

**COMPARATIVE STUDY ON THE IMPLEMENTATION OF QUALITY
EDUCATION IN PUBLIC AND PRIVATE PRIMARY SCHOOLS IN
KAKAMEGA COUNTY, KENYA**

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**A Thesis Submitted in Fulfillment of the Requirements for the Award of the Degree
of Doctor of Philosophy in Comparative and International Education of the
University of Nairobi.**

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DECLARATION

This thesis research is my original work and has not been presented to any other university for examination or award of any other degree.



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DEDICATION

This research is dedicated to my wife, sons, and parents

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ABBREVIATIONS AND ACRONYMS

ACER	Australian Council for Educational Research
ADEA	Association for the Development of Education in Africa
ALA	American Library Association
ASAL	Arid and Semi-Arid Lands
CBS	Central Bureau of Statistics
CDE	County Director of Education
DEO	District Education Office
DQAS	Directorate of Quality Assurance and Standards
EFA	Education for All
FPE	Free Primary Education
GMR	Global monitoring report
GOK	Government of Kenya
ICT	Information Communication Technologies
KANU	Kenya African National Union
KESSP	Kenya education sector support programme
KNBS	Kenya national bureau of statistics
KNEC	Kenya National Examination Council
MDGs	Millennium Development Goals
MOEST	Ministry Of Education Science and Technology
NACOSTI	National commission of science, research and innovations
NAEP	National Assessment of Educational Progress
NARC	National rainbow coalition

NCES	National Center for Education Statistics
OECD	Organization for economic co-operation and development
PSCR	Primary school completion rate
QASOs	Quality Assurance and Standards Officers
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Education Quality
SPHs	Subject Panel Heads
SPSS	Statistical package for social sciences
SSA	Sub-Saharan Africa
TSC	Teachers' Service Commission.
UN	United Nations
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UNICEF	United Nations Children Education Fund
UPE	Universal Primary Education
VIF	Variance Inflationary Factor

ABSTRACT

The study investigated implementation of quality education in public and private primary schools of Kakamega County, Kenya. Though Kenya domesticated international protocols on free and quality primary education, there was a public outcry over the quality of education offered. The study identified six research objectives and six hypotheses that guided data collection and analysis. The review of related literature covered five themes, namely: school physical facilities; instructional materials; curriculum supervision; teachers' characteristics and learners' characteristics that addressed objectives of the study. The relevant literature also included an overview of quality education and benchmarks for quality of education. From the literature review, knowledge gaps specified indicated that the comparative studies on quality education in public and private primary schools had not been conducted. This study used the mixed method design involving quantitative and qualitative research. The target population for the study was 600 public primary schools and 200 private primary schools. With the entire study population of 536,594, out of which 816 respondents from 36 public and 12 private primary schools were sampled at random. The sample incorporated head teachers, teachers, and pupils. The researcher collected data through questionnaires and observation schedules. A pilot study was carried out in three schools that were randomly selected and had not been included in the sample. The pilot study evaluated the validity and reliability of the instruments. The collected data were coded thematically and then analyzed both quantitatively and qualitatively. The Cronbach's alpha tested reliability at the coefficient of 0.67. The Collinearity Statistical test was also used to determine the correlation of variable. Frequency and regression analysis was done with the use of SPSS software program. It was summarized in frequency tables, percentages, and model summaries. Hypotheses were tested through regression using the 0.05 or 5 percent level of significance. The analysis and findings of hypotheses H₁, H₂, H₃, H₄, and H₅ revealed that individual variety of physical facilities, instructional materials, curriculum supervision, teacher characteristics and learner characteristics partially predicted implementation of quality education in primary schools. The study concluded that private primary schools had adequate and well-maintained physical facilities as opposed to public primary schools. The percentage of adequacy of instructional materials was higher in private primary schools than in public primary schools. In addition, public primary schools experienced large class sizes while private primary schools had small class sizes. The rate of pupils' school attendance was higher in private primary schools than in public primary schools. The study recommended development of a policy on school attendance. The study further recommended that a tracer study be conducted to examine the extent which institutional administration influence implementation of quality education in public and private primary schools. In addition, a study on related factor of the parents' characteristics on the influence of quality education in public and private primary schools should be conducted

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

According to studies conducted by Schultz (1961), there was a direct link between the learning competencies and economic growth of a country. Education, therefore, reduced poverty by mitigating its effects on production and development. This was due to its positive impact on economic growth and development. Subsequently, the global communities prioritized education as a prerequisite for investment. In this regard, education was considered crucial for human development. In spite of this, investment in education at primary school level formed the basis for more productive labor force by promoting literacy and numeracy. As a result, United Nations (UN) had to establish structures that entailed the expansion of education opportunities to encompass all citizens globally. It was done through the education for All (EFA) initiative. The quality education to be acquired was expected to equip children with skills and attitudes, which enabled them, tackle contemporary problems.

However, as revealed by Samoff (2005) and O'sullivan (2006), societies full of diversity, ideologies, and opinions perceived quality education differently. Subsequently, communities all over the world had various approaches in relation to way quality education is conceptualized. This study, therefore, investigated quality education in Kenyan primary schools in line with the country's vision 2030. The study focused on quality as envisaged in Universal Primary education (UPE), EFA, Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs). The aspect of

quality was based on the definition of quality as advanced by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and United Nations Children Education Fund (UNICEF). UNICEF (2000) and UNESCO (2002) refer to quality education as an adjustment of learning processes that ensure excellence in achievement of competencies by learners. The competencies achieved are actualized through literacy, numeracy, and essential life skills. According to UNESCO (2005), quality education is manifested in five dimensions of learners' characteristics; teachers' characteristics; teaching and learning processes; facilitating inputs; and outcomes of the learning process. This is reflected in Figure 1.1 as developed by Tikly (2010)

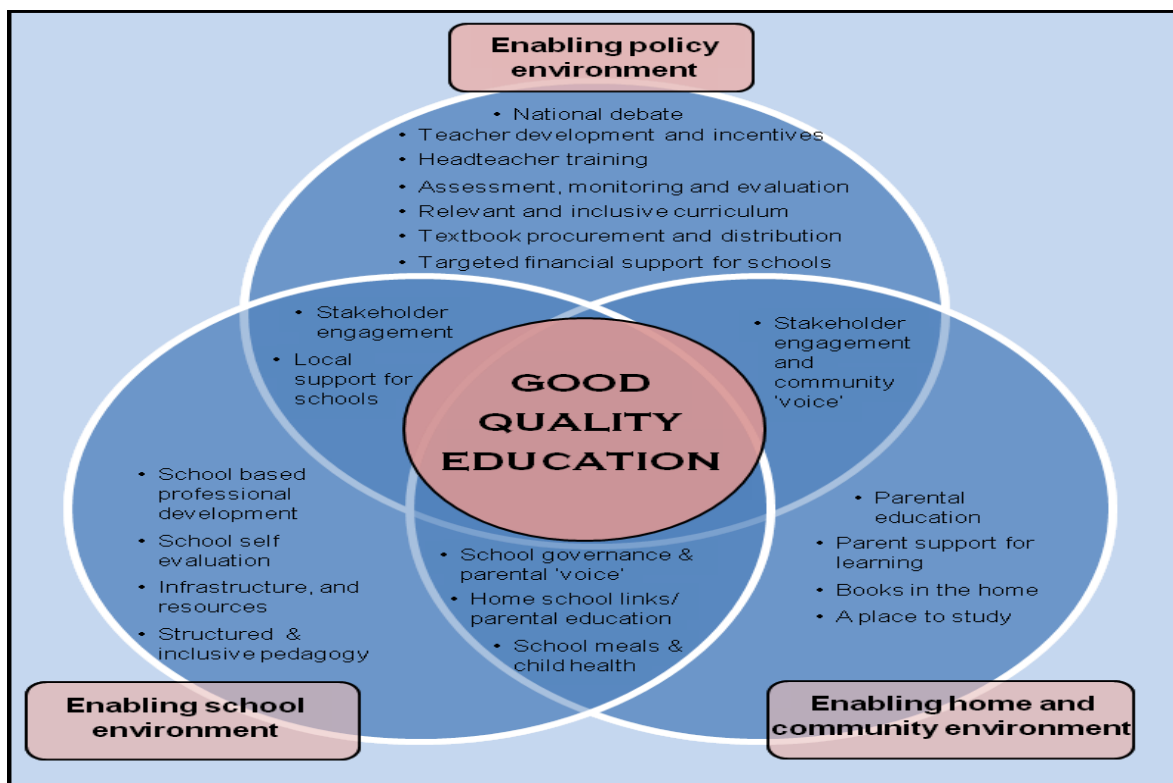


Figure 1.1: Tikly 2010, Model of Good quality education

The dimension of learners' characteristics include characteristics of the learners and their households that influence the effectiveness of the educational process. The teaching and

learning process encompass pedagogical approaches and assessment methods. Facilitating inputs includes infrastructure and equipment, teachers, QASOs and instructional materials. These factors influence the outcome of teaching and learning processes. Outcomes of the learning process are expressed in the results of the teaching and learning processes in terms of achievement of literacy and numeracy skills, life skills, creativity and values that impact on societal development.

Quality, therefore, referred to the availability of the environments that recognized the linkage of a learning experience. This was in concurrence with Buckland (2004), Paola & Brunello (2016), UNESCO (2011) and UNICEF (2007) when they revealed that conducive environments contributed to acquisition of skills and attitudes that were crucial in upholding human rights. In this context, quality education refers to student learning achievements, which are as a result of facilitating of its inputs (students, teachers, facilities and supplies). Parents' school choice was therefore based on perceptions that quality education was being offered in that particular school.

According to Watkins (2006), students in public schools performed better than their counterparts in private schools. This implied that student learning achievement was higher in these schools. However, Lubienski, (2006), in a study conducted by National Assessment of Educational Progress (NAEP) stated that private schools performed better than public schools. The findings were based on the performance in national examinations. The same case applies to Kenya where it is viewed that private primary schools perform better than public primary schools due to good results in national examinations.

In addition to human capital, Buckland (2004) noted that knowledge was essential in the event of liberal ideas. It was also influential in nation building and promoted political indoctrination. In spite of this, the school had a positive influence on aspects of the conflict that contribute to peacebuilding. In light of this, UN Secretary-General (2009) emphasized the role that education played in establishing security, political processes, and peace. UNICEF (2011) collaborated this when it noted that Education was crucial in conflict resolution as it provided knowledge and skills for protection and values for prevention of the conflict itself. In spite of this, UNESCO (2011) noted that Education played a significant role in providing amnesties and forgiveness. According to UN (2013), the critical role played by Education led to its declaration as a human right in 1948 by United Nations (UN) general assembly.

The UN general assembly of 1948 advocated for free and compulsory basic Education for all children. The basic Education included primary and secondary education. This Education was to equip an individual with knowledge and skills for economic sufficiency. In light of this, the global community signed international conventions (Dakar, 2000; Jomtien1990; MDGs, 2000). These instruments enabled achievement of UPE and ensured entrenchment of quality in education. Subsequently, the World Bank and the entire global community started funding primary Education for achieving quality education. According to Glick and Sahn (2006) since parents were yearning for quality education, they had options of either public or private schools that entrenched quality education.

Subsequently, Wedgwood (2007) noted that private schools mushroomed due to parents' lack of faith in public schools. In spite of this, Desai (2010) revealed that parents with

poor economic background admitted their children to public primary schools. However, parents who chose private schools were educated and had a good economic background. Private schools were therefore an alternative for parents who were not happy with public schools. Subsequently, social stratification influenced public and private school choices.

Therefore, socioeconomic and demographic characteristics of parents influenced the type of school parents to choose for their children. According to Mackatiani (2008), several levels of implementation of policy issues in public schools led to inefficiency as opposed a single level of implementation in private schools. In spite of this, Organization for Economic Co-operation and Development (OECD) in 2012 noted that that private involvement in school management led to efficiency in Education.

According to Elder and Jepsen (2014), private Catholic schools performed better than public schools. In this respect, parents chose private primary schools due to the accessibility of quality education. Hence, parents were concerned that their children should be helped to realize their potentials. Nevertheless, whether schools are functioning efficiently or whether pupils are learning in these schools is another matter. As a result, researchers and educationists worldwide have been motivated to examine the issue of quality in primary education. According to UNESCO (2015), the Global Monitoring Report (GMR) in the developing world, there was still the poor quality of education at the primary school level. In light of this, learners completed the fundamental level of education without the attainment of the necessary skills.

According to Encyclopedia of Business (2010), which quality is customers' expectations of the products and services being offered. Educational excellence was, therefore, judged

concerning processes involved in a school setting. In spite of this, Krueger (1998) revealed that quality education occurred in small class sizes of 13 to 20 pupils. The Lewis et al. (1999) concurred with the findings when they noted that large numbers of inadequate teachers negatively influenced quality education. According to United States of America (USA) Department of education (1991), curriculum monitoring promoted the existence of quality education. It was, therefore, noted that globally, there were concerns about quality education.

African governments had to enact Free Primary Education (FPE) policies for realization of access in education. However, according to Sifuna and Sawamura (2008), good quality education was an important means of achieving many of the other development goals. In spite of this, the focus on getting African children into schools expanded as the quality of their learning experience improved. Despite this, Association for the Development of Education in Africa (ADEA), 2005 noted that in Africa, realization of learning competencies was at stake. In light of this, learners did not attain literacy and numeracy skills on completion of primary education. Although FPE policies in Africa contributed significantly to access in primary education, there is increasing deterioration of the quality of primary education. World Bank (2007) noted that Sub Saharan Africa (SSA) had a population of 740 million people and a fast increasing number of public and private primary education institutions.

The study further revealed that she had the highest gross enrolment ratio in the world. In spite of this, greater attention was to be paid to issues of quality at the primary level. According to Anderson, (2002), teaching was crucial in the intervening of the learning process in order to raise the learning achievement of children in Africa. In light of this,

Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ), 2004 revealed that there was low learners' achievement in primary schools in Africa. Besides, Sifuna and Sawamura (2008) noted that physical facilities and instructional materials impeded educational quality in SSA. This was inconsistent with Glick and Sahn (2006) who further noted that the availability of resources negatively affected public schooling choice. In light of this, the distribution of resources affected the school choice by parents.

Subsequently, parents opted for private schooling where it was perceived that resources were adequate and there was no inefficiency. In spite of this, the World Bank (2012) noted that the Primary School Completion Rate (PSCR) in SSA stood at 67 percent by 2009. The study also revealed that the transition rate of pupils from primary education to secondary education stood at 33 percent. Subsequently, there was wastage at primary school level. Besides, various studies from SSA (Mtika and Gates 2010); Robinson (2003) and Schweisfurth (2002) revealed that learner-centered approaches were not being used in Malawi, South Africa, and the Gambia. SSA, therefore, became conscious of the need for adequate quality assurance and quality improvement in primary schools. Thus, as in developed countries, private schools outshine public schools in developing countries. This was consistent with Tooley et al. (2005) who revealed that in Nigeria, the quality of education was higher in private schools as opposed to their counter public schools.

Kenya, like any other country in SSA, was committed to the provision of quality primary Education through the signing of international legal instruments. To redress the issue of quality education, the Children Act and the Basic education Act were enacted by

parliament in 2001 and 2013 respectively while the Constitution of Kenya was promulgated in 2010. These legal instruments incorporated quality education. Following the re-introduction of FPE in Kenya in 2003, the primary school enrolment improved.

According to Kenya national bureau of statistics (KNBS), 2016, there was a rise in public primary school enrolment from 6,062,700 pupils in 2002 to 10,090,800 in 2015. This increase of 66 percent in enrollment had implications for resources in public primary schools. In spite of this high enrollment, the pupils to teacher ratio had to rise from 35:1 to 54:1. This was consistent with UNICEF (2014) which noted that PTR in Kenyan public schools stood at 42:1 while in private primary schools it was 19:1. Besides, there was an acute shortage of physical facilities and instructional materials. The pupil-resource ratio was high. Consequently, learning achievement was not realized. Therefore, quality education in public primary schools was compromised. Though the Constitution of Kenya (2010) and the Basic Education Act (2013) had provisions for free and compulsory education, they were silent on the enhancement of quality education in schools.

However, the Government of Kenya (GOK), 2005 only made inferences regarding steps to be taken to improve the quality of primary education. According to MoEST (2003), issues that affected quality education were discussed and addressed in Sessional Paper no. 1 of 2005 on Education, training, and research was enacted by parliament (The Republic of Kenya, 2005). Subsequently, the MoEST had to establish the Kenya Education Sector Support Program (KESSP). Through KESSP, resources were mobilized to promote quality education. The Ministry of Education had to set benchmarks to be adhered to achieve quality education. The parameters were set concerning physical

facilities, instructional materials, curriculum supervision, pupils' enrollment and deployment of teachers. The benchmarks were to ensure that quality assurance was observed in public and private primary schools.

Despite these efforts, quality education faced challenges of learners' characteristics; teachers' characteristics; teaching and learning processes; and facilitating inputs. According to UNESCO and GOK (2004), there was inadequate provision of facilitating inputs; and teaching and learning processes that contributed to poor learning achievement. Besides, SACMEQ (2007) and UNICEF (2008) noted that facilitating inputs did not match the high enrollment of pupils. In addition, Kenya National Examinations Council (KNEC) (2010), revealed that most teachers did not attend in-service courses.

Subsequently, SACMEQ (2004), observed that Kenya had disparities in the provision of physical facilities, instructional material and deployment of teachers due to high pupils' enrollment. As a result, many parents expressed worries about the declining quality of education in public primary schools. Some parents transferred their children from public to private schools. In light of this, MoEST (2014) concurred with the finding when it noted that from 2006-2010, the number of private primary schools was higher than public primary schools. The findings were reflected in Table 1.1

Table 1.1 Public and Private Primary schools from 2006 to 2010

	2006	2007	2008	2009	2010
Public schools	10,058	11,100	11,225	11,584	11,800
Private schools	22,480	23,595	26,234	27,268	27,334

Source: MoEST (2014)

From Table 1.1 above, there was a high increase of private primary schools compared to public primary schools in Kenya. This was in concurrence with Central Bureau of Statistics (CBS), 2006 which noted that the number of private primary schools increased by 38 percent, while the rise in public schools compared was 1.6 percent. Due to the high enrolment, public primary schools had an acute shortage of teachers. In spite of this, classrooms were generally congested and there was hardly any space for movement. In addition, UNICEF (2008), noted that there was understaffing of teachers in most public schools. Subsequently, most public schools encountered large classes that teachers could not comfortably handle.

