education stakeholder's perceptions on the effect of schools' teaching practices on academic achievement of public secondary schools in Kakamega County, Kenya. The study data relating to this objective was analyzed using descriptive statistics and findings summarized.

From the findings, it emerged that 34% of the students were of the view that the teaching practices engaged by the teachers had a very high positive effect on the academic achievement of the learners. While 36% and 22% of the students felt that the teaching practices had a moderate positive effect and low positive effect respectively. Lastly, 3% of the students opined that teaching practices did not in

any way affect the learners' academic achievement. As far as the individual teaching practices were concerned; 38% of the students felt that group discussions had the highest positive effect on their academic achievement. While 37% of the students felt that the practical lessons had the highest positive effect.

Also the findings showed that 32% of the deputy principals were of the view that teaching practices engaged by teachers had a very high positive effect on the academic achievement of the learner while 31% and 30% of the deputy principals felt that the teaching practices had a moderate positive effect and low positive effect respectively on the academic achievement. Lastly, 5% of the deputy principals opined that teaching practices did not in any way affect the learners' academic achievement. As far as the individual teaching practices were concerned; 46% of the deputy principals felt that students discussing in groups had the highest positive effect on their academic achievement. The results indicated that there was a significant difference in their perceptions on the effect of schools' teaching practices with regard to the effect of the academic achievement with the p value $p < .001$.The null hypothesis was consequently rejected. This implied that that the students and deputy principals perceived differently, the effect of the teaching practices on academic achievement.

5.2.2 Education stakeholders' perceptions on the effect of examination practices on academic achievement in secondary schools in Kakamega County, Kenya

The second objective sought to determine the education stakeholders' perceptions on the examination practices done in public secondary schools of Kakamega

County. The second objective sought to determine the education stakeholders 'perceptions on the effect of examination practices on academic achievement. The following examination practices were taken as indicators in this study; availability of resources, conveyor belt marking, examination moderation systems, invigilation and administration of exams and timely marking of the exams .The results showed that that 30% of the students were of the view that the examination practices engaged by their teachers had a very high positive effect on the academic achievement of the learner. While 43% and 20% of the students felt that the examination practices had a moderate positive effect and low positive effect respectively on the academic achievement. Lastly, 3% of the students were of the opinion that the examination practices did not in any way affect the learners' academic achievement. As far as the individual examination practices were concerned; 93% of the students felt that supervision of their examinations had the highest positive effect on their academic achievement. While 75%of the students were of the opinion that the rewards and punishment accorded to them with regard to performance in class had a moderate effect on their overall academic achievement.

Additionally the results of the findings showed that 31% of the directors of studies were of the view that the examination practices engaged by the teachers had a very high positive effect on the academic achievement of the learner. While 44% and 20% of the director of studies felt that the examination practices had a moderate positive effect and low positive effect respectively, on the academic achievement. However, 2% of the directors of studies opined that examination practices did not

in any way affect the learners' academic achievement. As far as the individual examination practices were concerned; 42% of the directors of study felt that internal examinations had the highest positive effect on their academic achievement. This was closely followed by the examination scores at the primary school level closely at 31%.

Also the results of the findings showed that 29% of the deputy principals were of the view that the examination practices applied by the teachers had a high positive effect on the academic achievement of the student. On the other hand 39% and 25% of the deputy principals felt that the examination practices had a moderate positive effect and low positive effect respectively, on the academic achievement. Lastly, 3% of the deputy principals had the opinion that examination practices do not in any way affect the learners' academic achievement. As far as the individual teaching practices were concerned; 39% of the deputy principals were of the view that having enough examination resources had the highest positive effect on their academic achievement. While 31% of them felt that the proper invigilation was attributable to good academic performance. There was a significant difference in their perceptions on the effect of the teaching practices on academic achievement with the p value of $p < 0.05$. The null hypothesis was consequently rejected.

5.2.3 To determine the stake holders perceptions on the relationship between schools' quality control practices on academic achievement in secondary schools in Kakamega County, Kenya

The third objective set out to determine the stakeholders' perceptions on the effect of schools' quality and control practices on academic achievement in secondary schools in Kakamega County, Kenya. The specific indicators of quality control practices were checking of professional documents, timely lesson attendance, feedback mechanism and the effect of internal exams on KCSE.

The research findings showed that 79% of the deputy principals were of the view that the quality control practices engaged by the teachers had a very high positive effect on the academic achievement of the learner. While 48% and 41% of the deputy principals felt that the quality control practices had a moderate positive effect and low positive effect respectively. As far as the individual control practices were concerned, 100% of the deputy principals felt that adherence to the timetable had the highest positive effect on academic achievement. While 99% of the deputy principals felt that proper management, planning and organizing has a high positive effect. In addition 58% of the deputy principals opined that incentives have a high positive effect on academic achievement. Also the findings showed that 26% of the principals were of the view that lesson attendance and teacher appraisal were critical elements of quality control in ensuring teaching. While 19% of them felt that the implementation of the curriculum was crucial in quality control.

Four percent (4%) of the principals reported that they were keen to ensure that the staff submit and update their professional documents, besides maintaining the teaching and learning standards. These findings corroborated those of Mavindu (2013), who reported that 98% of principals in the Trans-Mara West District inspected the work records of their teachers and made sure that students kept to their timetables. Only 13% of educators reported that their classes had been watched. While neither educators nor the administrators said they had discussed or evaluated teaching plans afterward.