The public schools, therefore, lacked adequate classrooms. In light of this, parents started enrolling their children in private primary schools due to parents' concern over quality education. In spite of this, GOK (2004) revealed that private primary schools increased by 4.6 percent due to the re-introduction of FPE in 2003. Parents, therefore, opted for private school Education due to overcrowded public primary schools and high pupil/teacher ratio in public schools. According to Uwezo (2011), the level of learning achievements of public primary school pupils was of low standards. Poor outcomes of learning were due to indicators are driven by pressure from inputs. The foreseen trends would be the same when surveyed in Kakamega County.

According to County Education Office (CEO), Kakamega (2015), 492,940 pupils enrolled in public primary schools. However, the total number of teachers in service was 9767. This translated to teacher/pupil ratio of 1:50 in public primary schools while the proportion of pupils to teachers in private primary schools stood at 1:30. The recommended teacher/pupil ratio is 1:40. Consequently the ratio was high in public

primary schools while it was lower in private primary schools. Subsequently, the parents opted for private primary schools where they perceived enrolment was low and educational resources were not wasted.

In light of this, Education stakeholders shifted their focus from education access to quality education in primary schools. Attention focused on measures that improved learning and ensured acquisition of the necessary learning competencies. However, taking cognizance of the many factors that influence implementation of quality education in primary schools, this study focused on the availability of physical facilities, adequacy of instructional materials, the influence of curriculum supervision, the importance of teacher characteristics and impact of learner characteristics.

1.2 Statement of the problem

In light of the background information, there was evidence that implementation of quality education in primary schools was crucial. In Kenya, primary education as a condition for entry to secondary school education led to the expansion of primary school education. The need for this study arose due to the success increase of access by learners in both public and private primary schools. Despite this, there seemed to be a disconnection between increased accessibility and acquisition of quality education in both public and private primary schools. It is often perceived by many stakeholders that success in education attained is based on increased enrolment. Learners are considered to benefit from the education they are pursuing if only they get quality education. However, there appears to be disparities in the provision of physical facilities, instructional material and deployment of teachers due to high pupils' enrollment. Subsequently, there is public

outry on the extent of students' learning achievements in public primary schools vis-à-vis private primary schools.

1.3 Purpose of study

The purpose of this study was to investigate factors that influenced the implementation of quality education in public and private primary schools in Kakamega County, Kenya.

1.4 Objectives of study

The following objectives guided the study:

- i.** To determine the influence of physical facilities on the implementation of quality education in public and private primary schools in Kakamega County.
- ii.** To establish the influence of instructional materials on the implementation of quality education in public and private primary schools in Kakamega County.
- iii.** To determine the influence of curriculum supervision on the implementation of quality education in public and private primary schools in Kakamega County.
- iv.** To establish the influence of teacher characteristics on the implementation of quality education in public and private primary schools in Kakamega County.
- v.** To determine the influence of learner characteristics on the implementation of quality education in public and private primary schools in Kakamega County.
- vi.** To establish the influence of combined factors physical facilities, instructional materials, curriculum supervision, teachers' characteristics and learners' characteristics on the implementation of quality education in public and private

primary schools in Kakamega County.

1.5 Research Hypotheses

The study tested the following null hypotheses:

Hypothesis H₁: School physical facilities do not significantly influence the implementation of quality education in public and private primary schools.

Hypothesis H₂: Instructional materials do not significantly influence the implementation of quality education in public and private primary schools

Hypothesis H₃: Curriculum supervision does not significantly influence the implementation of quality education in public and private primary schools.

Hypothesis H₄: Teacher characteristics do not significantly influence the implementation of quality education in public and private primary schools.

Hypothesis H₅: Learner characteristics do not significantly influence the implementation of quality education in public and private primary schools.

Hypothesis H₆: Combined factors physical facilities, instructional materials, curriculum supervision, teachers' characteristics and learners' characteristics do not significantly influence implementation of quality education in public and private primary schools.

1.6 Significance of the study

Over the last fifteen years since the re-introduction of FPE in Kenya, the government heavily invested in primary school education. The considerable investment has not been

commemorated with quality in education due to various challenges. The challenges arose due to strained resources and processes that affected quality education. The study is therefore significant to multiple education stakeholders as: The study findings provided information on quality education. The findings would remove misconception on quality education as passing of public examinations. Misconceived perceptions of quality education in public vis-à-vis in private schools would be eliminated. Parents would, therefore, make proper school choices for their children.

The study findings were likely to draw the attention of the technocrats and focus on the weak areas concerning the implementation of quality education in public and private primary schools. The findings of the study might be significant to policy planners in the formulation of educational policies on the provision, improvement, designing, implementing and monitoring of quality primary education.

Findings from this study also provided suggestions for quality assurance to be shared with education stakeholders. The education policy implementers would use the results to incorporate available inputs and processes in the education sector to achieve quality education in public primary schools. Supervision and teaching as processes would be adopted to promote quality primary education. The findings on effective supervision of schools might guide Quality Assurance and Standards Officers (QASOs). Teachers, too, would redress their weaknesses by adopting learner-centered approaches for the active promotion of quality education in primary schools.

This thesis is a body of knowledge. The findings of this study would add value to the existing research knowledge and literature on quality of education in primary schools.

The results might be of interest to researchers in educational policy studies and comparative education. Finally, the study findings of this study would be beneficial to all stakeholders including education researchers, policymakers, education planners and relevant government departments' responsible quality primary education.

1.7 Limitations of the study

This study like any other study had various limitations. The geographical set up of Kakamega County was a significant limitation to this study. Kakamega County is vast and varied in terrain which affected the transport infrastructure during the rainy season. The record keeping and the documentation that could not be relied upon to understand institutional processes. Besides, the perception of quality education and its indicators was a limitation. The socioeconomic status of institutions was also a limitation. It affected the quality of education being offered in respective institutions.

With regard to mitigation of limitations, the study was conducted during the months of August 2016 and September, 2016. Besides, the study sampled respondents drawn from all the twelve sub-counties of Kakamega County through stratified sampling in order to go to particular schools with characteristics that enabled generalization of the findings. In addition, research tools that were used to gather information ensured the supplementation of each other. Further, information on implementation of quality education were not predicted and manipulated.

1.8 Delimitations of the study

The study delimited itself to the following variables: school physical facilities, instructional materials, curriculum supervision, teachers' characteristics and learners'

characteristics. The study also focused on thirty six public primary schools and twelve private primary schools in the 12 sub-counties of Kakamega County.

1.9 Assumptions of the study

The study was carried out on the basis of the following assumptions:

- i. Both public and private primary schools in Kakamega County had adequate physical facilities for the implementation of quality education.
- ii. Both public and private primary schools in Kakamega County had adequate instructional materials for the implementation of quality education.
- iii. Both public and private primary schools in Kakamega County conducted curriculum supervision for the implementation of quality education.
- iv. Teacher characteristics in both public and private primary schools in Kakamega County influenced the implementation of quality education.
- v. Learners' characteristics in both public and private primary schools in Kakamega County influenced the implementation of quality education.

1.10 Definitions of operational terms

Competency referred to the ability of a learner to perform what he or she has adequately learned.

Dropout rate referred to the percentage of pupils who leave primary schools before reaching completion of the eight-year primary school cycle.

Efficiency in Education referred to the measure of participation in Education by stakeholders. It also determined effective utilization of educational resources in the primary educational institution.

FPE referred to the provision of education that government of Kenya entirely finances.

Implementation referred to the execution of guidelines as directed by various government agents to actualize quality education in schools.

Instructional materials referred to teaching and learning aids that assisted a teacher during instruction of a subject in public and private primary schools. They included textbooks, wall maps, charts, exercise books, pens, and chalk.

Learning achievement referred to the extent to which attainment of skills and attitudes were realized during the teaching and learning process.

School physical facilities referred to the necessary infrastructure used by children in schools to support of learning achievement. They included classrooms, libraries, halls, administration blocks, play fields, and restrooms. Maintenance of these facilities was also incorporated.

Policy guidelines referred to educational instructions that guide decisions leading to achieve learning outcomes.

Primary completion rate referred to the percentage of pupils who completed the eight-year period of the primary Education cycle.

The primary school referred to an institution that caters for the education of children that is a prerequisite for secondary education.

Quality education referred to acquire skills and attitudes that are essential for life. It entails students' learning achievement

1.11 Organization of the study

This thesis report is comprised of five chapters. Introduction to the study was covered in chapter one. Sections covered in the presentation included the background of the study and the statement of the problem. Besides, the purpose of the study, objectives of the study and hypotheses were also covered. Assumptions of the study, the significance of the study, limitations of the study, delimitations of the study, the operational definition of terms used and organization of the study were handled in chapter one. Chapter two captured review of related literature. The conceptual framework was also captured in chapter two. The research methodology was captured in chapter three. The sections covered in research methodology included study design, target population, sample and sampling procedures, research instruments, pilot study, data collection procedure, data analysis techniques and ethical consideration. Chapter four captured data analysis, interpretation, and presentation of research findings. Finally, chapter five focused on the summary of research findings, conclusions, recommendations and suggestions for further research. References and appendices were also included in the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The purpose of this study was to investigate factors that influence the implementation of quality education in public and private primary schools in Kakamega County, Kenya. This chapter on literature review discussed the existing information on quality education. The chapter is divided into nine sections. Section one discussed related literature on the concept of education. The second section looked at overview of quality education. Section three explored the influence of physical facilities on implementation of quality education. Section four discussed influence of instructional materials on quality education. Section five explored the influence of curriculum supervision on implementation of quality education. Section six discussed the influence of teachers' characteristics on implementation of quality education. Section seven looked at the influence of learners' characteristics on quality education. Summary of literature review was covered in section eight. Lastly conceptual framework adapted for the study was covered in section nine.

2.2 Overview of the concept of quality education

Researchers have varied on the definition of quality education. Coombs (1985) defines quality education as a qualitative dimension that is judged by student learning achievements. In this context, quality education entails to the relevance of what is taught and learned. It also involves how well the learning achievement fits the present and future

needs of the individual learner in question. Coombs definition surveys the significant changes in the educational system which are as a result of facilitating inputs (students, teachers, facilities, equipment, and supplies); its objectives, curriculum and educational processes

The World Bank (1995) in defining quality noted that it is difficult to identify and measure quality education. It observed that an adequate definition must include student outcomes. This is in concurrence with Coombs who emphasized learning achievement. This learning experience of students is as a result of a good learning environment. UNICEF (2000) recognizes the five dimensions of quality, as identified in the Dakar Framework as learners, environments, content, processes, and outcomes, founded on 'the rights of the whole child, and all children, to survival, protection, development, and participation. UNICEF, therefore emphasizes learning achievement that applies to life skills. Subsequently, quality education should not just be looked at as a matter of learning things well. It incorporates outputs that contribute to life skills that enable one to tackle contemporary problems.

There are also studies on quality education in relation quality assurance and quality improvement. Murgatroyd and Morgan (1994), refer to quality assurance as, the determination of standards, appropriate methods and quality requirements by an expert body. In Kenya, the Basic Education Act (2013) empowers DQAS to inspect and examine the extent to which school practices meet quality standards as specified in legal documents and policy papers. QASOs are expected to "contract conformance that is customer-driven to ensure students outputs are to the expectation of the society.

According to the ministerial report, UNESCO (2003) noted that quality education should equip all people to fully participate in their own communities and the entire world. This conformed to UNESCO (2000) which affirmed that quality education was a determinant of enrolment, retention, and achievement. Therefore, it had to expand the definition of quality education to include characteristics of learners, processes, content (curriculum), and systems. According to UNESCO (2000), the issue of quality education resurfaced during an EFA global conference held in Jomtien, Thailand in 1990. In light of this, UPE that was qualitative was to be achieved by 2015. Accordingly, UNICEF (2007) noted that everyone had the right to receive education that equipped an individual with the knowledge and skills for economic sufficiency. Besides, the Education acquired was to enable full participation in civil society. This was in line with Schofthaler (1986) who noted that quality education was crucial for economic development.

In spite of this, Economists measured the output investments in human capital, which led to conclusions about the effect of Education on the financial position of a country. Because of this, there was a direct link between the output of a school system and economic growth of a nation. Hence, education reduced poverty by promoting literacy and numeracy. Education was, therefore, a priority all over the world for the purpose of human development. According to Buckland (2004), education was responsible for the development of liberal ideas that were crucial for nation-building. It was, therefore an essential tool in the political sector. In light of this, education positively influenced aspects of the conflict that contribute to peacebuilding. In the course of a battle, education provides knowledge and skills for protection and values for prevention of the conflict itself (UNICEF, 2011). In concurrence with this, UNICEF (2011) revealed that education

facilitated reconciliation by addressing conflict issues.

From the foregoing, quality education received a lot of attention in Kenya due to its role in the lives of people. In addition, in 2002, there was a wind of change in the political arena. National Rainbow Coalition (NARC) succeeded Kenya African National Union (KANU) in Kenyan political leadership. With NARC's manifesto putting weight on universal education, FPE was re-introduced in Kenya in 2003. Subsequently, there was an upshot in school enrolment.. According to an economic survey by KNBS in 2017, the net primary school enrolment in Kenya was over 10 million children.

However, SACMEQ (2004) observed that in Kenya, there were disparities in the provision of instructional materials, classroom facilities, and absenteeism of teachers for active participation in children's learning. This implied that learning achievement could not be realized. Hence, quality education was compromised. Sawamura and Sifuna(2008), concurred with the findings when they noted that the government of Kenya concentrated on provision of quantity education compared to quality education. It can therefore, be deduced that although FPE succeeded in increasing enrolment of children in primary schools, there were concerns over the quality of primary school education being offered in Kenya.

According to Nungu (2010), there was acute shortage of teaching and learning resources in most schools. Besides, Amukowa (2013) noted that there was a significant strain into school infrastructure like classrooms, toilets, and water points. Consequently, the Kenya government developed policy papers that addressed quality education (MoEST, 2005). In light of this, MoEST (2005) noted that the legal documents emphasized on the

importance of provision of adequate resources that facilitated quality of Education. This paradigm shift focused on quality education in Kenya and was to be realized nationally.

Based on the above discourse, the reviewed related literature was outlined in the following subheadings:

2.3 Influence of school physical facilities on the implementation of quality education

In this study, physical facilities referred to learning environments in which formal learning took place. These places incorporated modern school buildings, dilapidated building structures, and outdoor sites. Akinfolarin (2008) revealed that facilities were the primary factor that contributed to academic performance in the school system. However, with the expansion of Education, provision of adequate facilities in schools was affected. Despite this, Alimi (2004) noted that school physical infrastructure influenced students' academic achievement. The findings collaborated with Willms (2000) who observed that the repetition rate was higher in schools that had inadequate facilities than in schools which had adequate facilities. OECD (2012) concurred with these findings when it revealed that school structures influenced learning achievement, better discipline, and better pedagogic approaches. In spite of this, physical facilities were crucial in the promotion of learning achievement of pupils.

According to Studies by Chan (1996), the learning achievement of pupils was highest in modern learning facilities and lowest in obsolete physical conditions. O'Neill and Oates (2001) concurred with these findings when they noted that the condition of buildings correlated with learner achievement. However, Fuller (1999), disagreed that condition of school buildings was not related to higher learning achievement. Besides having modern

buildings, it was, therefore, prudent that maintenance of the same was essential. The poor condition of physical facilities would lead to absenteeism of learners.

According to UNESCO and GOK (2004), the introduction of FPE led to inadequate physical facilities that compromised learning. The report of KNEC (2010) concurred with the findings when it noted that interventions were needed to improve facilities in schools. Besides, the annual report of the MoE (2005/2006), indicated that parents had developed marginal interests in the provision of physical facilities. In view of this, public schools had inadequate physical facilities.

In light of this, Mackatiani (2008) noted that parents took their children to private schools due to adequate physical facilities in these schools. These findings collaborated with Alimi et al. (2012) when they revealed that private schools had a higher index of physical facilities than public schools. Subsequently, public primary schools did not provide quality education as compared to private primary schools that had adequate physical facilities. This study focused on the following school physical facilities that influenced the implementation of quality education in both public and private primary schools.

2.3.1 School administration blocks

In this study, administration blocks referred to physical space used by head teachers and teachers for the management of education. In this regard, administration block incorporated head teacher's office, staff room and other offices for heads of departments. According to Tanner and Lackney (2006), the school administration office was crucial for implementation of educational policies, which elevated academic achievement of learners. However, there were variations in administration blocks due to school types.

These variations conformed to the governance structure of either public or private schools. In spite of this, administration block determined the attractiveness of school programs.

Besides, Australian Council for Educational Research (ACER) 2013, noted that school administration blocks were crucial as educators spend time with non-teaching staff, pupils and visitors in this infrastructure. Subsequently policy documents and teaching materials are stored here. Consequently, the administration block was expected to be attractive with notices and teaching timetables displayed on the walls. In addition, Hunter et al (2011) noted that a staff room operated as a social, cultural, and emotional place for the members of the teaching fraternity. Therefore, since the school administration blocks coordinate school academic activities, they are crucial in implementation of quality education.

2.3.2 Classrooms

In this study, classrooms referred to physical space used by learners in schools. In this regard, classrooms were crucial for learning achievement. Following the 1990 global conference on EFA, many developing countries significantly expanded access to primary Education. However, there were no adequate classrooms that could match the increase in the student population. A survey conducted by UNICEF/UNESCO in 1995 in 14 developing countries revealed that class size was as low as thirty pupils in Bhutan and as high as 118 pupils in Equatorial Guinea. Based on this observation, large class size led to strained facilities in order to accommodate large numbers of new students. In spite of this, due to strained facilities in public schools, parents opted for private schools.

According to Dronkers, J and Robert, P (2003), school climate determined the school choice by parents. Subsequently, parents perceived that private schools were better than public schools due to small class size. This was due to positive interaction of teachers and pupils. OECD (2012) concurred with the findings when it noted that management in private schools was more efficient than in public schools.