5.2.4 To Determine the Relationship between KCPE and KCSE scores in public Secondary Schools in Kakamega County, Kenya

The correlation analysis results revealed a positive and a strong significant positive relationship between KCPE and KCSE in secondary schools in Kakamega County, Kenya, at a p value $p<0.05$. This implied that KCPE and KCSE performance changed in the same direction as the hypothesis was rejected.

5.2.5 To Assess the relationship of government school policies on KCSE performance

The findings from the study showed that 90% of the principals were of the view that the education policies administered in their schools had a very high positive effect on the academic achievement of the learner. While 25% and 14% of the respondents felt that the education policies had a moderate positive effect and low positive effect respectively.

As far as the individual education policies were concerned; 100% of the principals felt that having books of account audited at the end of each financial year and

goods and services bought being subjected to a tendering process had the highest positive effect on their academic achievement. Stakeholders being involved in the procurement process closely followed at 97%. The results of the chi-square test for the principals 'perceptions that revealed no significant difference with a p value of p = 0.664.Therefore the null hypothesis was not rejected. This implied that according to the principals, the different government policies enforced in schools from the Ministry of Education and from the Teachers service commission are not attributable to the differences in the academic performance of the schools.

5.3 Conclusions of the Study

Based on the findings this study concludes that

1. There was a significant difference in the education stakeholders 'perceptions on the effect of the teaching practices on academic achievement of public secondary schools in Kakamega County.
2. There was a significant difference in the education stakeholders 'perceptions on the effect of the examination practices on academic achievement of public secondary schools in Kakamega County .
3. There was no significant difference in the education stakeholders 'perceptions on the effect of quality control practices on academic achievement of public secondary schools in Kakamega County.
4. There was a significant relationship in the education stakeholders 'perceptions on the effect of the KCPE and KCSE scores.

5. There was no significant difference in the education stakeholders 'perceptions on the effect of the government education policies on academic achievement of public secondary schools in Kakamega County.

5.4 Recommendations of the Study

The recommendations were drawn from the conclusions of this study;

5.4.1 Policy recommendations

This study makes the following recommendation on the basis of the conclusions that were drawn:

1. Some teaching practices that were perceived to enhance academic achievement should be used in public secondary schools of Kakamega County.
2. The examination practices that were perceived to improve academic achievement should be used in the public secondary schools of Kakamega County.
3. The quality control measures should be tailored to improve academic achievement of learners.
4. The learners with high KCPE marks should be made to work intelligently and score highly in KCSE .Value addition should be insisted.
5. A trained personnel should be employed in the school to monitor and report on the schools' internal quality and standards practices going on school

5.5 Suggestions for Further Studies

1. That further studies be done on the extent of effect of internal quality and standards assessments in secondary schools in Kakamega County.
2. Further studies should be done on internal quality and standards assessment in schools and value addition

3. The effect of internal quality and standards achievement on academic achievement of learners in all cadres of learning institutions.

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APPENDICES

Appendix I: Introduction Letter

VIOLET ODENDA NAMUHISA
EPM/H/01/52848/2018
P.O. BOX 9918 – 00100
KAKAMEGA
26TH JULY, 2021
The Principal
……. ……..
P.O. Box ……
Dear Sir/Madam,
RE: REQUEST TO CARRY OUT RESEARCH WITHIN YOUR ORGANIZATION

I do request to be allowed to carry out the above research within your organization. I am a Doctor of Philosophy Student in the Department of Educational Planning and Management (EPM) at Masinde Muliro University of Science and Technology -Student No.EPM/H/01/52848/2018. I am doing a research on education stakeholders' perceptions on the effect of internal quality and standards assessments on academic achievement of public secondary schools in Kakamega County, Kenya. This research is meant for purely academic purposes; however, evaluation results may be made public after the completion of the study for future researchers and other relevant stakeholders to guide them in their work.

Every care will be taken in the data collection procedure to ensure that it is within ethical limits.
Thank you in advance for your cooperation.

Yours sincerely,

VIOLET ODENDA NAMUHISA

Contact Details: +254721673380

violetnamuhisa@gmail.com

Appendix II: Questionnaire for Principal of public secondary schools in Kakamega County.

Instructions.

The purpose of this questionnaire is to collect information about your perception on the effect of internal quality and standards assessment on the academic achievement of public secondary schools in Kakamega County, Kenya. Please note that your answers will be used for the purpose of this study ONLY. Provide your information either ticking (v) the appropriate option or by writing in the blank spaces provided.

Section A

1.Indicate your gender Male [ ] Female [ ]

Highest level of education attained?

University Degree[ ] Post-Graduate Diploma [ ]

Master's Degree [ ] Diploma/College Certificate [ ] Doctorate Degree [ ]

Subject combination ……..

2.Number of years served with the public secondary school?

Less than 1 years [ ] 1 – 2 years [ ]

2 - 3 years [ ] Over 3 years [ ]

3.Type of the public secondary school?

National [ ] Extra-County [ ]

County [ ] Sub-County [ ]

4.Operation of the public secondary school?

Day School [ ] Boarding School [ ]

Both Day and Boarding School [ ]

5.Is it Boys', Girls' or a mixed public secondary school?

Boys Only [ ] Girls' Only [ ] Both Boys and Girls School [ ]

6.Which sub-county is your public secondary school located

……

……

……

7) What quality and standards practices do you monitor in your school?