The issue of class size was crucial in determining school choice as it influenced learning achievement. In spite of this, various scholars (Anderman, 2009; Bruhwiler and Blatchford, 2009; Finn et al., 2003; Krueger, 2002; and Westerlund, 2008) agreed that smaller classes allowed a better quality of teaching and learning. However, some researchers like Bascia et al. (2008), Leithwood et al.(2004) and Hanushek (2002) revealed that besides small class size, good classroom practices were essential for realization of competencies. This was in concurrence with Lazear (2001) who advanced that students enrolled in smaller classes learnt more because they experienced fewer students' disruptions as opposed to their counterparts in large class who hide from participation in the learning process. According to UNICEF (2014), average class size in Kenyan public primary schools was 36 while in private primary schools it stood at 16. Small class sizes were therefore, experienced in private schools while large class sizes were found in public schools.

Subsequently good classroom practice controlled disruptive behavior and enhanced learning behavior. However, according to Willms (2000), class size did not link to student achievement. However, Bedard and Kuhn (2008), noted that large class size impacted negatively on student evaluations. Similarly, Westerlund (2008), noted that increase in class size of mathematics leads to lower student course evaluations.

Therefore, with regard to the reviewed of related literature, it was evident that availability of classrooms contributed to the implementation of quality education.

2.3.3 Libraries

According to Parveen and Mohammad (2012), the extent of quality education in a school corresponded with the availability of physical facilities in the particular school. This was in concurrence with American Library Association (ALA, 2010) who noted that in a supportive learning environment, a library facility was imperative. In light of this, Busayo (2011) suggested that reading was an important part responsible for transforming man and his entire society. This was in concurrence with Mokatsi (2005) who noted that reading was not only important for enjoyment, but a basic tool for learning achievement.

Although libraries were crucial in learning achievement, Reddy (2006) noted that problems in availing physical facilities arose due to high enrolment. In light of this, Willms (2000) revealed that pupils enrolled in schools that had adequate library services were likely to perform better than those whose schools lacked libraries. However, Doosuur and Igyuve (2014) noted that there was no difference in reading among the children in public and private schools. From the reviewed literature on the role of electricity, it was evident that libraries influenced implementation of quality education.

2.3.4 Water and sanitation

In this study, water and sanitation facilities referred to water points and latrines availed in schools. According to Pruss-Ustun et al (2008), availability of water and sanitation in schools, reduced diarrhea and other related diseases among pupils. This implied that schools with poor sanitation and inadequate water supply would contribute to disease

outbreak that would affect the learning process. This was consistent with International Resource Centre (IRC), 2005 which noted that absenteeism in such schools went up by twenty percent. In light of this, Ejemot et al (2008) indicated when children washed their hands; there was a 30 percent reduction in diarrhea cases in primary schools. Besides reduction in diseases, availability of latrines and water improved school attendance.

However, developing countries faced challenges of providing sanitation facilities. According to Majra et al. (2010), in India, 60 percent of schools had adequate latrines while 10 percent had sufficient water points. This was consistent with UNICEF (2004) which noted that in Bangladesh there was an average of one toilet for 152 pupils. The situation was similar in SSA. Schools had inadequate sanitation facilities. According to Gyabaah et al. (2009), in Ghana, 53 percent of schools lacked sanitation facilities and water points. This correlated with Ofovwe et al. (2007) who revealed that in Nigeria 33 percent of schools had pit latrines while 26 percent had water points. Njuguna et al. (2008) concurred with the findings when they stated that schools in Kenya that had sanitation facilities and water experienced low absenteeism rate.

Availability of sanitation facilities and water enhanced health outcomes for children and kept them in school. With the availability of the facilities, absenteeism was controlled. Sanitation facilities and water points in public primary schools were perceived to be inadequate as compared to their counterparts in the private sector. Hence, learning achievement was enhanced in private schools as opposed to public schools. Concerning the reviewed literature on water and sanitation, there was a manifestation of the role water and sanitation played in influencing implementation of quality education.

2.3.5 Electricity

In this study, electricity referred to artificial energy used for lighting, cooking, and accessing information communication technologies (ICT). In this context, electricity incorporated hydroelectric energy, generator, wind and solar energies. Electricity was crucial for schools as it enabled learning to be conducted outside the normally scheduled timelines. In this regard, remedial work would be conducted outside the scheduled timelines for reinforcing the learning process. Besides, contact hours lost due to sickness or engaging in other activities would be compensated through the usage of electricity at odd hours. Electricity also played an important role in e-learning and accessing other modern mass media like the internet and television. In spite of this, modern instructional media would be employed in order to address the global perspective of Education.

Besides, electricity was used for catering and laundry services. With the availability of electricity, perishable foods would be preserved through refrigeration services. In addition, electricity would be used to tap water from boreholes and improve the sanitary standards of schools. However, according to UNDESA (2014), four out of five primary and secondary schools in African countries lacked access to electricity. In light of, UNICEF (2014), noted 39.4 percent of public primary schools were connected to electricity while 57.4 percent of private primary schools had electricity connection private primary schools. Besides, OECD (2012) noted that advantaged parents opted for private primary schools while the disadvantaged ones send their child to public primary schools.

Hence, private primary schools are seen to be endowed with high socioeconomic status as opposed to public primary schools. Private primary schools, therefore had an advantage

of accessing electricity contrary to public primary schools. Subsequently, UNDESA (2014) noted that electricity contributed to improvements in staff retention and student completion rates. Electricity, therefore significantly influenced learning achievement in private primary schools than public primary schools. In light of the reviewed literature on electricity, there was manifest that electricity played a crucial role in influencing implementation of quality education.

2.3.6 Playfields

Playfields in this study referred to physical space available in schools for recreation purposes. According to Dwyer, T. et al (2001); Linder (2002) and Tremblay et al (2000), there was a positive relationship between physical activity and academic performance. In this regard, Tremblay, Inman, and Williams, (2000) noted that pupils who participated in physical Education lessons attained better grades and promoted school attendance. Consequently, physical education played a crucial role in the promotion of learning achievement. Despite the role played by physical activities in the promotion of learning achievement, private primary schools had limited playfields for recreational activities. Contrary to this, public primary schools were well endowed with playfields. In this regard, public schools were likely to promote quality education. Therefore, with regard to the reviewed literature, it was evident that availability of playfields contributed to the implementation of quality education.

2.3.7 Maintenance of school physical facilities

Maintenance in this study referred to repairs made to buildings or refurbishment of school facilities. According to UNESCO (1984), maintenance programs were

administered to prevent deterioration of school buildings and furniture in the life of every school. Besides, Akpan (2011), noted that the appearance of school facilities contributed the basis upon which the public judged the academic performance of schools.

In this regard, with parents' perceptions that private primary schools performed better than public primary schools, it was assumed that physical facilities were well maintained in private primary schools than public primary schools. Besides, since private primary schools were well endowed with resources, their facilities were well maintained. According to Chan (1996) and O'Neill (2000), school buildings with deficiencies had a negative impact on learners' achievement. In light of this, public primary schools had school buildings with deficiencies. This, influenced negatively on learning achievement contrary to their counterparts in the private sector. Subsequently, school building components had a measurable influence upon student learning. If the buildings were well maintained, then they influenced positively while if the buildings were poorly maintained then it reversed to negative influence.

Therefore, with regard to the reviewed literature, it was evident that maintenance of school physical facilities contributed to the implementation of quality education. In summing up this section, therefore, it was evident that availability of and maintenance of school physical facilities influenced implementation of quality education in public and private schools.

2.4 Influence of instructional materials on the implementation of quality education

In this study, instructional materials included writing textbooks, writing materials and teaching aids used by teachers and learners. According to Mukwa and Jowi (1988),

instructional materials were teaching and learning aids such as textbooks and wall charts that teachers used to communicate the subject content to students. According to 2005 EFA Global Monitoring Report (GMR), availability of resources was crucial in the quality of teaching and learning (UNESCO, 2005). This was consistent with Samoff (2005) who observed that poor Education quality correlated with the scarcity of resources. The studies conformed to Eshiwani (1983), who revealed that there was a scarcity of instructional materials which compromised quality in Kenyan primary schools. In their survey, Southern and Eastern Africa Consortium (2007) noted that 22percent of pupils in Kenyan public primary schools lacked instructional materials. This implied that quality education in public primary schools would be affected as compared to their counterparts in the private sector as it was perceived that they had adequate instructional materials. This study, therefore focused on the following instructional materials that influence the implementation of quality education in primary schools:

2.4.1 Textbooks

In this study, textbooks referred to teachers' reference books and learners course books. Various researchers (SACMEQ, 2011; Boissiere, 2004; Braslavsky & Halil, 2006) revealed that appropriate textbooks in schools contributed to the improvement of Quality education. However, with the introduction of FPE in SSA, countries like Kenya, Malawi and Namibia experienced high enrolment, which negatively influenced the availability of textbooks. Due to high enrolment in schools, developing countries experienced the inadequacy of textbooks. This had to compromise quality education in schools. Despite this, Porta and Laguna (2007), revealed that countries like Guatemala and Nicaragua, introduced free textbook policies. In this regard, these countries realized that textbooks

were crucial in learning achievement of pupils. With respect to the role played by textbooks, in learning achievement,

SSA had to adopt policies that promoted the availability of textbooks in schools. According to White (2004), Ghana increased the availability of textbooks in schools. Hence, learning achievement was realized in schools. However, in Kenya due to high enrolment in public schools, the ratio of textbooks for learners was high (UNESCO, 2004). In this regard, the high ratios negatively influenced learning achievement. Basing on information from the literature review on textbooks, it was evident that textbooks influenced implementation of quality education in schools. Therefore, with regard to the reviewed literature, it was evident that availability of textbooks influenced implementation of quality education in schools.

2.4.2 Writing materials

According to Tsavga (2011), learning environment played an important role in establishing how pupils perform in their surroundings. The environments in this context referred to materials like exercise books and writing pens. Hence, the environment played an important role in influencing learning achievement. This was in concurrence with Adeogun (2001) who noted that instructional materials promoted academic performance of learners. The writing materials were, therefore, necessary for facilitating learning achievement of learners. In this respect, writing materials were crucial in the promotion of quality education. In light of this, schools with adequate learning materials performed better than schools with inadequate learning materials.

According to Adeogun (2001) children in private schools performed better than their counterparts in public schools due to the availability of resources. Because of this, the resources addressed incorporated availability and usage of writing materials. The writing materials used by teachers in private schools were also adequate. In contrast, Adeogun (2001) further revealed that public schools had inadequate learning materials. Hence, insufficient instructional materials contributed to poor learning achievement. Likoko et al. (2013) also noted that active learning could not be achieved in a classroom environment that was devoid of instructional materials. Therefore, concerning the reviewed literature on writing materials, it was evident that availability of writing materials influenced implementation of quality education in schools.

2.4.3 Teaching Aids

In this study, teaching aids included wall charts, wall maps, visual aids, and realia. According to Barrow and Leu, (2006) teaching aids ensured the active participation of learners during the teaching process. In this regard, teaching aids played the crucial role of reinforcing what has been taught. Teaching aids, therefore, formed an integral part of the classroom. According to Mtana and Hojhund, (2004), teaching and learning aids used by teachers promoted quality education. In this respect, where teaching and learning processes varied, several learning aids were applied. Therefore, teachers used learning aids that suited learning achievement.

However, a study conducted by Eshiwani (1983), noted that teachers in primary schools did not use teaching aids. Ackers and Hardman (2001), correlated the findings when they noted that pupils in both public and private schools were not exposed to learner-centered

teaching approaches. In this respect, Kemizano, (2007), indicated that traditional teaching led to the unmotivated learning process. Therefore, concerning the reviewed literature on teaching aids, it was evident that availability of teaching aids influenced implementation of quality education in both public and private primary schools.

In summing up this section, therefore, concerning the reviewed of related literature on the influence of instructional materials, it was evident that availability of instructional materials influenced implementation of quality education in both public and private primary schools.

2.5 Influence of Curriculum supervision on the implementation of quality education in primary schools

In this study, curriculum supervision implied monitoring teaching and learning processes in schools. Curriculum supervision in schools is conducted by QASOs, head teachers and subject panel heads. According to Stephens (1991), quality education was not to be judged only in terms of inputs and output but also in terms of processes by which it was achieved. In spite of this, procedures included child-centered teaching methods and active monitoring and management of schools. For the learning process to be successful, the school administrative mechanisms are crucial in ensuring that the teaching process is dynamic.

Subsequently, supervised teaching develop skills which and attitudes that are essential for learning achievement. In spite of this, Beach and Reinhartz (2000) noted that supervision should involve teachers and inspectors in a cordial relationship. In this respect, instructional guidance embraced all activities geared towards the establishment, maintenance, and improvement of the teaching-learning process. Quality assurance

arrangements in schools, therefore, entailed evaluation in order to promote quality education. In spite of this, school evaluation is related to a broad range of school activities that included teaching and learning. In this context, there were two types of school evaluation; internal and external supervision. Internal supervision is conducted by evaluators who are staff members of the school while external evaluators involve officers from the state department of education. This study, therefore, focused on the following curriculum supervision processes that influence the implementation of quality education in primary schools:

2.5.1 External curriculum supervision by QASOs

According to Beach and Reinhartz (2000), supervision involved interaction between teachers and other educators. Quality Assurance and Standards Officers (QASOs) were incorporated as other educators and played a crucial role in oversight of the curriculum. The QASOs supervision, exercise was administrative support at the government level. It, therefore, guaranteed both psychological and resources support for teachers and pupils.

In this respect, help at the national level was crucial as it ensured that funds for education were effectively implemented. Besides, the support for teaching and learning included better conditions and professional development for teachers. Such support influenced learning achievement of pupils. However, Miske et al. (1998) noted that in Malawi, education supervisors frequented schools and evaluated teachers. Hence, they assisted teachers through professional development and improved the teaching practice. This was consistent with Oliva and Pawlas (2001) who noted that supervision was necessary for the new, inexperienced, and experienced teachers in schools. However, studies conducted

in South Asia on supervision (Grauwe, 2000; Lamichhane et al., 1997; Ali, 2000; Kazi, 1997; Khan, 2004), suggested that monitoring did not provide the required support for teachers.

However, in Kenya, according to the Basic Education Act (2013), the Directorate of Quality Assurance and Standards (DQAS) is the one mandated to maintain standards of Education in Kenya. This was done through regular inspection and guidance, and by checking on facilities, equipment, administration, and teaching of individual teachers. This correlated Matthews and Smith (1995) who noted that active inspection systems provided a powerful incentive to different stakeholders, especially pupils' achievements. In this regard, Mackatiani (2008) indicated that QASOs supervised both public and private primary schools. Despite this, GOK (2004) revealed that the quality of education in arid and semi-arid lands (ASAL) districts were, overall poor because of inadequate supervision and inspection. Therefore, concerning the reviewed literature on external curriculum supervision by QASOs, it was evident that external supervision of curriculum by QASOs influenced implementation of quality education in both public and private primary schools.

2.5.2 Internal curriculum supervision by Head teachers

According to Muriithi (2014), monitoring by head teachers contributed to effective curriculum implementation. In this respect, Kenya policy paper (Sessional paper no. 1 of 2005) advocated for school-based supervision, which was to be administered by head teachers and subject panels. In spite of this, Kimeu (2010), noted that head teachers' visits to the classroom were an encouragement to teachers. Despite this, Nzabonimpa (2013)

indicated that there was limited instructional supervision by head teachers. Besides, Carron and Chau, (1996) noted that lack of administrative training and excess pedagogical responsibilities left the head teachers with minimal time for supervision. However, many head teachers had educational duties in their schools. In addition did not have any formal training in school administration. In this regard, Wanzare (2013) noted that exemplary leadership and high integrity were crucial skills in curriculum supervision. However, there were no provisions for these guidelines when appointing head teachers. Furthermore, appointments to administrative positions of schools did not consider leadership or management skills. This was due to lack of formal training for head teachers in the leadership functions of schools.

OECD (2012) observed that advantaged parents send their children to private schools as they addressed the issue of autonomy of private primary schools. In this regard, the independence contributed to close supervision of private primary schools by head teachers. Therefore, concerning the reviewed literature on internal curriculum supervision by head teachers, it was evident that internal curriculum supervision by head teachers influenced implementation of quality education in both public and private primary schools.

2.5.3 Influence of internal curriculum supervision by Subject panels heads in primary schools

According to Garba (2006), school supervision was a bond between teachers and supervisors responsible for the improvement of classroom instruction. Although curriculum supervision was crucial in learning achievement, Adikinyi (2007) indicated that since there were inadequate numbers of QASOs, school-based guidance was

necessary. In this regard, school-based supervision was recognized as being crucial for academic achievement. However, Nyandiko (2008) noted that due to understaffing of teachers, school-based surveillance was not effectively conducted. In contrast to these findings, Abdille (2012) revealed that classroom observation was neglected even in adequately staffed schools.

Despite the understaffing, Afemikhe, (2007) noted that private schools were well supervised at the school level. Hence, private schools had the high academic achievement. Besides, Olayemi (2001) indicated that lack of school-based supervision in public schools contributed to the emergence of private schools. Therefore, concerning the reviewed literature on internal curriculum supervision by subject panel heads, it was evident that internal oversight of curriculum by subject panel heads influenced implementation of quality education in both public and private primary schools.

In summing up this section, therefore, concerning the reviewed literature on curriculum supervision, it was evident that curriculum supervision influenced implementation of quality education in both public and private schools.

2.6 Influence of Teachers' characteristics on the implementation of quality education.

To understand the influence of teachers' characteristics in the implementation of quality education, this study reviewed the aspects of attitudes, qualifications and professional development. According to various studies conducted (Aaronson, Barrow, and Sander (2007); Kane and Staiger (2008); Rivkin, Hanuskek, and Kain (2005); and Rockoff and Staiger (2010), teachers varied in the performance of duty. In spite of this, the considerable variation in the productivity of teachers is due to their characteristics.

The variance in quality of teachers contributed to various levels of learning achievement attained by children. However, Wayne and Young (2003) noted that there was a relationship between teachers' characteristics and learning achievement. However, researchers like Clot-Felter et al., (2006); and Harris and Sass (2006), observed that there was little evidence to associate teachers' characteristics with learning achievement.

This study, therefore focused on the following teachers' characteristics that influenced the implementation of quality education in primary schools.

2.6.1 Teachers' attitudes

In order to understand the influence of teachers' attitudes in the implementation of quality education, this study identified aspects that impacted on the quality of implementation. Various researchers, including Hughes et al (2005), and Oates (2003) explored the influence of teachers' attitudes on students' academic achievement. In addition, studies done by Jennings, (2006), and McDonough (2009), looked at teacher preparation programs.

According to Carron & Chau, (1996), 50 percent of teachers in public schools fail to report for duty on a monthly basis. In addition, they did not compensate for the time lost when pupils were left without instruction for the day. However, in private schools, the rate of absenteeism was minimal while in public schools it was high. The findings were consistent with Fuller et al., (1999) who revealed that learning occurred only when teachers engage learners in instructional activities. This collaborated Verwimp (1999), who noted that the quality of teaching is realized in schools that use time efficiently. However, UNICEF (2004) and Uwezo (2011) decried high rate of absenteeism of

teachers in public primary schools. This implied that teachers' characteristics in public primary schools negatively influenced quality education. It was contrary to teachers in private schools whose attitudes impacted positively on quality education.

According to Wiliam and Lee (2001), maximum achievements of students depended on formative assessment. This was consistent with Black and Wiliam (1998) who noted that teachers enhanced learning achievement of learners through formative assessment. Besides, John (2010) indicated that formative assessment for learning was expected to be child-centered. In this context, formative assessment reinforced learning achievement of pupils. Therefore, concerning the reviewed literature on teachers' attitudes, it was evident that teachers' attitudes influenced implementation of quality education in both public and private primary schools.

2.6.2 Teachers' academic qualification

According to studies by Betts et al (2003), and Rice (2003), teachers' qualification positively correlated with students' achievement. These findings were consistent with Greenwald et al (1996) who noted that teachers' qualifications contributed to learning achievement. In this regard, teachers' academic qualification played an important role in the learning achievement of pupils. Despite these studies, Wayne and Young, (2003) observed that there was no consistency between teacher education level and student achievement.

However, Greenberg et al. (2004) and Wenglinsky (2002) observed that academic and professional qualifications of teachers did not influence students' learning achievement. These findings were correlated by Goldhaber (2004), and Xin et al (2004) who noted that

teachers' academic qualification did not influence learning achievement. According to the National Center for Education Statistics (NCES) 1997, teachers in public schools were more qualified than those in private schools. In this respect, public primary schools provided quality education as opposed to primary private schools. With regard to the reviewed literature on teachers' academic qualification, it was evident that academic qualification of teachers influenced implementation of quality education both public and private primary schools.

2.6.3 Teachers' professional qualification

In this study, professional qualification referred to teaching skills acquired by teachers during their pre-service teacher training courses. Professional qualification is therefore crucial to quality education. However, according to NCES (1997), public school teachers were more professionally qualified than their counterparts in private schools. In spite of this, Betts et al (2003) and Rice (2003), noted that teachers' professional qualification positively correlated with students' achievement.

These studies were consistent with Everston et al (1985); and Ferguson & Womack (1993), who revealed that there was positive consistent between pedagogical training and teachers' effectiveness. However, studies conducted by Goldhaber and Brewer (2000), indicated that there was no impact of professional qualification on learning achievement. The findings correlated Carron and Chau, (1996), who noted that teachers used teacher-centered teaching styles irrespective of their professional skills. However, Verwimp (1999), concurred with the findings when they indicated that 50 percent of professionally trained teachers used teacher-centered approaches. Concerning the

reviewed literature on teachers' professional qualification, it was evident that professional qualification of teachers influenced implementation of quality education both public and private primary schools.

2.6.4 Teachers' professional development

In this study, teachers' professional development referred to in-service courses exposed to teachers for upgrading of their professional skills. According to Graydon (2006); and Jimerson et al (2006), improvement of teachers' skills promote the learning achievement of learners to a higher level. This was in concurrence with Anderson (2000) who noted that teachers who were supported with in-service courses improved on their pedagogical approaches. In this respect, teacher's professional development improved skills on their teaching techniques. Besides, professional development appraise teachers on new knowledge and pedagogical approaches. Teachers subsequently used child-centered teaching approaches. Despite the findings, KNEC (2010) noted that 37.8 percent of teachers had not attended in-service courses since 2003. In this regard, most teachers lacked the necessary current pedagogical approaches to teaching.

However, GOK & UNESCO (2005) recommended the participation of teachers in in-service courses as this enhances their skills to teach and instill discipline among pupils. This would improve achievement of competencies and enable teachers deal with indiscipline cases of pupils. According Johnson et al (2000), private schools performed better than public schools because of their professional development opportunities. In this regard, teachers in private schools attend in-service courses as opposed to their counterparts in public schools. With regard to the reviewed literature on teachers'

professional development, it was evident that professional development of teachers influenced implementation of quality education both public and private primary schools.

In summing up this section, therefore, concerning the reviewed literature on teachers' characteristics, it was evident that curriculum supervision influenced implementation of quality education in both public and private schools.

2.7 Influence of Learners' Characteristics on the implementation of quality education

To understand the influence of learners' characteristics on quality education, the study identified aspects of attitudes, nutrition and health, school attendance and socioeconomic status of pupils. According to Corten, R & Dronkers, J (2004), pupils' characteristics in public and private schools differed due to parental differences in education, professional and economic characteristics. In this regard, parents with favorable backgrounds took their children to private schools. This implied that parents perceived that private schools guaranteed quality education. However, Wang and Newlin (2002) who indicated that self-efficacy beliefs of learners correlated with scores in the final exam. In this respect, learners' characteristics influence learning achievement. Despite the varied findings by researchers, pupils from favorable backgrounds increased their opportunities of higher learning achievement as opposed to their counterparts from unfavorable backgrounds. This study, therefore focused on the following learners' characteristics that influenced the implementation of quality education in primary schools:

2.7.1 Learners' attitudes

In this study, learners' attitudes referred to pupils' mental factors, which affected the learning process. These attitudes were mainly incorporated in motivation and personality.

According to Nathalie (2016), learners' motivation contributed to successful learning achievement. However, Scarcella and Oxford (1992) noted that attitudes either influenced learning achievement positively or negative. In this respect, positive attitudes facilitated skills that contributed to learning achievement. Contrary to this, negative attitudes did not affect learning achievement. Despite these inconsistencies, instructional activities were to be stimulating for promotion of the learning process.

According to Bishop et al. (2007), there was a significant relationship between attitudes and learning achievement. Besides, Fabunmi (2007), stated that classroom factors influenced learners' attitudes. In this regard, the classroom factors included class size, space, and pupil-teacher relationship. Subsequently, the pupils' performance in class depended on classroom factors in determining academic performance. Subsequently, pupils' personality and motivation influenced learning achievement. In light of this, Riaz et al. (2011), noted that perception and performance were crucial in the learning process. However, Brazdău and Mihai (2011) noted that there was no correlation between learning and students' attitudes.

According to NCES (1997), pupils in public schools were sexposed to crime and threats which affected learning achievement. However, Khan et al. (2012) noted that pupils in private schools had positive attitudes on school environment as opposed to their counterparts in public schools. Salem (2017) concurred with the findings when he noted that pupils in private schools showed positive attitudes towards learning as opposed to their counterparts in public schools.

Regarding the reviewed literature on learners' attitudes, it was evident that pupils'

attitudes influenced implementation of quality education both public and private primary schools.

2.7.2 Nutrition and health

In this study, nutrition and health referred to diet given to pupils for mental growth, which affected the learning process. According to Brown et al. (2008), nutrition impacted on learning achievement. Afridi (2010) concurred with the findings when he noted that the midday meal program enhanced nutritional value as well as school attendance. In this context, learners participated actively in the learning process when they were satisfied. However, Sorhaindo and Feinstein (2006), noted that nutritional deficiency negatively influenced the cognitive development of children. Rausch (2013) correlated these findings when he observed that poor nutrition affected the cognitive function of the brain. In this regard, poor diet contributed to learners being attacked by diseases leading to absenteeism of pupils from schools. According to a study conducted by Kar et al. (2008), nutrition was critical for the well-being of children.

According to Alderman et al (2010), School Feeding Programs (SFP) significantly influenced on enrolment and attendance. In this respect, SFPs were initiated in public schools as opposed to private schools. According to Florence et al (2008), higher quality diet correlated with good performance in examinations. However, Kazianga et al. (2009) noted that SFPs did not promote learning achievement. Jomaa et al (2011) concurred with the findings when they noted that SFPs did not correlate with academic achievement. In addition, Buttenheim et al (2011) noted that there was no significant difference in pupil enrolment between schools that had SFP) and those devoid of the programs. However,

Lien et al (2009) noted that pupils in SFP schools performed better than their counterparts in non-SFP schools. With regard to the reviewed literature on nutrition and health, it was evident that nutrition and health influenced implementation of quality education both public and private primary schools.

2.7.3 Pupils' School attendance

In this study, pupils' school attendance referred to the frequency of attendance in school, which affected the learning process. According to Murray et al (2012), school attendance involved effective participation in formal Education by pupils. However, Reid (2008) noted that children from disadvantaged backgrounds incurred participation problems. In this regard, participation problems led to children not attending school regularly. According to Zubrick et al (2006), there was a gap in educational attainment between advantaged and disadvantaged children. In this respect, Schwab (1999) noted that poor participation led to drop out rates of school children. Marsh (2000) concurred with the findings when he observed that poor participation led to rebellion against school authority. These findings also concurred with Finn (1989) who noted that poor participation at school contributed to disruptive and delinquent behavior amongst learners.

According to various researchers, for example; Alexander et al (2002); Hallfors et al. (2002); and Rothman (2001); poor school attendance impacted negatively on the learning outcomes. Subsequently, it had unfortunate implications for the future life of pupils. This implied that pupils in later years would become drug and alcohol abusers. However, Purdie and Buckley (2010) noted that there were inconsistencies in the way school

attendance was perceived.

Although there were inconsistencies in school attendance, student attendance significantly influenced learning achievement. According to Altonji et al. (2005), school attendance was higher in private schools than in public schools. This implied that pupils in private schools performed better than pupils in public schools. A study conducted by Johnson (2005) noted that the socioeconomic status of pupils significantly influenced school attendance. In this regard, children from good socioeconomic status families perform better than those children with a poor socioeconomic status background. Subsequently, pupils in private schools performed better than pupils in public schools. Concerning the reviewed literature on pupils' school attendance, it was evident that pupils' school attendance influenced implementation of quality education both public and private primary schools.

2.7.4 School distance from pupils' homes

In this study school distance referred to the distance covered by pupils between their home and the school. According to a study by Germany Education International (GEI) in 2012, journeys to school impacted differently on learning achievement levels. Falch et al. (2013) concurred with the findings when they noted that commuter time affected differently learning achievement. However, Dickerson and Mc Indosh (2013) indicated that shorter distance between school and home impacted positively on learning achievement. Despite this, Horwich (2004) noted that the students' frequent movements led to academic deficiency because of the discontinuity of instruction due to lateness.

According to studies conducted by Alokani (2010), school distance did not correlate with

learning achievement. The findings were consistent with Considine and Zappala (2002) who pointed out that distance between school and home did not influence academic performance of pupils. However, Galabawa (2001) noted that academic performance of learners whose schools were located far from their homes were negatively affected. In this respect, Zamudio (2004) indicated that mobility had a negative impact on academic achievement of pupils. However, with organized modes of transport, learners would be positively affected. In regard to the reviewed literature on school distance from pupils' homes, it was evident that school distance influenced implementation of quality education both public and private primary schools.

2.7.5 Learners' socioeconomic status

According to this study, socioeconomic status indicators addressed were the educational level of parents and the parental occupation. In this regard, Fuller, et al (1999), Redding (2000) and Willms (2000), noted that parental education and income influenced learning achievement of pupils. These findings concurred with Carron and Chan (1996) who noted that parental education influenced interactions with the children. Subsequently, parents with higher Education and income were largely involved in participation in school activities of their children. Hence, socioeconomic status of the parents influenced either positively or negatively on pupils' learning achievement.

According to findings by Willms (2000), children whose parents had a background of illiteracy, performed poorly in class than those children whose parents were literate. In this respect, literate parents secured good employment that improved their economic status. Bowden and Doughney (2011) further noted that children with a higher

socioeconomic status were more likely to aspire to Higher Education. It was, therefore, the socio-economic status of parents that determined provision of home resources such as personal library books and other school-related services.

According to a study by Delaney et al. (2011), students with a low socioeconomic status underestimated themselves because of the socioeconomic status they inherited from their parents. In this regard, Students with low socioeconomic status and poor backgrounds performed poorly in school. This was in concurrence with Willms (2000) and Zhao et al. (2011), who argued that parents with low socioeconomic status were less involved in their children's schooling as opposed to parents with higher socioeconomic status. Therefore, concerning the reviewed literature on the socioeconomic status of learners, it was evident that learners' socioeconomic status influenced implementation of quality education in both public and private primary schools.

In summing up this section, therefore, concerning the reviewed literature on learners' characteristics, it was evident that learners' characteristics influenced implementation of quality education in both public and private primary schools.

2.8 Summary of reviewed literature

From the related literature review; scholars, government organizations, international organizations, and institutions addressed various factors that influenced implementation of quality education in primary schools. The reviewed literature revealed that there were factors that influenced the quality of Education in primary schools. The global scholars, however, did not underscore the role of the factors mentioned above. The study therefore established that factors such as school physical facilities, instructional materials,

curriculum supervision, teachers' characteristics and learners' characteristics were crucial in the implementation of quality education in public and private primary schools. In this regard, the variables addressed in the study play a significant role in the implementation of quality education.

According to various studies (Bishop et al. (2007; OECD, 2012; Oliva and Pawlas 2001; Rockoff and Staiger, 2010; and UNESCO, 2005), it was established that physical facilities, instructional materials, curriculum supervision, teachers' characteristics, and learners' characteristics influenced implementation of quality education in primary schools. In this regard, there was a consensus from the reviewed literature conducted that there were factors influenced the quality of education in primary schools. The studies established that physical facilities, instructional materials, curriculum supervision, teachers' characteristics, and learners' characteristics influenced quality education in public and private primary schools.

However, the reviewed literature also revealed that investigated factors did not correlate to the implementation of quality education in primary schools. Among the researchers who disagreed on factors that influenced quality education primary schools included Clot-Felter et al., (2007); Fuller (1999); Khan, 2004; and Wang & Newlin (2002). The researchers indicated that the variables being investigated did not significantly implement quality education in public and private primary schools.

From the related literature reviewed, the research gap identified was that no comparative studies had been conducted on factors influencing implementation of quality education in public and private primary schools. This study, therefore, sought to investigate the extent

to which physical facilities; instructional materials; curriculum supervision; teacher characteristics and learner characteristics influenced the implementation of quality education in public and private primary schools.

2.9 Conceptual framework

The study formulated a conceptual framework. The conceptual framework in Figure 2.1 shows the relationship between independent variables of physical facilities, instructional materials, curriculum supervision, teachers' characteristics and learners' characteristics, and the dependent variable of quality education. The assumptions in the conceptual framework is that the independent variables influenced implementation of quality education.

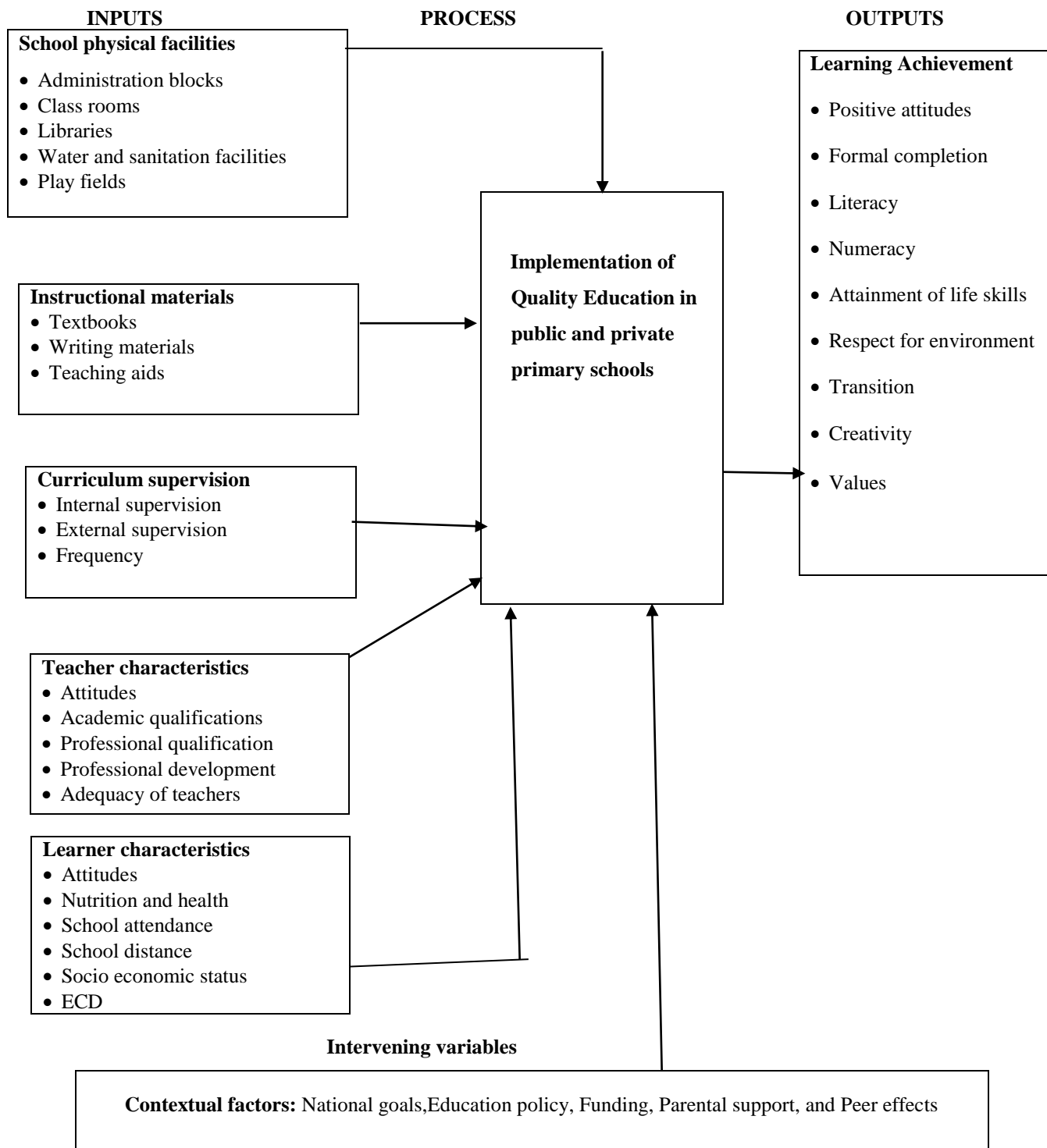


Figure 2.1 Conceptual framework of Quality Education

Concerning the conceptual framework in Figure 2.1, it was adopted from UNESCO

(2005) on the relationship between factors that influenced implementation and quality education in primary schools. The school physical facilities, instructional materials, curriculum supervision, teacher characteristics, and learner characteristics were the independent variables for the study. Implementation of quality education in primary schools was the dependent variable as well as the process. The conceptual framework assumed that school physical facilities, instructional materials, curriculum supervision, teachers' characteristics and learners' characteristics were interrelated and influenced implementation of quality education in public and private primary schools.