……

……..……

……

8) Briefly explain the internal examination policy of your school?

……

……..……

……

9) What is the reward and punishment policy in your school regarding the academic performance?

……

……..……

……

10) Which other educational programs do you use on your students to improve their academic Performance?

……

……..……

……

11) Do your internal examination results reflect the KCSE results?

……

……

12) How does KCPE entry mark affect the KCSE performance of your students?

……

……

Section B

Government School Policies on KCSE Performance

Kindly indicate your level of agreement with the statements on schools' teaching practices by using the following scale of 5 points where: 1 = no effect, 2 = a negative effect, 3 = a low positive effect, 4 = a moderate positive effect and 5 = a high positive effect.

Government school Policies	5	4	3	2	1
1.Our school provides comfortable and safe learning environment					
2.facilities for teaching & learning Our school has access to the necessary learning resources & educational					
3.Our school ensures that financial management emphasizes transparency & information sharing among stakeholders through preparation of monthly & quarterly statement on income & expenditure					
4. school produces and provide the auditors with all books of account at the end of each financial year					
5.Our school ensures that all goods and services bought are subjected to a tendering process					
6.Our school involves all the relevant stakeholders in the procurement process					
7.Our school has access to adequate physical resources and good school facilities					

THANKS FOR YOUR PARTICIPATION

Appendix III:Questionnaire for Deputy Principal Research of public secondary schools in Kakamega county, Kenya,

The purpose of this questionnaire is to collect information about your perception on the role of internal quality and standards assessment on the academic achievement of public secondary schools in Kakamega County, Kenya .Please note that your answers will be used for the purpose of this study ONLY. Provide your information either ticking (v) the appropriate option or by writing in the blank spaces provided.

Section A: background information:

1. Indicate your gender

   Male [ ] Female [ ]

2. Highest level of education attained?

   University Degree[ ] Post-Graduate Diploma[ ] Doctorate [ ]

   Master's Degree [ ] Diploma/College Certificate [ ]

3. Number of years served with the public secondary school?

4. Less than 1 years [ ] 1 – 2 years [ ] 2 - 3 years [ ] Over 3 years [ ]

5. Type of the public secondary school?

   National[ ] Extra-County [ ]

   County [ ] Sub-County [ ]

6. Operation of the public secondary school?

   Day School[ ] Boarding School [ ]

   Both Day and Boarding School[ ]

7. Is it Boys', Girls' or a mixed public secondary school?

   Boys Only[ ] Girls' Only [ ]

   Both Boys and Girls School[ ]

8. Which sub-county is your public secondary school located.....

9. Subject combination ……..

Section B: Schools' Teaching Practices

Kindly indicate your level of agreement with the statements on schools' teaching practices by using the following scale of 5 points where: where: 1 = no effect, 2 = a negative effect, 3 = a low positive effect, 4 = a moderate positive effect and 5 = a high positive effect.

No.	**Teaching Practices**	**5**	**4**	**3**	**2**	**1**
1	Digital instruction					
2	Team teaching,					
3	Reflective teaching					
4	Group discussion					
5	Use varied teaching methods					
6	Engagement in practicals					
7	Question and answer method in teaching					

Section C: Academic Examination Practices

Kindly indicate your level of agreement with the statements on academic examination practices by using the following scale of 5 points where: where: 1 =

no effect, 2 = a negative effect, 3 = a low positive effect, 4 = a moderate positive effect and 5 = a high positive effect.

No.	Academic Examination Practices	5	4	3	2	1
1	We ensure that adequate resources are allocated for examinations management					
2	Our staff have embraced conveyor belt marking					
3	We ensure that we have in place internal and external moderation systems					
4	We ensure that our examinations are adequately invigilated					
5	We ensure that the tests are effectively handled and administered					
6	The marking of exams has to be professionally handled and within a specified time frame					
7	We ensure that those handling the exams are adequate, competent, trustful and qualified academic staffs					

Section D: School Quality and Control Practices

Kindly indicate your level of agreement with the statements on school quality and control practices effect on academic achievement, by using the following scale of 5 points where: where: 1 = no effect, 2 = a negative effect, 3 = a low positive effect, 4 = a moderate positive effect and 5 = a high positive effect.

No.	School Quality and Control Practices	5	4	3	2	1
1	We ensure that we check teachers' professional tools					
2	We ensure adherence to the timetable by our teaching staff					
3	We ensure that we provide conducive working climate and provide incentives for teaching and learning					
4	We ensure that the management of planning and organizing are properly carried out					
5	Our internal examinations scores usually predict the outcome of KCSE examination					

THANKS FOR YOUR PARTICIPATION

Appendix IV: Director of Studies Questionnaire

The purpose of this questionnaire is to collect information about your perception on the role of internal quality and standards assessment on the academic achievement of public secondary schools in Kakamega County, Kenya .Please note that your answers will be used for the purpose of this study ONLY. Provide your information either ticking (v) the appropriate option or by writing in the blank spaces provided.

Section A: Background Information:

1. Indicate your gender Male [ ] Female [ ]
2. Highest level of education attained?

   University Degree[ ] Post-Graduate Diploma [ ]

   Master's Degree [ ] Diploma/College Certificate [ ]
3. Number of years served with the public secondary school?