From the information in Figure 2.1, the independent variables that influenced the processes of teaching and learning, were school physical facilities, instructional materials, curriculum supervision, teachers' characteristics and learners' characteristics. These factors were crucial in the implementation of quality education at primary school level. There ought to be adequate physical facilities and instructional materials to promote quality education. The process of interaction was also necessary. The learners interacted freely for the promotion of learning achievement.

The interaction process also included teachers and education officers. The school head teachers, subject panel heads (SPHs) and QASOs supervised the school curriculum. Teacher characteristics included attitudes, academic qualifications, professional qualification and teacher development. Teachers' features were crucial in the teaching and learning process. The teacher-learner ratio should be manageable to promote the interaction in the classroom. This improved the learning process and contributed to successful outcomes. Learner characteristics included attitudes, ECD, school attendance and socioeconomic status, nutrition, and health.

These independent variables influenced the process of implementation of quality education in public and private primary schools. The variables affected the outcome of the implementation of quality education, which was the dependent variable as well as the process. The output of quality education was realized in achievement status. The achievement included good learning environment, adequate resources, effective curriculum supervision, positive attitudes, appropriate teaching, attendance, formal completion, literacy, and numeracy. Adequate resources and effective curriculum supervision contributed to good environment that led to the achievement of aural, speaking, reading, and writing skills, basic arithmetic, logical reasoning and life skills.

However, for useful results to be realized, there were intervening variables that mediate between the independent variables and a dependent variable. The contextual factors in the figure were the intervening variables that mediated the implementation of quality education. The factors included national goals of education, education policy (benchmarks), funding, parental support, and Peer effects. They were crucial in the implementation of quality education.

Therefore the conceptual framework displayed the interrelationship between factors and quality implementation of quality education in primary schools. This implied that if quality education was to be implemented in public and private primary schools, then physical facilities, instructional materials, curriculum supervision, teacher characteristics and learner characteristics played a crucial role. The influence of these factors was justified by testing hypotheses of the study by Regression analysis.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this study was to investigate factors that influence the implementation of quality education in public and private primary schools in Kakamega County, Kenya. The research methodology used in the study was covered in this chapter. The sections covered included research design, target population, sampling techniques and sample size. The chapter also described research instruments that were used in the study. Ethical issues considered in the study were also covered. Finally, procedures for data collection and data analysis used were explained.

3.2 Study design

This study used the mixed method design. Mixed methods research involved collection, analysis and integration of quantitative (surveys) and qualitative (interviews) research. According to Nutting et al. (2009), mixed methods design is an ideal technique for assessing complex interventions of a study. The mixed methods involved measuring, classifying, analyzing, comparing and interpreting data. On the other hand, regression analysis was used to test hypotheses formulated for the study. The null hypotheses were tested using 5 percent (0.05) level of significance. The mixed methods design was therefore appropriate due to quantitative and qualitative analysis of data from large number and diversity of respondents in the study. It was also applicable due to versatility, efficiency, and generalization.

Therefore, the mixed method study design was used in this study since it provided a means to juxtaposition, assessment, interpretation and summarization of respondents' views on the factors that influenced the implementation of quality education in public and private primary schools in Kakamega County. This was done through usage of both quantitative and qualitative paradigms.

3.3 Target population

According to Koul (2005), target population referred to any collection of a specified group of human beings, or non-human entities to whom the research results applied. In light of this, the target population for this study referred to a population of people and institutions. The target population for this study included primary schools, QASOs, head teachers, teachers and pupils from which the sample for the study was selected. Kakamega County has twelve sub-counties. This study targeted public and private primary schools from the twelve sub-counties.

The target population for public primary schools was 600 while the target population for private primary schools was 200. The total target population for primary schools was, therefore, 800. From these schools: head teachers, teachers, and pupils were targeted as respondents. The target population for head teachers was 800 as there was only one head teacher per school. The target for teachers was 10866 while the target for pupils was 524928. The target population for QASOs was 13. The total target population was 536607.

3.4 Sample and sampling procedures

The study used both simple random and stratified sampling procedures to select the

appropriate sample the method of sampling was found to be applicable as it involved a finite accessible population. The method was used due to vast geographical location of Kakamega County. The location had a bearing on the study. In this regard, stratified sampling was used to sampled 4 (3 public primary schools and 1 private primary school) per sub county for all the 12 sub counties of Kakamega county. 48 (thirty six public primary schools and twelve private primary schools), making a total of forty eight primary schools were sampled for the study with expert consent of supervisors.

The subjects from public primary schools and private primary schools were sampled by use of simple sampling method. The study sampled 8 pupils (4 boys and 4 girls) from both public primary schools and private primary schools. This constituted a sample of 288 pupils in public primary schools and 96 pupils in private primary schools. The total sample for pupils in both public and private primary schools was 384. With regard to teachers, the study sampled 5 teachers who teach KNEC examinable subjects in public primary schools and private primary schools. The sample for public primary schools was 180 while for private primary schools it was 60. The total sample for teachers in both public and private primary schools was 240. The forty eight head teachers of schools and 13 QASOs were also sampled. This was a census sample for QASOs and head teachers. The total sample for the study was 685 respondents. The sample size was summarized in Table 3.1

Table 3.1 Sample size

Institution	No. of institutions	QASOs	Head teachers	Teachers	Pupils
Public Primary	36		36	180	288
Private Primary	12		12	60	96
Total	48	13	48	240	384

Concerning data in Table 3.1, 685 respondents were sampled for the study. The sample size produced confidence level of 1.96, the confident interval of 0.05 and standard deviation of 0.5 in the study.

3.5 Research instruments

According to Zohrabi, M (2013), appropriate instruments for the collection of relevant information contribute to the reliability and validity of data. Besides, Zohrabi, M (2013), further noted that the main instruments to be used in mixed method research consist of questionnaires, interviews and observation schedules. The purpose of incorporating various tools is to supplement each other and boost validity of the data. In this study, questionnaires, interview schedules and observation schedules were the main research tools.

3.5.1 Questionnaires

According to Gay (2003), a questionnaire with clearly constructed question items is a valuable tool. In this study, three sets of questionnaires were constructed to capture the implementation level of benchmarks set by the government on quality education in public

and private primary schools. There were three sets of questionnaires that were administered to respondents. Head teachers filled one set of questionnaires. Teachers filled the other set of questionnaires while pupils filled the third set of questionnaires.

In all the cases, demographic and background information of respondents was captured in section 'A' of the questionnaire. Section 'B' of the questionnaire covered variables that were being investigated. The questionnaire items were both structured and unstructured. This was to enable respondents to respond more effectively to questionnaire items. It helped the researcher to gather adequate information on factors influencing implementation of quality education in public and private primary schools. The items also assisted the researcher in assessing on whether institutional factors, teacher characteristics, and learners' characteristics influence implementation of quality education in public and private primary schools. The information gathered was used to test research hypotheses in relation to the implementation of quality education in public and private primary schools. The questionnaires were filled and collected back immediately.

3.5.2 Interview schedules

Interviews consist of collecting data by asking questions. Interview schedules were administered to QASOs. This type of interview was more appropriate to collect complex information from QASOs with a higher proportion of opinion-based information. It involved either structured or unstructured verbal communication between the researcher and QASOs.

3.5.3 Observation schedules

The researcher collected information through observation schedules. Observation schedules were prepared to cover facilities that influence quality education in the schools. It was used to collect information through observation on condition and availability of physical facilities and instructional materials.

All items in the questionnaires, interview schedules and observation schedules were based on research objectives and hypotheses formulated. This was done in order to ensure the study remained focused. These different ways of data collection enabled supplementation of each other, leading to boosting the validity and dependability of the data collected.

3.6 Pilot study

According to Van Teijlingen and Hundley (2001), a pilot study is referred to as a trial run done in readiness for the feasibility study. In this study, a pilot study was conducted in order to pre-test the research instruments. Pilot testing of research instruments established how the sampled population responded to question items outlined in research instruments. Through the pilot study, research instruments were pre-tested for the purpose determining validity and reliability of research instruments.

Sampling for pilot study had to be conducted. According to Wolfgang, V.et al (2015), 5 percent sample of the study sample size produces 95 percent confidence in a pilot study. In this study, 5 percent of the sample size was therefore reasonable in piloting research instruments. The sample for pilot study was determined as indicated;

$$5/100 * 48 = 2.4$$

$$= 3$$

Subsequently, three primary schools were sampled for the pilot study. Two of the schools were public while one school was private. The sample size of respondents included three head teachers, 24 teachers, and twenty four pupils. The total sample size for the pilot study was fifty one respondents. It translated to the requirement of at least 5 percent of the sample size of the pilot study.

3.6.1 Validity of instruments

According to Lawrence (2015), Validity referred to appropriateness of tools, processes and data. In addition, Thatcher (2010), noted that content validity entailed measurements that reflected specific aspects of the study. In this study, content validity measured the expected data needed for the study. The questionnaire items were corrected by the researcher after being filled. The exercise was conducted in order to test the wording and the flow of questions and to identify the common response categories to the questions about the quality concept. The responses were analyzed and items with ambiguity were addressed.

Overall, the pilot study evaluated the suitability of the instruments, especially the clarity of instructions and question items; relevance of question items and adequacy of space to write in responses. The responses were analyzed and items with ambiguity were addressed. More so, the study questionnaire items were adjusted so that results obtained would be appropriate in order to conform to the study objectives and hypotheses. There were also assessment and identification of problems that respondents encountered while

completing the questionnaires. These were problems which had not been foreseen during the development of the instruments. There was also verification of questionnaire items which ensured that they were clearly conceptualized by respondents.

According to Carmines and Zeller (1979), construct validity was the relationship between empirical measures and hypothesis testing. In this study, construct validity was demonstrated by careful analysis of construct quality and factors that influenced the implementation of quality education. Construct validity of questionnaires was enhanced by basing on the categories from the reviewed literature. Internal validity was addressed through the advice of the supervisors.

3.6.2 Reliability of Instruments

According to Twycross and shields (2004), the reliability of instruments ensured that research findings study were consistent and stable when repeated. It implied that the research findings would be identical, though from different circumstances. This was consistent with Cohen et al, (2000) when they noted that reliability was the consistency and reliability over time and a group of respondents. In this study, Instrument reliability ensured that the instruments used for measuring experimental variables gave the same results. Questionnaire items were refined before being administered. Internal consistency of questionnaire items ensured that each part of the item generated similar results and that each part of item measured the correct construct. Reliability tested how stable the items were over time. It ensured that the same items performed upon the same individual give exactly the same results. Cronbach's alpha statistical test was used to determine reliability of instruments. The reliability coefficient was determined at 0.67 on all standardized

items. This was an indication that measurement of factors that influenced quality education in conformed to schools the acceptable standards.

3.7 Data collection procedure

The first step the researcher took during the data collection procedure was to gain access to the study site. This step allowed the researcher to become familiar with people and spaces. It also allowed potential actors and others to learn about the nature of the study and specifics of the research design (Stake, 1995). The researcher then obtained a research permit from the National Commission of Science, Technology, and Innovations (NACOSTI). The researcher further sought permission from the Kakamega County Commissioner and Kakamega County Director of Education. Thereafter, the researcher obtained names and contact information for eligible institutions from the Kakamega County Director of Education.

The researcher then sought consent from head teachers of those schools in order to participate in the study. Once permission was granted, letters of invitation to participate were issued to the respondents. The researcher issued the questionnaires to the head teachers and teachers. Questionnaires were issued to respondents through the assistance of research assistants, head teachers, and teachers. Primary data for this study was collected through questionnaires. The information gathered was supplemented by researcher's observation. Completion of the observation schedule was conducted by the researcher himself and assisted by research assistants. After the fieldwork, the researcher assembled all the filled questionnaires and observation schedules for data cleaning, juxtaposition, coding and finally data analysis.

3.8 Data analysis procedure

In this study, objectives and formulated hypotheses led to the collection of quantitative and qualitative data. Through thematic analysis, data were coded and categorized according to patterns and emergent themes related to the purpose of the study and research hypotheses. The analysis involved gleaning meaning from the qualitative data based on questionnaires; review of documents, researcher observations, as well as from themes in the literature. According to Patton (1990), a massive qualitative data collection of questions organized in significant patterns revealed the essence of data. In this case, analysis of qualitative data, attitudes and opinions of respondents was conducted. Subsequently, descriptive statistics were derived from the analysis. This led to the coding of collecting data. Numerical values were allocated to the qualitative data.

The coded data was entered in the computer. The Statistical Package for Social Sciences software (SPSS version 20) was used to analyze the data. Data from the questionnaires and observation schedules was analyzed. The qualitative data were classified according to the variables of the study physical facilities, instructional materials, curriculum supervision, teachers' characteristics, and learners' characteristics. The descriptive and inferential analysis was utilized to determine factors that influenced the implementation of quality education in public and private primary schools. The data gathered contained responses on physical facilities, instructional materials, curriculum supervision, teachers' characteristics, and learners' characteristics.

The Cronbach's alpha statistical test of variable reliability was used to determine the

authenticity of all standardized items. The range of α coefficient of reliability lies from 0 to 1. When $\alpha=0$, then the items are independent. If α is closer to 1, then the items have high covariance. According to the University of Virginia, (2016), the recommended Cronbach's alpha coefficient is 0.67. The ratio is acceptable since the recommended coefficient lies between 0.65 and 0.8 or above.

Descriptive statistics gathered included means, frequencies, standard deviations, and regressions. The findings were presented using tables. The results were tabulated to ease interpretation and visualize various results as given by respondents. The study hypotheses were tested at 5 percent level of significance. It was appropriate for this study since the target population was considerable. The analysis of variance was done by using the z-test method. The method determined the significant difference in the hypothesized population proportion and the sampled proportions. However, with highly correlated independent variables, change in the dependent variable was not noticed. The change, therefore, could not be attributed to an individual independent variable.

The Collinearity Statistical test was also used to determine the correlation of variables. Collinearity is the prediction a variable from other variables with a substantial degree of accuracy. In VIF test;

When $VIF = 1$, then it is not correlated;

When $1 < VIF < 5$, then moderately correlated;

However, when $VIF > 5$ to 10, then it is highly correlated.

In addition, Wilcoxon signed rank test was used in order to understand the difference in

implementation of quality education in public and private primary schools. In Wilcoxon signed-rank test, the dependent t-test compared the two dependent variables public and private primary schools to determine whether there was a statistically significant difference between these dependent variables.

It was expressed as $H_0: \mu_1 = \mu_2$;

Where P is the significant value,

When $P=0$, then there is no significance.

If $P>0$, then there is negative significance.

While if $P<0$, there is positive significance.

Analysis of Variance (ANOVA) was used to determine whether there were significant differences between factors of the study. F statistic is the ratio: variations between sample means/ variations within samples,

Alpha =value= significance level,

Significance level = 0.05

p = value,

$p>0.05$, hypothesis not rejected and

$p< 0.05$, hypothesis rejected.

However, when the calculated test statistic exceeds cutoff, then the null hypothesis is rejected. Besides, Kao L. et al (2008), noted that when drawing conclusion, Bonferroni

correction is used to reset the P-value to α/k where k represents the number of comparisons made (hypotheses).

Finally, Regression analysis was used to determine how the value of the dependent variable changed when any one of the independent variables was varied, while the others were fixed. Overall, the results of the data analysis were presented by the use of frequency tables. In Regression analysis, the following equation was used :

$$Y=a+bX;$$

Where Y = dependent value (Quality Education) that was being predicted in this study. X was the independent value (variables). The value (a) was the constant in the Regression analysis equation. It was the intercept point of the Regression line and Y-axis. The (b) value was the coefficient of X. It was the slope of the Regression line. The independent variable for the hypothesis in the study were the variables of the study and their influence on implementation quality education in public and private primary schools.

3.9 Ethical considerations

According to this study, ethical consideration referred to standards for conduct which distinguished between right and wrong. Various researchers (Berg, 2001; Punch, 2005; Hesse-Biber & Leavy, 2011; Israel & Hay, 2006) reiterated the importance of maintaining research ethics. Besides, they emphasized that researchers should preserve privacy and anonymity of the respondents. Ethics in the study were therefore given utmost concern. As this study involved the acquisition of personal information, ethical principles were considered during the data collection process. Before starting the exercise of data collection and data analysis, the researcher had to seek approval from the

University of Nairobi. Permission to conduct the research was obtained from NACOSTI. Consent was also obtained from the administrative personnel of the participating schools and the County director of Education in Kakamega County.

A research authority letter and research permit from NACOSTI warranting the investigation were presented to the respondents before the commencement of data collection. The right to privacy and confidentiality was disclosed to respondents before the start of data collections. The respondents had the right to respect, trust, and integrity. They were not identified by name at any time, before, during, or after the study. Each questionnaire had a covering letter explaining privacy and ethical issues to respondents as well as demonstrating that their participation was voluntary. In cases where respondents were children, authority was sought from their parents to enable them to participate in the research.

Accordingly, in this study, data collected from respondents were treated with confidentiality through maintaining privacy and anonymity by excluding names in collection instruments like questionnaires. Before embarking on data collection, consent was sought from respondents before their responses through informing them the purpose of the study. The participants were told of the nature and procedures of the study. They were informed that their participation was voluntary and they had the right to withdraw from the study at any time. The researcher ensured that the data collected was used for the academic purposes to avoid prejudicing the originator of the data and the university's reputation in any way.