   Less than 1 years [ ] 1 – 2 years [ ] 2 - 3 years [ ] Over 3 years [ ]
4. Type of the public secondary school?

   National [ ] Extra-County [ ]

   County [ ] Sub-County [ ]
5. Operation of the public secondary school?

   Day School [ ] Boarding School [ ]

   Both Day and Boarding School [ ]
6. Is it Boys', Girls' or a mixed public secondary school?

   Boys Only [ ] Girls' Only [ ]

   Both Boys and Girls School [ ]

7. Which sub-county is your public secondary school located.....

8. Kindly provide information on KCPE and KCSE mean grade results of the students' admitted in the following years and their KCSE mean grades in subsequent years in the following years in their respective tables

Year	2015	2016	2017	2018	2019
School Mean Score KCSE					

Year	2012	2013	2014	2015	2016
School Mean Score KCPE entry mark					

Kindly indicate your level of agreement with the statements on Academic form one Entry and KCSE students results by using the following scale of 5 points where: where: 1 = no effect, 2 = a negative effect, 3 = a low positive effect, 4 = a moderate positive effect and 5 = a high positive effect.

No.	Schools examination practices	5	4	3	2	1
1	Our students well fulfills their roles in the educational setting in terms of the extra-curricular activities					
2	Our students are able to realize their potential through positive reinforcement					
3	We admit students as per the policies regulating student admissions					
4	We use examinations to measure the level of candidates' achievement.					
5	We have increased our students average admission score					
6	Our internal examinations scores are a true reflection of the scores got at KCSE					

Questionnaire for the Director of Studies Questionnaire in public secondary schools in Kakamega County

Kindly provide information on KCPE and KCSE mean grade results of the students' admitted in the following years and their KCSE mean grades in subsequent years:

S/NO	Code of Student	KCPE Grade (2016)	KCSE Grade (2019)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Internal evaluation scores for the above students

S/N	code of student	Form 1	Form 2	Form 3	Form 4
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

THANKS FOR YOUR PARTICIPATION

Appendix V: Questionnaire for students in public secondary schools in Kakamega County

The purpose of this questionnaire is to collect information about your perception on the role of internal quality and standards assessment on the academic achievement of public secondary schools in Kakamega County, Kenya .Please note that your answers will be used for the purpose of this study ONLY. Provide your information either ticking (v) the appropriate option or by writing in the blank spaces provided.

Section A: Background Information:

1.Indicate your gender Male [ ] Female [ ]

2.Type of the public secondary school?

National[ ] Extra-County [ ]

County [ ] Sub-County [ ]

3.Operation of the public secondary school?

Day School[ ] Boarding School [ ]

Both Day and Boarding School [ ]

4.Is it Boys', Girls' or a mixed public secondary school?

Boys Only[] Girls' Only [ ]

Both Boys and Girls School[ ]

5.Which sub-county is your public secondary school located.....

Section B: Schools' Teaching Practices

Kindly indicate your level of agreement with the following statements about teaching practices effect on academic achievement, in your school on a five point scale where: 1 = no effect, 2 = a negative effect, 3 = a low positive effect, 4 = a moderate positive effect and 5 = a high positive effect.

No.	Schools' Teaching Practices	5	4	3	2	1
1	Use of a digital instructional program.					
2	Implementation of team teaching					
3	.Prompt marking of examinations					
4	.Role of group discussion					
5	.Application of diverse teaching methods					
6	engagement in practical lessons					
7	.use of question and answer technique in teaching					

Section C: Academic Examination Practices

Kindly indicate your level of agreement with the following statements on examination practices effect on academic achievement, in your school on a five point scale where: 1 = no effect, 2 = a negative effect, 3 = a low positive effect, 4 = a moderate positive effect and 5 = a high positive effect.

No.	Examination Practices	5	4	3	2	1
1	Clearly printed tests					
2	Rewarded for Improvement and punished for dropping					
3	Exams are supervised					
4	Tests are marked					
5	The marking of our exams done within a specified time					
6	Qualified exam handlers					
7	The scores are an improvement primary school.					

THANKS FOR YOUR PARTICIPATION

Appendix VI KCPE and KCSE Mean Scores for Different Schools

Cohort 1		Cohort 2		Cohort 3		Cohort 4		Cohort 5	
KCPE	KCSE	KCPE	KCSE	KCPE	KCSE	KCPE	KCSE	KCPE	KCSE
2012	2015	2013	2016	2014	2017	2015	2018	2016	2019
4.6	5.7907	5.001	4.2982	4.001	3.6078	4.8	4.0309	5.2	3.45
8.5	7	4.68	5.12	8	5.02	8.32	7	8.12	6.7923
5.001	3.12	4.4	3.51	4.5	2.89	5.001	3.8	5.625	4.09
6.125	8.142	6.22	4.98	6.46	7.54	6.28	7.051	6.18	4.24
5.34	3.091	5.1	2.567	5.2	2.519	4.78	2.866	4.8	2.33
4.48	4.651	4.26	4.425	4	4.21	4.34	3	4.3	3.67
6.84	7.304	6.76	4.768	6.48	4.61	6	5.197	6.32	5.87
5.72	6.9	5.54	4.1	5.06	4.7	4.52	5.1	4.66	2.33
5.16	5.001	4.92	3.078	5.06	3.282	5.28	3.76	5.92	3.89
4.33	3.875	4.62	2.921	4.58	2.942	4.38	3.409	4.6	3.59
4.987	6.7636	4.13	3.089	5.023	4.95	6.78	4.68	6.576	4.357
4.543	6.4815	4.53	3.67	5.67	4.06	6.45	4.885	6.43	4.98
5.78	6.3273	5.32	3.442	5.88	4.11	6.007	4.97	6.78	4.23
5.131	6.431	5.77	3.9	5.33	3.33	6.21	4.25	6.17	4.032
5.99	5.8464	6.56	3.6	5.764	3.805	5.98	3.8009	6.89	4.075
4.38	5.3137	7.65	4.56	5.34	3.447	5.008	3.576	6.754	4.006
4.5	6.1562	8	4.89	5.56	3.908	6.773	4.3001	6.763	4.713
7.766	7.29	7.5	3.56	7.9	4.1	7.89	4.89	7.65	4.01
7.99	7.31	7.8	3.78	7.5	4.334	7.35	5.57	7.78	4.47
8.32	7.8	7.999	4.14	8	4.55	8.2	5.88	7.99	4.78
8.004	8.23	7.68	4.58	7.98	5.967	7.78	5.998	7.99	4.99
8.509	8.665	7.898	4.88	8.024	5.998	7.54	6.23	7.98	5.123
7.965	7.32	7	4.67	8	4.68	7.86	5.12	7.9	5.02
8	7.55	7.68	4.779	7.98	4.89	7.9	5.44	7.5	5.34
7.9	6.56	7.54	3.99	7.5	4.75	7.34	4.89	7.2	4.76
7.412	6.134	7.6	4.08	7.82	4.5	67	4	7.7	4.23
7.809	6.557	7.98	4.67	7.666	5.1	7.76	5.5	7	5.43

7.445	6.33	7.23	4.222	7.9	5.32	7.69	5	6	5.23
7.091	6.669	7.13	3.998	6.9	4.32	7	4.44	7.2	4.43
7.45	6.223	7.56	4.09	7.89	4.13	7.91	4.23	8	4.65
7.35	6.766	7.46	4.79	7	4	6.9	4.15	7	4.225
6.19	4.667	6.45	4.56	6.54	4.67	6.6	4.76	45	4.87
6.335	4.212	6.76	4.445	6.23	4.678	6.3	4.73	6.5	4.55
6.95	4.11	7.01	5.03	6.75	4.554	6.8	4.67	7.2	4.87
6.921	4.03	6.877	5.112	7.1	5.23	7.5	5.67	7.3	6.334
6.312	4.33	6.323	4.887	6.22	4.98	6.39	5.21	6	5.556
6.559	4.665	6.76	4.71	6.55	4.76	6.7	4.87	6.5	4.98
6.412	5.554	6.89	3.998	6.44	4.01	6.534	4.65	6.7	5.3
6.734	5.334	6.23	4.76	6.87	4.87	6.87	5.234	6.9	5.56
6.398	5.104	6.44	4.689	6.56	4.71	6.2	5.24	6	5.33
7.663	5.367	6.93	4.976	7.7	5.23	7.7	5.445	7.56	5.76
7.534	5.677	6.876	4	7.65	4.5	7.576	4.88	7.8	4.76
5.87	3.465	5.56	3.78	5.67	4.01	6	4.66	6.23	4.77
5.54	3.102	5.21	3.981	5.45	4.67	5.6	4.87	5.7	5.89
6.17	3.664	5.97	3.99	6.5	4.22	6.2	4.56	6.4	4.889
6.07	3.567	5.978	3.897	6	4.56	6.1	5.12	6.4	5.556
5.23	3.7344	4.978	3.992	5.5	4.334	5.4	4.67	5.56	5.559
5.798	3.722	5.45	3.421	5.87	4.35	5.6	4.69	5.73	5.31
5.567	3.341	5.664	3.67	5.77	4.44	5	4.76	5.8	4.556
5.34	3.664	5.134	3.09	5.43	3.45	5.7	3.33	5.4	3.789
5.435	3.714	5.034	3.76	5.12	3.73	5.5	3.86	5.56	3.887
5.667	3.855	5.367	3.665	5.78	3.45	5.8	3.52	5.67	3.775
5.899	4.332	5.557	3.54	5.66	3.67	5.7	3.84	5.87	3.987
5.334	4.577	5.224	3.577	5.61	3.678	5.6	3.8	5.557	3.897
5.332	4.12	5.113	3.978	5.45	4.32	5.7	4.56	5.44	4.675
5.553	4.234	5.559	3.997	6.55	4.34	6.8	4.53	6.71	4.345
5.334	4.12	5.002	3.234	5.56	3.45	5.6	6	5.76	5.991
6.778	4.56	5.56	3.197	6.98	3.35	7	5.442	7.1	5.5