The data gathered herein was used to substantiate the researcher's discussion. Shepard

(2002) advised that it is the researcher's responsibility to guard against actions crossing an ethical measure. In any case, the researcher had to be alert enough to prevent transgressing good conducts of research. After the completion of the exercise, participants had the opportunity to review their responses and to make any changes to their statements. Only the researcher accessed the completed questionnaires. At the completion of the study, paper data were shredded and discarded.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION, AND PRESENTATION

4.1 Introduction

The purpose of this study was to investigate factors that influence the implementation of quality education in public and private primary schools in Kakamega County, Kenya. This chapter dealt with data analysis, interpretation, and presentation. The data were collected using three sets of questionnaires interview guides and observation schedules. The three sets of questionnaires were administered to head teachers, teachers, and pupils. The interview guides were administered to QASOs. The researcher used the observation schedules to determine the availability of physical facilities in public and private primary schools. The extent to which physical facilities and equipments were maintained was also captured on observation schedules. The results focused on the influence of physical facilities, instructional materials, curriculum supervision, teachers' characteristics, and learners' characteristics on the implementation of quality education in public and private primary.

The analysis conformed to the requirements of the mixed method study design. Descriptive statistics were used to analyze the data. The qualitative analysis of responses was based on the consistency of facts and logic adduced to factors that influenced the implementation of quality education in public and private primary schools. Regression analysis tested the hypotheses at the 5 percent level of significance. Overall, data analyzed was based on research objectives and hypotheses. The findings were presented by the use of frequency tables.

4.2 Instrument return rate

The research instruments were administered to QASOs, head teachers, teachers, and pupils in public and private primary schools in Kakamega County. The study sample comprised of 13 QASOs, 48 head teachers, 240 teachers and 384 pupils. The questionnaires and interview schedules the main research instruments. The research assistants assisted in issuing the instruments to the respondents. The respondents filled the questionnaires. After completion of the filling exercise, the research instruments were returned. The interview schedules were also administered to QASOs.

The 685 respondents responded to the research tools. The response rate from the respondents was 100 percent was also 100 percent. This was because the instruments were administered by the researcher himself and his research assistants. In addition, respondents filled the questionnaires and returned them immediately after completion of the exercise. According to Kerlinger (1973), 60.0 percent of the return rate of questionnaires was good enough. In this study, therefore, the return rate of 100 percent, which was above 60.0 percent, was perfect. In this regard, the return rate of study instruments in this study was perfectly adequate.

4.3 Respondents' demographic information

The study sought to establish the demographic information of the respondents to give an insight on the respondents' characteristics. The demographic characteristics of head teachers, teachers, and pupils that were captured included respondents' gender, age bracket, academic qualification, professional qualification, and professional experience.

The information on the gender of the respondents was captured in Table 4.03

Table 4.01 Respondents' gender

Gender	Public Primary Schools								Private Primary Schools							
	QASOs		Head				Head				Teachers		Teachers		Pupils	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%		
Male	10	77	20	67	108	60	144	50	8	67	36	60	48	50		
Female	3	23	16	33	172	40	144	50	4	33	24	40	48	50		
Total	13	100	36	100	180	100	288	50	12	100	60	100	96	100		

Concerning data contained in Table 4.01, 77 percent of QASOs were male while 67 percent of the head teachers in both public and private primary schools who participated in the study were male. However, 60 percent of the teachers in both public and private primary schools were male.

Further findings from Table 4.01 revealed that 23 percent of QASOs were female while 33 percent of the head teachers in both public and private primary schools who responded to the questionnaires were female. However, 40 percent of the teachers in both public and private primary schools who participated in the study were female. Besides, 50 percent of pupils in both public and primary schools who participated in the study were male. Another 50 percent of the pupils in both public and private primary schools who participated in the study were female.

Overall, there were more male than female respondents who participated in the study. Coincidentally, the percentage of male and female head teachers and teachers was the same

in both public and private primary schools. Their views were used for generalization of the study. The study also sought to establish the age brackets of the respondents. The information on age bracket was captured in Table 4.02

Table 4.02 Age bracket of QASOs, headteachers and teachers

Age bracket	Public Primary Schools						Private Primary Schools				
	QASOs		Head teachers		Teachers		Head Teachers		Teachers		
	n	%	n	%	n	%	n	%	n	%	
21-25	0	0	0	0	0	0	0	0	0	39	65
26-30	0	0	0	0	0	0	4	33	11	18	
31-35	0	0	0	0	0	0	2	17	10	17	
36-40	0	0	0	0	40	22	2	17	0	0	
41-45	2	15	10	28	100	56	2	17	0	0	
46-50	3	23	20	56	20	11	1	8	0	0	
51 and above	8	62	6	16	20	11	1	8	0	0	
Total	13	100	36	100	180	100	12	100	60	100	

Regarding data contained in Table 4.02, 15 percent of QASOs indicated that they were in the age bracket of 41-45 years of age. 23 percent of the QASOs were in the age bracket of 46-50 years of age. 62percent of the QASOs were in the age bracket of 51 and above years old. However, 28 percent of the head teachers in public primary schools fell in the

age bracket of 41-45 years while 56 percent of the head teachers were in the age bracket of 46-50 years. Besides, 16 percent of the head teachers were in the age bracket of fifty-one and above years.

However, findings from Table 4.02 indicated that 28 percent of the head teachers in private primary schools fell in the age bracket of 41-45 years while 56 percent of the head teachers were in the age bracket of 46-50 years. Besides, 16 percent of the head teachers in private primary schools were in the age bracket of fifty-one and above years. Further findings in Table 4.05, indicated that 22 percent of the teachers in public primary schools fell in the age bracket of 36-40 years while 56 percent of the teachers were in the age bracket of 41-45 years.

However, 11 percent of the teachers were in the age bracket of 46- 50 years while 11 percent of the teachers were in the age bracket of fifty-one and above years. However, 66 percent of the teachers in private primary schools fell in the age bracket of 20-25 years while 17 percent of the teachers were in the age bracket of 26-30 years. Besides, 17 percent of the teachers in private primary schools were in the age bracket of 31-35 years.

Overall, the age brackets for QASOs, head teachers and teachers established that they were above 26 years of age. However, teachers in private primary schools were younger than teachers in public primary schools. This implied that teachers in public primary schools were more experienced than teachers in private schools.

The study further sought to establish the age brackets of the pupils. The information on age bracket was captured in Table 4.03

Table 4.03 Age bracket of pupils

Age bracket	Public primary schools		Private primary schools	
	n	%	n	%
5-10	0	0	0	0
10-15	240	83	84	87
16-20	48	17	12	13
Total	288	100	96	100

Regarding data contained in Table 4.03, none of the pupils in both public and private primary schools were in the age bracket of 5-10 years. However, 83 percent of pupils in public primary schools were in the age bracket of 10-15 years, while 17 percent of pupils in public primary schools fall in the bracket of 16-20 years. Besides, the study further indicated that 87 percent of the pupils in private primary schools were in the age bracket of 10-15 years, while 13 percent were in the age bracket of 16-20 years.

Overall, over 85 percent of the pupils were within the age bracket of 10-15 years. The study further established that there were over age pupils (age bracket of 16-20 years) in both public and private primary schools. The recommended chronological age for primary education in Kenya ranged from 6-13years for primary Education. These findings indicated that there were over age pupils in public and private primary schools. Therefore, the conclusions concurred with GoK (2014) which noted that there was internal inefficiency in primary school Education due to the enrolment of over-age

children.

The study further sought to examine professional qualifications of QASOs, head teachers and teachers. The information was captured in Table 4.04

Table 4.04 Professional qualification of QASOs, Head teachers and Teachers

Qualification	Public primary schools				Private primary schools					
	QASOs		Head teachers		Teachers		Head teachers		Teachers	
	n	%	n	%	n	%	n	%	n	%
P1	3	23	24	67	160	89	10	83	55	92
Diploma	3	23	3	8	0	0	0	0	0	0
University Degree	7	54	9	25	20	11	2	17	5	8
Total	13	100	36	100	180	100	12	100	60	100

Regarding data contained in Table 4.04, 23 percent of QASOs were of P1 qualification. However, 67 percent of the head teachers in public primary schools had professional qualification of P1 while 83 percent of the head teachers in private primary schools had P1 as their professional qualification. Besides, 89 percent of the teachers in public primary schools had professional qualification of P1 while 92 percent of the teachers in private primary schools indicated that they had professional qualification of P1.

Further findings from Table 4.04, showed that 23 percent of QASOs were of diploma qualification while 8 percent of the head teachers in public primary schools had a

diploma in education as their professional qualification. However, none of the head teachers and teachers in private primary schools and teachers in public primary schools had diploma of education as a professional qualification.

Besides, 54 percent of the QASOs had a university degree. However, 25 percent of the head teachers in public primary schools had professional qualification of University degree while 17 percent of the head teachers in private primary schools had university qualification as their professional qualification. However, 11 percent of the teachers in public primary schools had a university degree as their professional qualification while 8 percent of the teachers in private primary schools had a University degree.

Overall, most head teachers and teachers in both public and private primary schools had the minimum professional qualification of P1 as required by the teaching profession. However, teachers in public primary schools were more qualified than their counterparts in private primary schools. This concurred with NCES (1997) which noted that teachers in public schools were more qualified than those in private schools. This implied that it had positive influence on the learning achievement in both public and private primary schools. Quality education would then be implemented in public primary schools better than private primary schools.

The length of service of QASOs, head teachers and teachers was considered. The period of service of head teachers and teachers was as indicated in Table 4.05

Table 4.05 Experience of QASOs, head teachers and teachers

Experience	Public primary schools						Private primary schools			
	QASOs		Head teachers		Teachers		Head teachers		Teachers	
	n	%	n	%	n	%	n	%	n	%
1-5 years	0	0	4	11	90	50	10	83	48	80
6-10 years	0	0	12	33	18	10	0	0	5	8
11-15 years	0	0	12	33	27	15	0	0	0	0
16-20 years	0	0	4	11	27	15	0	0	0	0
Over 20years	13	100	4	11	18	10	2	17	7	12
Total	13	100	36	100	180	100	12	100	60	100

Regarding data contained in table 4.05, 100 percent of QASOs had working experience of over 20 years. However, 11 percent of the head teachers from public primary schools indicated that they had an experience of 1-5 years as head teachers while 83 percent of the head teachers in private primary schools stated that they had administrative experience of 1-5 years. Besides, 50 percent of the teachers in public primary schools indicated that they had an experience of 1-5 years while 80 percent of the teachers in private primary schools reported that they had an experience of 1-5 years.

In addition, 33 percent of the head teachers from public primary schools indicated that they had administration experience of 6-10 years while none of the head teachers in private primary had administrative experience of 6-10 years. Besides, 28 percent of

teachers from public primary schools indicated that they had teaching experience of 6-10 years while 8 percent of the teachers in private primary schools reported that they had teaching experience of 6-10 years.

Further findings from Table 4.05 indicated that 33 percent of head teachers from public primary schools indicated that they had an administrative experience of 11-15 years while none of the head teachers and teachers in private primary schools had administrative experience of 11-15 years. However, 15 percent of teachers from public primary schools indicated that they had teaching experience of 11-15 years. Also, 11 percent of head teachers from public primary schools indicated that they had an administrative experience of 16-20 years. However, none of the head teachers and teachers in private primary schools had administrative experience of 16-20 years. In addition, 15 percent of teachers from public primary schools indicated that they had teaching experience of 16-20 years. Besides, 11 percent of head teachers from public primary schools indicated that they had an administrative experience of over 20 years while 17 percent of the head teachers in private primary schools had administrative experience of over 20 years. In addition, 10 percent of teachers from public primary schools indicated that they had teaching experience of over 20 years while 12 percent of the teachers in private primary schools stated that they had teaching experience of over 20 years.

Overall, the findings revealed that all the head teachers and teachers had the required expertise to administer and teach in both public primary schools and private primary schools. However, head teachers and teachers in private primary schools were younger than their counterparts in public primary schools. This implied that head teachers and teachers in public primary schools were more experienced than their counter parts in

private primary schools. It therefore affected implementation of quality education in these schools.

The study further sought responses concerning class size. Class size is crucial in the organization of classrooms that can influence the instructional method of teachers. Small class size can lead to arranging to seat in a circle for maximum interaction instead of lecturing children sitting in rows. Teachers are usually happier with small class size. Small class size leads to teachers becoming more efficient and able to give children individual attention. To determine the proper class in public and private primary schools in Kakamega County, the researcher asked pupils to indicate class enrollment of their respective classes. This information was captured in Table 4.06

Table 4.06 Class size in public and private primary schools

Class size	Public primary schools		Private primary schools	
	n	%	n	%
10-20	0	0	6	50.0
21-30	0	0	3	25.0
31-40	0	0	3	25.0
41-50	6	16.7	0	0
51-60	9	25.0	0	0
61-70	12	33.3	0	0
71-80	9	25.0	0	0
Total	36	100	12	100

With regard to class size, data contained in Table 4.06 revealed that 16.7 percent of public primary schools had class enrolment in the bracket of 41-50 pupils per class. It was further indicated that 25.0 percent of public primary schools fell in the class enrolment bracket of 51-60 per class. 33.3 percent of public primary schools fell in the class enrolment bracket of 61-70 per class. 25 percent of public primary schools fell in the class enrolment bracket of 71-80 per class.

Further findings from Table 4.06, indicated that 50 percent of private primary schools had class enrolment in the bracket of 10-20 pupils per class. It was further revealed that 25 percent of public primary schools fell in the class enrolment bracket of 21-30 per Class. However, 25 percent of private primary schools fall into the class enrolment bracket of 31-40 per class.

Overall, most public primary schools had class size of 60-70 pupils. Pupils were sitting in rows. The classrooms were congested. This implied positive interaction between pupils and teachers was likely to be interrupted. Learners did not get the required attention from teachers. Implementation of quality education would therefore be affected. However, most of the private primary schools had class size of 10-20 pupils. Pupils were sitting in rows. The classrooms were not congested. This implied there was positive interaction between pupils and teachers. Learners got the required attention from teachers. Implementation of quality education would therefore be influenced. This was an indication that due to low-class enrolment, private primary schools were likely to implement quality education better than public primary schools. This concurred with Westerlund (2008) who noted that smaller classes allowed a better quality of teaching and learning.

The study also sought information on teacher-pupil ratio from head teachers. Researchers considered the academic interaction between teachers and students as an indicator of quality education. However, the number of students per teacher in a school was a determinant for such success. The ratio was associated with class size. Smaller classes promoted better learning achievement than larger classes. The teachers with low proportions of learners were likely to execute teaching duties effectively. Their responses were reflected in Table 4.07

Table 4.07 Teacher-pupil ratio in Public and Private primary schools

Ratio	Public primary schools		Private primary schools	
	n	%	n	%
1:20	0	0	6	50
1:30	0	0	3	25
1:40	0	0	3	25
1:50	15	41.7	0	0
1:60	12	33.3	0	0
1:70	6	16.7	0	0
1:80	3	8.3	0	0
Total	36	100	12	100

Concerning teacher/ pupil ratio, data contained in Table 4.07 revealed that 41.7 percent of respondents in public schools noted that teacher/pupil ratio of 1:50 existed in their schools. However, 33.3 percent of the respondents in public primary schools indicated

that their schools had a ratio of 1:60 while 16.7 percent of respondents observed that public primary schools had teacher/pupil ratio of 1:70. Besides, 8.3 percent of the respondents in public primary schools indicated that their schools had a rate of 1:80.

Further findings from Table 4.07 revealed that 50 percent of respondents in private schools reported that teacher/pupil ratio of 1:20 existed in their schools. However, 25 percent of the respondents indicated that their schools had a ratio of 1:30 while 25 percent of respondents observed that private primary schools had teacher/pupil ratio of 1:40.

Overall, most public primary schools had pupils/teacher ratio of over 50:1 in public primary schools, while most private primary schools had pupils/teacher ratio of 20:1.. This concurred with UNICEF (2014) which noted that PTR in Kenyan public schools stood at 42:1 while in private primary schools it was 19:1.

4.4 National benchmarks for quality education

The government of Kenya through the Ministry of Education, science and technology has given policy guidelines to be followed for the purpose of achieving quality education. For quality assurance to be ensured in public and private primary schools, physical infrastructure and interactive environment are vital for effective learning. The physical infrastructure includes physical facilities and instructional materials. Interactive environment is realized through the availability proper Class size and supervision of curriculum. These basic requirements for learning achievement were addressed by the government through the necessary benchmarks for quality education. The policy guidelines were expected to be adhered to in public and private primary schools in

Kakamega County. The parameters were reflected in Table 4.08

Table 4. 08 National Benchmarks for selected indicators of quality of education

Selected indicator	Description of indicator	National benchmark
Basic learning materials	The pupil has at least one exercise book, a pencil or a pen, and a ruler	100%
Textbooks	Pupils have textbooks in required ratios	3:1 in lower primary and 2:1 in upper primary
Pupil-teacher ratios	Total number of pupils in a school divided by the number of teachers in the school	40:1
Class size	Average number of pupils per Class	45
Supervisory capacity	School level supervision	100%
INSETS	INSETS for new teaching and learning methods	100%
Toilets	Number of pupils per toilet for boys and girls	34:1 and 29:1 for boys and girls

Source: MoEST (2005), TSC (2005) and UNICEF (2014).

In regard to information based on benchmarks in Table 4.08, schools were to have adequate physical facilities, and instructional materials. Physical facilities and instructional materials were considered crucial to ensure that the pupils participate reasonably in learning activities in the classrooms. Therefore, it was desirable for schools

to have adequate physical facilities.

All pupils were to have these materials in order to acquire better quality education. Quality education could not be achieved only in terms of inputs, but also in terms of processes. Curriculum supervision as a process at the school level was to be conducted. School level supervision was enhanced by QASOs, head teachers and subject panel leaders. During the study, head teachers' data were obtained from the sampled public and private primary schools. The data obtained was based on these benchmarks and formed the basis of the study analysis. Analysis of responses from head teachers, teachers and pupils was done as per each research objective and corresponding hypothesis.

4.5 Data Analysis on influence of physical facilities on quality education

After the analysis of respondents' demographic data in this section, the study focused on the analysis of data on objective one and research hypothesis one. Research objective one sought to determine the influence of school physical facilities on the implementation of quality education in both public and private primary schools in Kakamega County. In relation to this objective, the null hypothesis was tested on the basis that school physical facilities did not significantly influence the implementation of quality education in public and private primary schools in Kakamega County.

Data collected addressed the study objective and research hypothesis. The data sought for comprised administration blocks, classrooms, libraries, restrooms, water points, electricity, and playfields. The head teachers', teachers' and pupils' views on these variables provided information on the extent to which school physical facilities influenced the implementation of quality education in public and private primary

schools in Kakamega County.