7.112	5.211	6.687	4.89	7.2	5.345	7	4.34	7.5	4.631
7.331	5.344	6.998	4.48	7.5	5.12	7.558	5.556	7.76	5.773
5.886	4.223	6	4.78	5.9	4.97	6.2	5.32	6.24	5.113
6.889	4.667	6.1	4.012	6.99	4.89	7	5.1	6.9	5.37
6.223	4.995	5.78	4.13	6.54	4.23	6.7	4.56	6.6	64.744
6.884	5.89	6.912	4.32	6.9	4.56	6.98	4.85	7	4.77
6.993	5.231	6.53	3.998	7	4.44	6.98	4.89	7	4.776
5.998	4.776	5.56	3.302	5.89	4.132	6	4.798	6.23	4.871
6.887	4.134	6.775	3.997	7.13	4.443	7	4.667	7.2	4.887
6.765	5.552	5.445	4.278	6.9	3.99	7	4.556	6.98	4.812
6.772	5.336	6.665	3.675	6.7	3.554	6.8	4.887	6.86	4.91
6.89	5.376	6.54	4.79	6.8	4.59	6.9	4.776	7.1	34.514
4.9	3.4448	5.21	3.08	5.5	3.58	5.8	4.178	5.89	3.954

Appendix VII: Comparison of KCPE entry Marks and KCSE Exit Marks

KCPE MARKS	KCPE GRADE	KCSE GRADE	KCPE MARKS	KCPE GRADE	KCSE GRADE	KCPE MARKS	KCPE GRADE	KCSE GRADE
386	B+	B+	317	B-	C+	296	C+	C
345	B-	B+	353	B+	C	269	C	D+
372	B	B+	354	B+	C-	258	C	D+
363	B	B+	315	B-	D+	263	C	D+
344	B-	B+	303	B-	D	289	C+	D+
361	B	B+	311	B-	D	234	C	D
381	B	B+	311	B-	D	240	C	D-
396	B+	B+	388	B+	C+	242	C	D+
329	B-	B+	386	B+	C+	277	C+	C-
362	B	B+	315	B-	C+	274	C+	D+
372	B	B+	341	B	C+	250	C	D+
367	B	B+	325	B	C+	245	C-	D+
366	B	B	341	B	C+	262	C	D+
369	B	B	333	B	C	263	C	D+
334	B-	B	362	B	C	260	C	D
344	B-	B	352	B	C	249	C	D
390	B+	B	348	B	C	277	C	D
365	B	B	301	B-	C	276	C	D
327	B-	B	314	B-	C	247	C-	D
372	B	B	346	B	C	292	C+	D
347	B	B	344	B	C	265	C	D

357	B	B	340	B	C	280	C+	D
383	B+	B	324	B-	C-	262	C	D
345	B-	B	334	B-	C-	296	C+	D
337	B-	B	330	B-	C-	272	C	D
356	B	B	322	B-	C-	269	C	D
370	B	B	324	B-	C-	247	C-	D
373	B	B	351	B	C-	270	C	D
349	B-	B	361	B	C-	252	C	D
352	B	B	344	B	C-	283	C+	D
342	B-	B	316	B-	C-	240	C-	D
359	B	B	334	B-	C-	259	C	D
362	B	B	347	B	C-	262	C	D
381	B+	B	370	B	C-	263	C	D
342	B-	B	349	B	C-	280	C+	D-
334	B-	B	302	B-	D+	268	C	D
366	B	B	347	B	D+	264	C	D-
370	B	B	341	B	D+	268	C	D-
375	B	B	368	B	D+	252	C	D-
353	B	B	327	B-	D	250	C	D-
415	A	A-	345	B	C	236	C	D-
397	A-	B+	363	B	C+	259	C	D-
334	B-	B+	348	B-	C+	302	B-	D-
336	B-	B+	358	B	C+	258	C+	D-

342	B-	B+	352	B	C+	286	C+	D-
350	B	B+	364	B	C+	267	C+	D-
388	B+	B+	342	B-	C+	276	C+	D-
366	B	B+	343	B-	C+	227	C-	D-
361	B	B+	365	B	C+	242	C	D-
349	B-	B+	341	B-	C+	208	C-	D-
333	B-	B	337	B-	C+	256	C+	D-
382	B+	B	347	B-	C+	245	C	D-
364	B	B	345	B-	C+	254	C+	D-
351	B	B	369	B	C+	270	C+	D-
364	B	B	362	B	C+	268	C+	D-
383	B+	B	307	B-	C+	252	C+	D-
357	B	B	372	B	C+	257	C+	D-
355	B	B	363	B	C+	276	C+	D-
337	B-	B	384	B	C+	264	C+	D-
335	B-	B	345	B-	C+	268	C+	D-
354	B	B	328	B-	C+	272	C+	D-
382	B+	B	338	B-	C+	269	C+	D-
359	B	B	341	B-	C+	247	C	D-
378	B	B	342	B-	C+	283	C+	D-

Appendix VII Mean marks

Form 1(2016)		Form 2(2017)		Form 3(2018)		Form 4(2019)		KCSE (2019)
7.076		5.001		4,447		5.29		7.28
7.336		5.776		4.559		5.15		6.922
7.865		5.443		4.332		4.87		6.717
7,776		5.445		4.6321		4.68		6.354
5.776		5.321		4.38		3.19		5.565
7.118		5.223		3.645		4.346		4.021
6.99		4.886		3.712		4.517		5.76
6.556		4.331		4.0987		4.982		5.75
7.223		4.089		4.134		4.699		5.75
7.997		4.334		4.987		4.521		6.172
7.012		3.56		4.32		4.796		4.84
7.998		3.213		3.532		4.165		4.098
7.556		3.67		3.177		4.347		4.367
7.78		3.97		3.708		4.533		4.742
7.98		3.657		3.667		4.517		4.966
7.6887		3.87		3.566		4.346		4.021
7.476		3.987		3.978		4.982		5.945
7.009		4.013		4.645		4.969		5.88
6.534		4.013		4.165		3.929		5.798
6.34		3.876		4.743		3.88		5.701
6.123		3.45		4.089		3.77		4.968

6.345		3.678		4.142		3.769		4.86
6.432		3.664		4.31		3.66		4.785
6.335		4.008		3.89		3.561		4.721
6.998		4.1678		4.118		3.551		4.684
6.555		3.967		4.112		3.478		4.57
6.435		4.278		4.678		3.4		4.529
6.454		3.987		4.056		3.39		4.483
5.035		3.932		4.198		3.386		4.333
5.67		3.991		3.978		3.381		4.32
4.997		3.554		3.987		3.507		4.145
4.9663		3.882		3.997		3.467		4.065
4.859		3.337		3.5087		3.387		4.016
4.912		3.973		3,967		3.343		4.529
4.732		3.221		3.0117		3.3		3.88
4.212		3.102		3.476		3.272		3.87
4.553		3.443		3,432		3.25		3.885
4.887		3.554		3.297		3.361		3.818
4.55		3.773		3.087		3.25		3.81
4.314		3.332		3.198		3.23		3.758
4.223		3.126		2.956		3.089		3.737

Appendix IX: Performance of Students in KCSE Examinations from 2017 to 2019 in Kakamega County.

SUB-COUNTY	TOTAL	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	MS 19	MG	MS 18	MS 17	DEV
BUTERE	2472	1	21	70	130	201	243	312	350	340	495	279	27	5.0522	-	4.020313	3.66	1.031935
MUMIAS WEST	2595	0	19	95	126	203	228	272	362	351	449	454	36	4.8748	-	4.628	4.24	0.246759
KAKAMEGA CENTRAL	2275	3	27	67	101	118	152	226	325	395	462	366	27	4.6831		4.11	3.9543	0.57312
LIKUYANI	2693	3	11	41	101	161	204	315	442	493	519	327	39	4.6624	+	3.948561	3.557231	0.713883
KAKAMEGA EAST	3639	0	14	49	143	213	292	418	523	594	684	605	79	4.5734	-	4.091709	3.678398	0.481657
MATUNGU	2654	0	2	19	67	172	217	337	403	432	566	411	28	4.5404	+	4.103	3.993	0.437408
MUMIAS EAST	2150	0	3	22	55	103	152	262	331	443	475	286	9	4.4988	+	3.7871	4.1657	0.711733
KAKAMEGA SOUTH	2639	0	11	38	82	141	179	31	388	442	534	474	34	4.4715	+	3.648	4.133	0.823526
MATETE	1548	0	6	19	38	65	88	152	203	244	336	350	44	4.1353	+	3.718188	3.464107	0.417087
LUGARI	2733	0	5	23	63	118	140	278	350	401	609	648	101	4.0702	+	3.754304	3.354	0.315859
KAKAMEGA NORTH	3742	0	1	22	79	155	06	295	497	588	919	873	100	3.9716	+	3.994	3.289	-0.02238
NAVAKOLO	2535	0	0	17	49	100	149	198	292	460	577	618	60	3.9622	+	3.341096	3.224	0.621145
KHWESERO	1625	0	2	12	32	66	93	128	212	315	388	252	17	3.95177	+	3.866461	3.552248	0.085242
COUNTY	33299	7	122	494	1066	1816	2343	3504	4678	5498	7013	5943	601	4.4259	+	4.06828	3.795	0.357639

Source: Kakamega Regional Education Office(2020)

Appendix X: University Introduction Letter

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

Tel: 056-30870
Fax: 056-30153
E-mail: directordps@mmust.ac.ke
Website: www.mmust.ac.ke

P.O Box 190
Kakamega – 50100
Kenya

Directorate of Postgraduate Studies

Ref: MMU/COR: 509099

16th August, 2021

Violet Odenda Namuhisa,
EPM/H/01-52848/2018,
P.O. Box 190-50100,
KAKAMEGA.

Dear Ms. Namuhisa,

RE: APPROVAL OF PROPOSAL

I am pleased to inform you that the Directorate of Postgraduate Studies has considered and approved your Ph.D. proposal entitled: ***"Effect of School's Internal Quality and Standards Assessments on National Summative Examination Performance of Public Secondary Schools in Kakamega County, Kenya"*** and appointed the following as supervisors:

1. Prof. Judith Achoka - MMUST
2. Dr. Judah Ndiku - MMUST

You are required to submit through your supervisor(s) progress reports every three months to the Director Postgraduate Studies. Such reports should be copied to the following: Chairman, School of Education Graduate Studies Committee and Chairman, Educational Planning and Management Department. Kindly adhere to research ethics consideration in conducting research.