4.5.1 Analysis of data on influence of physical facilities

To establish the adequacy of available school physical facilities in public and private primary schools in Kakamega County, the study sought views from the head teachers, teachers, and pupils in respect of the issues. The responses collaborated with the researcher's views on observation schedules concerning availability and maintenance of school physical facilities. The responses indicated that School physical facilities did influence quality of Education in primary schools. Space and furniture available were also crucial in determining quality education being offered in public and private primary schools. Findings on views of head teachers and teachers on the adequacy and inadequacy of the physical facilities were reflected in Table 4.09

Table 4.09 Head teachers' and teachers' information on availability of school physical facilities

Facility									Private primary schools							
	Headteachers				Teachers				Head teachers				Teachers			
	Adequate		Inadequate		Adequate		Inadequate		Adequate		In Adequate		Adequate		Inadequate	
	n	%	n	%	N	%	n	%	n	%	n	%	n	%	n	%
School administration blocks	15	41.7	21	58.3	120	41.7	60	58.3	3	25	9	75	35	58.3	25	41.7
Classrooms	15	41.7	21	41.7	75	41.7	105	58.3	8	66.7	4	33.3	40	66.7	20	33.3
Libraries	0	0	36	100	0	0	180	100	0	0	12	100	0	0	60	100
Desks	18	50	18	50	90	50	90	50	0	0	12	100	0	0	60	100
Teachers' tables	0	0	36	100	0	0	180	100	0	0	12	100	0	0	60	100
Teachers' chairs	0	0	36	100	0	0	180	100	0	0	12	100	0	0	60	100
Water	19	52.8	17	47.2	95	52.8	85	47.2	6	50	6	50	30	50	30	50
Electricity	19	52.8	17	52.8	95	52.8	85	47.2	8	66.7	4	33.3	40	66.7	20	33.3
Latrines	0	0	36	100	0	0	180	100	0	0	12	100	0	0	60	100
Play fields	0	0	36	100	0	0	180	100	0	0	12	100	0	0	60	100

Regarding data contained in Table 4.09, 41.7 percent of the head teachers from public primary schools indicated that their schools had adequate administration blocks while 58.3 percent of the head teachers from public primary schools indicated that their schools did not have adequate administration blocks. In addition, 25 percent of the head teachers from private primary schools noted that their schools had adequate administration blocks while 75 percent of the head teachers from private primary schools indicated that their schools did not have adequate administration blocks. Besides, 41.7 percent of teachers in public primary schools noted that administration blocks were adequate while 58.3 percent of the teachers indicated that administration blocks were inadequate. Also, 41.7 percent of the teachers in private primary schools noted that their schools had adequate administration blocks while 58.3 percent of the teachers in private primary schools indicated that their schools had inadequate administration blocks.

Further findings from Table 4.09, indicated that 41.7 percent of the head teachers from public primary schools indicated that their schools had adequate classrooms while 58.3 percent of the head teachers from public primary schools indicated that their schools didn't have adequate classrooms. However, 66.7 percent of the head teachers from private primary schools noted that their schools had adequate classrooms while 33.3 percent of the head teachers from private primary schools indicated that their schools did not have adequate classrooms. In addition, 41.7 percent of teachers from public primary schools indicated that their schools had adequate classrooms while 58.3 percent of the teachers from public primary schools indicated that their schools didn't have adequate classrooms. However, 66.7 percent of teachers from private primary schools noted that their schools had adequate classrooms while 33.3 percent of the teachers from private primary schools

indicated that their schools did not have adequate classrooms.

Data contained in Table 4.09 indicated that none of the head teachers and teachers from both public and private primary schools noted that there were libraries in their schools. However, 100 percent of head teachers and teachers from both public and private primary schools indicated that there were no libraries in their schools. This implied that library services were not availed to learners in both public and private primary schools. Also, 50 percent of head teachers and teachers from public primary schools noted that their schools had adequate desks. However 100 percent of head teachers and teachers in private primary schools noted that their schools had adequate desks. In addition, 50 percent of head teachers and teachers in public primary schools noted that their schools had inadequate desks. Moreover, none of the head teachers and teachers in private primary schools indicated that their schools had inadequate desks

Further findings from Table 4.09 indicated that none of the head teachers and teachers from both public and private primary schools noted that there were no adequate teachers' tables and chairs in their schools. However, 100 percent of head teachers and teachers from both public and private primary schools indicated that their schools had inadequate teachers' tables and chairs. In addition, 52.8 percent of the head teachers in public primary schools reported that their schools had adequate water points.

Besides, 66.7 percent of the head teachers in private primary schools noted that electricity points were adequate in their institutions. However, 47.2 percent of the head teachers in public primary schools indicated that electricity points were inadequate in their institutions. Another 33.3 percent of the head teachers in private primary schools

indicated that electricity points were inadequate in their institutions. Also, 52.8 percent of the teachers in public primary schools indicated that electricity points were adequate in their institutions. Another 66.7 percent of the teachers in private primary schools indicated that water points were adequate in their institutions. However, 47.2 percent of the teachers in public primary schools indicated that electricity points were inadequate in their institutions. Another 33.3 percent of the teachers in private primary schools indicated that water points were inadequate in their institutions.

In addition, 52.8 percent of the head teachers in public primary schools indicated that electricity points were adequate in their institutions. Another 50 percent of the head teachers in private primary schools indicated that electricity points were adequate in their institutions. However, 47.2 percent of the teachers in public primary schools indicated that water points were inadequate in their institutions. Another 50 percent of the teachers in private primary schools indicated that water points were inadequate in their institutions. Also, none of the head teachers and teachers from both public and private primary schools noted that there were adequate latrines and play fields in their schools. However, 100 percent of head teachers and teachers from both public and private primary schools indicated that there were inadequate latrines and playfields in their schools.

Overall, there were inadequate physical facilities in both public and private primary schools. The findings also applied to play fields in both public and private primary schools. The findings concurred with KNEC (2010) which noted that interventions were needed to improve facilities in schools.

The study also sought information on the availability of school physical facilities in public and private primary schools based on observation schedules. The availability was based on the existing facilities vis-à-vis the bench marks. The findings were represented in Table 4.10.

Table 4.10 Adequacy of school physical facilities based on observation schedules

Facility	Public primary schools				Private primary schools			
	Adequate		Inadequate		Adequate		Inadequate	
	n	%	n	%	n	%	n	%
School administration blocks	2	5.6	34	94.4	2	16.7	10	83.3
Classrooms	16	44.4	20	55.6	8	66.7	4	33.3
Libraries	0	0	36	100	0	0	12	100
Desks	18	50	18	50	10	83.3	2	16.7
Teachers' tables	0	0	36	100	0	0	12	100
Teachers' chairs	0	0	36	100	0	0	12	100
Water	18	50	18	50	6	50	6	50
Electricity	18	50	18	50	6	50	6	50
Latrines	0	0	36	100	0	0	12	100
Play fields	0	0	36	100	0	0	12	100

With regard to data contained in observation schedules in Table 4.10, 5.6 percent of the public primary schools had adequate administration blocks while 94.4 percent of the public primary schools had inadequate administration blocks. However, 16.7 percent of private primary schools had adequate administration blocks while 83.3 percent of the

private schools had inadequate administration blocks. Besides, 44.4 percent of public primary schools had adequate classrooms while 55.6 percent of the private schools had inadequate classrooms. In addition, 66.7 percent of private primary schools had adequate classrooms while 33.3 percent of the private primary schools had inadequate classrooms.

Further findings revealed that 50 percent of public primary schools had adequate desks while 83.3 percent of private primary schools had adequate desks and 16.7 percent of the private primary schools had inadequate desks. However, 100 percent of both public and private primary schools had inadequate teachers' tables. Besides, 100 percent of both public and private primary schools had inadequate teachers' chairs. However, 50 percent of both public and private primary schools had adequate supply of water. These findings concurred with Gyabaah et al (2009), who noted 53 percent of schools lacked sanitation facilities and water points. However, 50 percent of both public and private primary schools had adequate electricity. This concurred with UNICEF (2014) which noted 39.4 percent of public primary schools were connected to electricity while 57.4 percent of private primary schools had electricity connection private primary schools.

Further revelation from Table 4.10 indicated that 100 percent both public and private primary schools had inadequate latrines. Also, 100 percent of both public and private primary schools had insufficient playfields. Overall, the status of physical facilities in private primary schools was better than their public primary schools' counterparts. Subsequently, it motivated parents to opt for private schools, as they perceived that physical facilities influenced quality education it promoted quality. This was in concurrence with Mackatiani (2008) who noted that parents took their children to private schools due to the availability of adequate physical facilities in these schools.

The study further sought information from observation schedules on maintenance of school physical facilities. Maintenance of school infrastructure entailed repairs of depleted buildings and broken equipment, compound cleanliness, painting buildings, leaking water pipes and hanging electrical fittings. It also involved cutting of tall grass within school environment. The researcher observed the school compound covering play fields, buildings, school furniture, electricity cables and water pipes.

The observation schedules were analyzed to determine the extent of the maintenance. The information from observation schedules was contained in Table 4.11

Table 4.11 Maintenance of physical facilities based on observation schedules
Facility

Facility	Public primary schools				Private primary schools			
	Maintained		Not maintained		Maintained		Not maintained	
	n	%	n	%	n	%	n	%
School administration blocks	2	5.6	34	94.4	1	8.3	11	91.7
Classrooms	12	33.3	24	66.7	8	66.7	4	33.3
Libraries	2	5.6	34	94.4	1	8.3	11	91.7
Desks	18	50	18	50	10	83.3	2	16.7
Teachers' tables	2	5.6	34	94.4	1	8.3	11	91.7
Teachers' chairs	2	5.6	34	94.4	1	8.3	11	91.7
Water	2	5.6	34	94.4	1	8.3	11	91.7
Electricity	2	5.6	34	94.4	1	8.3	11	91.7
Latrines	0	0	36	100	0	0	12	100
Play fields	0	0	36	100	0	0	12	100

With regard to data contained on observation schedules in Table 4.11, 5.6 percent of public primary schools maintained their school administration blocks while 94.4 percent of the public primary schools did not maintain their school administration blocks. However, 33.3 percent of private primary schools maintained their administration blocks while 66.7 percent of the private schools maintained their

administration blocks. Besides, 33.3 percent of public primary schools maintained their classrooms while 66.7 percent did not maintain their classrooms. Contrary to private primary schools, 66.7 percent maintained their classrooms while 33.3 percent of the private schools did not maintain their classrooms.

Further findings contained in Table 4.11 revealed that 5.6 percent of public primary schools maintained their libraries while 94.4 percent of public primary schools did not repair their libraries. Also, 8.3 percent of private primary schools repair their libraries while 91.7 percent of the private primary schools did not maintain their libraries. Besides, 50 percent of the public primary schools maintained their desks while another 50 percent of public primary schools did not repair desks. Moreover, 5.6 percent of public primary schools repaired teachers' tables and teachers' chairs while 94.4 percent of the public primary schools did not repair teachers' tables and chairs. However, 8.3 percent of private primary schools repaired teachers' tables and chairs while 91.7 percent of private primary schools did not repair teachers' tables and chairs.

Besides, 5.6 percent of public primary schools repaired water and electricity fittings while 94.4 percent of the public primary schools did not sustain water and electricity fittings. However, 8.3 percent of private primary schools repaired water and electricity points while 91.7 percent of private primary schools did not repair water and electricity points. However, 100 percent of both public and private primary schools did not repair latrines. Playfields were either bushy or had eroded grounds.

Overall, physical infrastructure, water pipes, electricity fittings and playfields in both public and private primary schools than were not maintained. This was an indication that

un maintained buildings and equipment had a negative impact on quality education in both public and primary schools. This concurred with O'Neill (2000) when he stated that school buildings with deficiencies had a negative impact on learners' achievement.

The study also sought to opinion from head teachers and teachers whether they agreed that physical facilities positively influenced the implementation of quality education in primary schools. The study explored the opinions from strongly agree, agree, strongly disagree and disagree. This information was captured in Table 4.12

Table 4.12 Opinion of QASOs, head teachers and teachers on the influence of physical facilities

Rating	QASOs		Public primary schools				Private primary schools				
			Head teachers		Teachers		Head teachers		Teachers		
	n	%	n	%	n	%	n	%	n	%	
Strongly disagree	0	0	0	0	0	0	0	0	0	0	0
Disagree	0	0	0	0	0	0	0	0	0	0	0
Agree	3	23	6	16.7	30	16.7	2	16.7	10	16.7	
Strongly agree	10	77	30	83.3	150	83.3	10	83.3	50	83.3	
Total	13	100	36	100	180	100	12	100	60	100	

Concerning data contained on perceptions in Table 4.12, none of the QASOs, head teachers and teachers in both public and private primary schools neither strongly disagreed nor disagreed that school physical facilities influenced quality education. However, 23 percent of QASOs agreed that physical facilities influenced quality

education in primary schools. Besides, 16.7 percent of head teachers and teachers in public primary schools agreed that physical facilities positively influenced quality education in primary schools. In addition 16.7 percent of teachers in private primary schools agreed that school physical facilities affected quality education in primary schools. Also, 83.3 percent of head teachers and teachers from public primary schools strongly agreed that school physical facilities influenced quality education. Also, 83.3 percent of head teachers and teachers from private primary schools strongly agreed that school physical facilities affected quality education.

Overall, the respondents indicated that school physical facilities influenced quality education in both public and private primary schools. This was attested by the fact that when physical facilities were adequate and well maintained, they provided a conducive environment for the learning process. This was in concurrence with OECD (2012) which revealed that school structures influenced learning achievement, better discipline, and better pedagogic approaches.

4.5.2 Testing Hypothesis 1 on school physical facilities

The first hypothesis stated that; H_1 : School physical facilities do not significantly influence the implementation of quality education in public and private primary schools. The Regression analysis was used in testing the hypothesis. The Regression analysis estimated the relationship between variables. The findings were represented in Table 4.13

Table 4.13 Regression model on the influence of physical facilities

Change statistic								
R	R	Adjusted	Std Error	R	F	df1	df	Sig F
	Square	R	of	the	Square	Change	2	Change
	Square	Square	Estimate	Change				
.755	.570	.257	.422	.570	1.822	8	11	.176

a. Predictors: (Constant), water and electricity, classrooms, administration block, latrines, desks, library, Tables, chairs

b. Dependent Variable: Quality education

The results in Table 4.13 indicated that the significance level was at sig F= 0.176. It was greater than $p= 0.05$. The relationship was $F(8, 11) = 0.257$. $p > 0.05$, $R^2 = 25.7$ percent. The hypothesis was therefore rejected. This meant that X= physical facilities predicted implementation of quality education in public and private primary schools. The study, therefore revealed that physical facilities influence implementation of quality education in public and private primary schools by 25.7 percent. The findings concurred with OECD (2012) who stated that school structures influenced learning achievement.

The study further used ANOVA to determine the total variability of physical facilities when sub subdivided into, administration block, classrooms, chairs, tables, latrines, library, desks, water and electricity. It was used to establish the degree to which changes in physical facilities can influence changes in the implementation of quality education in public and primary schools. The results are represented in Table 4.14

Table 4.14 ANOVA results on Physical facilities.

		Sum of	Mean			
Model		Squares	Df	Square	F	Sig.
1	Regression	2.593	8	.324	1.822	.176
	Residual	1.957	11	.178		

a. Predictors: (Constant), water and electricity, classrooms, administration blocks, latrines, desks, library, Tables, chairs, playfields, workshops, benches, kitchens, dining halls, bookstores, food stores, libraries, urinals

b. Dependent Variable: Quality education

Concerning ANOVA in Table 4.14, the F statistic was 1.822 while deviation factor (DF) numerator was eight and DF denominator was eleven. Therefore, the p-value was 1.822. The significance level was at 0.05. The F statistic of 1.822 was not significant at $p < 0.05$. Since the F-test was greater than the p value, then the null hypothesis should be rejected. The null hypothesis was therefore rejected, and the variables predicted the quality of Education in public and private schools.

The Collinearity Statistical test was also used to determine the correlation of variables as indicated in Table 4.15

Table 4.15 Collinearity statistical test on physical facilities

Model	Unstandardized		Standardized		T	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta				Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	.308	.192			1.60	.136					
administration block		.352	-.119		-.328	.749	.043	-.094	-.067	.323	3.092
Classrooms	.282	.324	.296		.870	.402	.314	.243	.179	.366	2.735
Library	-.077	.487	-.077		-.158	.877	.341	.046	-.033	.179	5.60
Latrines	.058	.389	.060		.148	.885	.453	.043	.031	.257	3.891
Desks	-.147	.445	-.147		-.331	.746	.538	-.095	-.068	.213	4.695
Tables	.545	.403	.568		1.351	.202	.664	.363	.278	.239	4.187
Chairs	.224	.503	.234		.446	.663	.453	.128	.092	.154	6.503

- a. Predictors: (Constant), water and electricity, classrooms, administration block, latrines, desks, library, Tables, chairs
b. b. Dependent Variable: Quality education

Concerning Table 4.15, a is the independent variable of predictors: (Constant), classrooms, administration block, latrines, desks, library tables, and chairs. b is the dependent variable of quality education. The independent variables were significant to quality education as indicated by beta coefficients. The p values were greater than .005, which was the significant level. From the Collinearity Statistics test, variance inflation factors (VIF) ranged from 2.735 to 6.5.3 $p > 0.05$. This implied that the Regression model was highly correlated. The variables (classrooms, administration block, latrines, desks, library tables, and chairs) therefore, could be predicted from others with a high degree of accuracy.

Wilcoxon signed-rank test was further used to ascertain comparison of the influence of physical facilities on the implementation of quality education in public and private primary schools. The tabulation was computed from the Table 4.16

Table 4.16 Wilcoxon signed-rank test on Physical facilities

		Sum of	Mean			
Model		Squares	Df	Square	F	Sig.
1	Regression	2.593	8	.324	1.822	.176
	Residual	1.957	11	.178		

Concerning data in Table 4.17 above, $t(8) = 1.822$. Therefore, $p > 0$. Since $p > 0$, the null hypothesis was rejected. It was concluded that physical facilities significantly influenced implementation of quality education in public primary schools than in private primary

schools.

The Cronbach's alpha test was used to determine the variable reliability. The findings were reflected in Table 4.17

Table 4.17 Cronbach's alpha test on Physical facilities

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.745	.746	86

Concerning data in from Table 4.17 on Cronbach's alpha test, the coefficient was 0.745. The reliability coefficient in this study was, therefore, determined at 0.67 on all standardized items. The questionnaire items were reliable as the coefficient was above 0.67 ($0.745 > 0.67$).