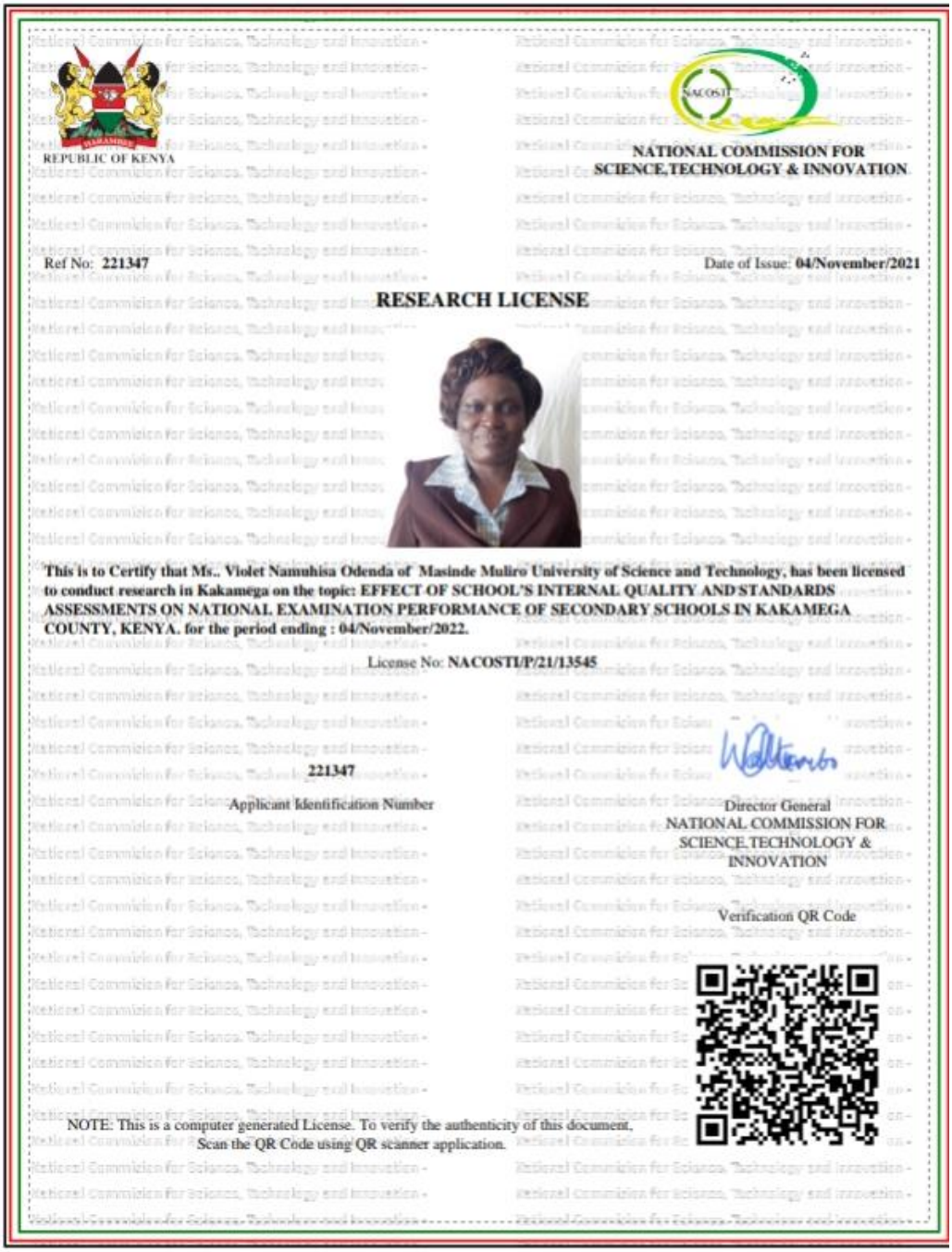
It is the policy and regulations of the University that you observe a deadline of three years from the date of registration to complete your Ph.D. thesis. Do not hesitate to consult this office in case of any problem encountered in the course of your work.

We wish you the best in your research and hope the study will make original contribution to knowledge.

Yours Sincerely,

Dr. Consalata Ngala
DIRECTOR, DIRECTORATE OF POSTGRADUATE STUDIES

Appendix XI: Research Permit



REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **221347**

Date of Issue: **04/November/2021**

RESEARCH LICENSE

This is to Certify that Ms.. Violet Namuhisa Odenda of Masinde Muliro University of Science and Technology, has been licensed to conduct research in Kakamega on the topic: EFFECT OF SCHOOL'S INTERNAL QUALITY AND STANDARDS ASSESSMENTS ON NATIONAL EXAMINATION PERFORMANCE OF SECONDARY SCHOOLS IN KAKAMEGA COUNTY, KENYA. for the period ending : 04/November/2022.

License No: **NACOSTI/P/21/13545**

221347

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

Appendix XII: Authorization Letter from Commission

TEACHERS SERVICE COMMISSION

Telephone: Kakamega
056 -
Email: cdirkakamega@tsc.go.ke
Web: www.tsc.go.ke
When replying please quote

Ref No.: TSC/373116/38

TSC COUNTY DIRECTOR
KAKAMEGA
P.O. BOX 2964-50100
KAKAMEGA

DATE: 8th November, 2021

Violet N. Odenda
TSC/373116

RE: PERMISSION TO VISIT SCHOOLS FOR RESEARCH PURPOSE

The bearer of this letter Violet N. Odendo ID No. 11470667 is hereby permitted to visit Secondary Schools in Kakamega County to collect data for a period of **6 months** up to **31st March 2022**. She is a student of Masinde Muliro University of Science & Technology undertaking a PhD, her topic of research is **"Effects of School Internal Quality and Standards Assessment on National Examination Performance of Secondary Schools in Kakamega County, Kenya"**.

Any assistance accorded to her is highly appreciated.

Nzuvu J. Nzioka
TSC COUNTY DIRECTOR
KAKAMEGA