Overall, the Regression analysis was done on the testing of the hypothesis: School physical facilities do not significantly influence the implementation of quality education in public, and private primary schools rejected the null hypothesis. The study used the Regression analysis, ANOVA statistical test, Collinearity Statistical test, Wilcoxon signed rank test and Cronbach's alpha. Through the various tests done, it was evident that the significant factor (0.176) was the same in almost all the tests. This justified the rejection of the null hypothesis that had been advanced.

4.6 Data Analysis on the influence of instructional materials for Quality education

After the analysis of data on the influence of school physical facilities on the implementation of quality education in both public and private primary schools, the study focused on the analysis of data based on objective two and research hypothesis two.

Research objective two sought to establish the influence of instructional materials on the implementation of quality education in both public and private primary schools in Kakamega County.

Data collected addressed the study objective and research hypothesis. The data obtained comprised of necessary learning materials that included exercise books, pens, rulers, teacher's guides, pupils' textbooks, wall maps, and charts. The head teachers', teachers' and pupils' views on these variables provided information on the extent to which instructional materials influenced the implementation of quality education in public and private primary schools in Kakamega County.

4.6.1 Analysis of data on influence of instructional materials

To establish the adequacy of available of instructional materials in public and private primary schools in Kakamega County, the study sought views from the head teachers, teachers, and pupils in respect of the issues. The responses collaborated with the researcher's views on observation schedules and QASOs interview schedules.. The head teachers', teachers' and pupils' views on these variables provided information on the extent to which instructional materials influenced the implementation of quality education in public and private primary schools in Kakamega County.

Findings on views of head teachers and teachers on the adequacy of instructional materials were reflected in Table 4.18

Table 4.18 Head teachers' and teachers' views on adequacy of instructional materials

Facility	Public primary schools								Private primary schools							
	Headteachers				Teachers				Head teachers				Teachers			
	Adequate		Inadequate		Adequate		Inadequate		Adequate		Inadequate		Adequate		Inadequate	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Exercise books	36	100	0	0	180	100	0	0	12	100	0	0	60	100	0	0
Writing pens	36	100	0	0	180	100	0	0	12	100	0	0	60	100	0	0
Wall maps	0	0	36	100	0	0	180	100	0	0	12	100	0	0	60	100
Marker pens	0	0	36	100	0	0	180	100	0	0	12	100	0	0	60	100
Teaching aids	0	0	36	100	0	0	180	100	0	0	12	100	0	0	60	100
Teachers' reference books	36	100	0	0	180	100	0	0	12	100	0	0	60	100	0	0
Pupils' course textbooks	20	55.6	16	44.4	100	55.6	80	44.4	10	83.3	2	16.7	50	83.3	10	16.7
Geometrical sets	0	0	36	100	0	0	180	100	0	0	12	100	0	0	60	100
Rulers	0	0	36	100	0	0	180	100	0	0	12	100	0	0	60	100

Regarding data contained in Table 4.18, 100 percent of the head teachers and teachers from both public and private primary schools indicated that exercise books and writing pens were adequate. However, 100 percent of head teachers and teachers from both public and private primary schools noted that wall maps, marker pens and teaching aids were inadequate. Also 100 percent of head teachers and teachers in both public and private primary schools noted that teachers' reference books were adequate.

Besides, 55.6 percent of head teachers and teachers in public primary schools indicated that there were adequate pupils' course books their schools. In addition 83.3 percent of the head teachers and teachers from private primary schools noted that their schools had adequate pupils' course books. However, 44.4 percent of head teachers and teachers from public primary schools indicated that their schools had inadequate pupils' course books. Also, 16.7 percent of the head teachers and teachers in private primary schools indicated their schools had inadequate pupils' course books. Further findings from Table 4.20 indicated that 100 percent of the head teachers and teachers from both public and private primary schools noted that their schools had inadequate geometrical tins and rulers.

Overall, views from head teachers and teachers indicated that both public and private primary schools had inadequate wall maps, marker pens, geometrical tins, rulers, and teaching aids. This implied that implementation of quality education would be negatively influenced in both public and private primary schools. This was in concurrence with Southern and Eastern Africa Consortium (2007) which noted that 22 percent of pupils in Kenyan public primary schools lacked instructional materials.

The study also sought to establish perceptions of QASOs, head teachers, teachers, and pupils on the influence of instructional materials on quality education. The study had to explore attitudes of strongly agree, agree, strongly disagree and disagree with head teachers, teachers, and pupils on the influence of instructional materials on quality education. This information was captured in Table 4.20

Table 4.19 Perceptions of head teachers, teachers, and pupils on the influence of instructional materials

Rating	Public primary schools							Private primary schools						
	QASOs		Head teachers		Teachers		Pupils		Head teachers		Teachers		Pupils	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Strongly disagree			0	0	0	0	0	0	0	0	0	0	0	0
Disagree			0	0	0	0	0	0	0	0	0	0	0	0
Agree	2	15	12	33.3	50	27.8	100	34.7	4	33.3	25	41.7	45	46.9
Strongly agree	11	85	24	66.7	130	72.2	188	65.3	8	66.7	35	58.3	51	53.1
Total	13	100	36	100	180	100	288	100	12	100	60	100	96	100

Concerning data contained on perceptions in Table 4.19, none of the QASOs, head teachers, teachers and pupils in both public and private primary schools strongly disagreed or disagreed that instructional materials positively influenced quality education in primary schools. However, 15 percent of QASOs agreed that instructional materials positively influenced implementation of quality education in primary schools. Besides 33.3 percent of head teachers, 27.8 percent of teachers and 34.7 percent of pupils in public primary schools agreed that instructional materials positively influenced quality education in primary schools. In addition, 33.3 percent of head teachers, 41.7 percent of teachers and 46.9 percent of pupils in private primary schools agreed that instructional materials positively influenced quality education in primary schools.

Further findings from Table 4.19 revealed that 85 percent of QASOs strongly agreed that instructional materials positively influenced implementation of quality education in primary schools. Besides, 66.7 percent of head teachers, 72.2 percent of teachers and 65.3 percent of pupils in public primary schools strongly agreed that instructional materials positively influenced quality education in primary schools. Another 66.7 percent of head teachers, 58.3 percent of teachers and 53.1 percent of pupils in private primary schools strongly agreed that instructional materials positively influenced quality education in primary schools.

Overall, views of 100 percent of QASOs, head teachers, teachers, and 100 pupils indicated that instructional materials significantly influence quality education in primary schools. This concurred with Eshiwani (1983) who stated that scarcity of instructional

materials compromised quality in Kenyan primary schools.

4.6.2 Testing Hypothesis 2 on instructional materials.

To determine the influence of instructional materials on the implementation of quality education in public and private primary schools, the second hypothesis was tested. The hypothesis stated that; H₂: Instructional materials do not significantly influence the implementation of quality education in public and private primary schools. The results of Regression analysis done to test the hypothesis are indicated in Table 4.20

Table 4.20 Regression model on the influence of instructional materials

Change statistic								
R	R Square	Adjusted R Square	Std Error of the Estimate	R Square Change	F Change	df1	df2	Sig F Change
.591 ^a	.349	-.140	.509	.349	.714	9	12	.689

a. Predictors: (Constant), chalk, wall charts, teaching aids, textbooks, marker pens, teachers' reference books, chalkboards, exercise books, writing pens

b. Dependent Variable: quality education

Concerning the data contained in Table 4.20 indicated that the significance level was at sig F= 0.689. It was greater than p= 0.05. The relationship $F(9, 12) = 0.714$. $p > 0.05$, adjusted $R^2 = 14$ percent. The hypothesis was therefore rejected. This meant that X= instructional materials predicted implementation of quality education in public and private primary schools. The study, therefore established that instructional materials predicted implementation of quality education in public and private primary schools by 14 percent. The findings agreed with UNESCO (2005) which noted that availability of instructional resources was crucial in the quality of teaching and learning.

The study further used ANOVA to determine the total variability curriculum supervision

when sub subdivided into chalk, wall charts, teaching aids, textbooks, marker pens and teachers' reference books. It was used to establish the degree to which changes in instructional materials can influence changes in the implementation of quality education in public and primary schools. The results were represented in Table 4.21

Table 4.21 ANOVA results for Instructional materials

		Sum of	Mean			
Model		Squares	Df	Square	F	Sig.
1	Regression	1.664	9	.185	.714	.689 ^a
	Residual	3.108	12	.259		

- a. Predictors: (Constant), chalk, wall charts, teaching aids, textbooks, marker pens, teachers' reference books, chalkboards, exercise books, writing pens
b. Quality education

Concerning information on ANOVA in Table 4.21, the F statistic was 0.714 while DF numerator was nine and DF denominator was twelve. Therefore, the p-value is .714. The significance level was 0.05. Therefore, the F statistic of 0.714 was not significant at $p < 0.05$. Since the F-test was greater than the F value, then the null hypothesis should be rejected. The null hypothesis was therefore rejected, and the variables of instructional materials predicted the quality of education in public and private schools.

Further, the study used the Collinearity Statistical test to determine the correlation of variables as indicated in Table 4.22

Table 4.22 Collinearity Statistical test on Instructional materials

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	.763	.295		2.586	.024					
Textbooks	.167	.336	.179	.496	.629	.098	.142	.116	.418	2.394
teachers reference books	-.353	.366	-.378	-.966	.353	-.160	-.269	-.225	.354	2.821
exercise books	.384	.622	.411	.618	.548	.428	.176	.144	.123	8.145
writing pens	.822	.950	.867	.864	.404	.370	.242	.201	.054	18.548
wall charts	-.242	.353	-.242	-.685	.507	.162	-.194	-.159	.436	2.294
marker pens	-.763	.588	-.816	-1.297	.219	.232	-.351	-.302	.137	7.287
teaching aids	.040	.347	.041	.114	.911	.295	.033	.027	.421	2.373
Chalkboards	-.171	.611	-.141	-.279	.785	.069	-.080	-.065	.212	4.717
Chalk	.020	.692	.015	.029	.977	-.013	.008	.007	.209	4.795

a. Predictors: (Constant), chalk, wall charts, teaching aids, textbooks, marker pens, teachers' reference books, chalkboards, exercise books, writing pens

b. Dependent Variable: type of school, public or private school

Basing on data contained in Table 4.22, the Collinearity Statistics test, VIF ranged from 2.294 to 18.548. Therefore, $p > 0.05$. It indicated multi-collinearity of predictor variables. This implied that the Regression model was highly correlated. The variables (instructional materials) were therefore predicted from others with a high degree of accuracy. The null hypothesis was therefore rejected, and the variables of instructional materials predicted the quality of education in public and private primary schools.

Wilcoxon signed-rank test was further used to ascertain comparison of the influence of instructional materials on the implementation of quality education in public and private primary schools. The tabulation was computed from Table 4.23

Table 4.23 Wilcoxon signed-rank test on Instructional materials

		Sum of		Mean		
Model		Squares	Df	Square	F	Sig.
1	Regression	1.664	9	.185	.714	.689 ^a
	Residual	3.108	12	.259		

With regard to data in Table 4.25 above, $t(9) = 0.714$. Therefore, $p > 0$. Since $p > 0$, then the null hypothesis was rejected. It was concluded that instructional materials significantly influenced implementation of quality education in public primary schools than in private primary schools.

Cronbach's alpha test was used to determine the variable reliability. The findings were reflected in Table 4.24

Table 4.24 Cronbach's alpha test on instructional materials

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.797	.790	21

With regard to data in Table 4.24 on the Cronbach' alpha test, the coefficient was 0.797. Therefore, the p value was 0.797. Since the significance level was at 0.67, the questionnaire items were reliable as the coefficient was above 0.67 ($0.797 > 0.67$).

Overall, the Regression analysis done on the testing of the hypothesis: Instructional materials do not significantly influence the implementation of quality education in public and private primary schools rejected the null hypothesis. The study used the Regression analysis, ANOVA statistical test, Collinearity Statistical test, Wilcoxon signed rank test and Cronbach's alpha. Through the various tests done, it was evident that the significant factor (0.689) was the same in almost all the tests. This justified the rejection of the null hypothesis that had been advanced.

4.7 Data Analysis on influence of curriculum supervision of quality education

After the analysis of data on the influence of instructional materials on the implementation of quality education in public and private primary schools, the study focused on the analysis of data on objective three and research hypothesis three. Research objective three sought to establish the influence of curriculum supervision on the implementation of quality education in both public and private primary schools in Kakamega County.

4.7.1 Analysis of data on influence of curriculum supervision

To establish the extent to which curriculum supervision significantly influenced the implementation of quality education, data was collected that addressed the study objective and research hypothesis. The data obtained comprised of information from QASOs, head teachers and SPHs. The head teachers' information on these variables provided information on the frequency of curriculum supervision in public and private primary schools in Kakamega County by various cadres. The information was captured in Table 4.25

Table 4.25 Head teachers' views on frequency of curriculum supervision by respective cadres

Frequency	Public primary schools						Private primary schools					
	QASOs		Head teachers		Subject panel heads		QASOs		Head teachers		SPHs	
	n	%	n	%	n	%	n	%	n	%	n	%
Daily	0	0	10	27.8	0	0	0	0	2	16.7	0	0
Weekly	0	0	26	72.2	12	33.3	0	0	10	83.3	0	0
Monthly	12	33.3	0	0	24	66.7	0	0	0	0	12	100
Rarely	24	66.7	0	0	0	0	12	100	0	0	0	0

Concerning data contained in Table 4.25 revealed that none of the QASOs SPHs supervised curriculum on daily basis in both public and private primary schools. However, 27.8 percent of the head teachers supervised curriculum in public primary schools on a daily basis while 16.7 percent of head teachers in private primary schools

supervised curriculum on daily basis

Besides, none of the QASOs supervised curriculum in both public and private primary schools on a weekly basis. Moreover, none of the SPHs in private schools supervised curriculum on a weekly basis. However, 72.2 percent of head teachers in public primary schools and 83.3 percent of head teachers in private primary schools monitored curriculum on a weekly basis. Besides, 33.3 percent of SPHs in public primary schools supervised curriculum on a weekly basis.

Further findings contained in Table 4.25 indicated that 33.3 percent of QASOs, none of the head teachers and 66.7 percent of SPHs supervised curriculum in public primary schools on a monthly basis. However, none of the QASOs and head teachers, and 100 percent of SPHs supervised curriculum in private primary schools on a monthly basis. Besides, 66.7 percent of QASOs, none of the head teachers and none of the SPHs rarely supervised public primary schools. However, 100 percent of QASOs, none of the head teachers and SPHs rarely monitored curriculum in private primary schools.

Overall, curriculum supervision in public and private primary schools was conducted by QASOs, head teachers, and SPHs. Most head teachers in public and private primary schools supervised curriculum on a weekly basis. Besides, most SPHs in both public and private primary schools monitored curriculum on a monthly basis. This implied that curriculum supervision by head teachers and SPHs contributed to the implementation of quality education in both public and private primary schools. However, QASOs hardly supervised curriculum in both public and private primary schools. This was an indication that non-curriculum supervision by QASOs negatively influenced the implementation of

quality education in primary schools. This was in concurrence with Abdille (2012) who noted that classroom observation was neglected in schools.

The study further sought to establish the adequacy of QASOs. The information was sought from QASOs, head teachers and teachers. This information was captured in Table 4.26.

Table 4.26 Views of QASOs, head teachers and teachers on the adequacy of QASOs

Adequacy	Public primary schools					Private primary schools				
	QASOs		Head teachers		Teachers		Head teachers		Teachers	
	n	%	n	%	n	%	n	%	n	%
Adequate	0	0	12	33.3	62	34.7	5	41.7	28	46.7
Inadequate	13	100	24	66.7	118	65.6	7	58.3	32	53.3
Total	13	100	36	100	180	100	12	100	60	100

Concerning data contained in Table 4.26, 100 percent of QASOs indicated that QASOs were inadequate. However, 33.3 percent of the head teachers and 34.7 percent of teachers in public primary schools indicated that QASOs were adequate. However, 41.7 percent of the head teachers and 46.8 percent of teachers in private primary schools reported that QASOs were adequate

Further findings from the data contained in Table 4.26 indicated that 66.7 percent of the head teachers and 65.6 percent of teachers in public primary schools reported that QASOs were inadequate. However, 58.3 percent of the head teachers and 53.3 percent of

teachers in private primary schools indicated that QASOs were insufficient.

Overall, therefore, all respondents noted the inadequacy of QASOs. Kakamega County has got 12 sub-counties and 60 wards. This totals to 60 administrative units. It is therefore expected to have 72 QASOs besides the County Director of Quality Assurance and Standards officer. The county has been deployed with 13 QASOs. This was an indication acute shortage of QASOs. It was an implication that QASOs hardly supervised both primary and private primary schools. This had a negative influence of implementation of quality education in both public and primary schools. The findings concurred with GOK (2004) which noted that the quality of education on the whole poor as a result of inadequate supervision and inspection.

The study also sought perceptions from QASOs, head teachers and teachers on the influence of curriculum supervision for the implementation of quality education in public and private primary schools. The respondents rated the opinions of strongly agree, agree, strongly disagree and disagree. This information is captured in table 4.28

Table 4.27 Perceptions of QASOs, head teachers and teachers on the influence of curriculum supervision.

Perceptions	Public primary schools						Private primary schools			
	QASOs		Head teachers		Teachers		Head teachers		Teachers	
	n	%	n	%	n	%	n	%	n	%
Strongly disagree	0	0	6	16.7	30	16.7	2	16.7	7	11.7
Disagree	0	0	6	16.7	23	13.3	2	16.7	0	0
Agree			12	33.3	63	35	4	33.3	15	25
Strongly agree	13	100	12	33.3	63	35	4	33.3	38	63.3
Total	13	100	36	100	180	100	12	100	60	100

Concerning data contained in Table 4.28, 100 percent of QASOs strongly agreed that curriculum supervision positively influenced the implementation of quality education in primary schools. However, 16.7 percent of the head teachers and 13.3 percent of teachers in public primary schools strongly disagreed that curriculum supervision influenced quality education. Besides, 16.7 percent of the head teachers and 11.7 percent of teachers in private primary schools strongly disagreed that curriculum supervision affected quality education.

Also, 16.7 percent of the head teachers and 13.3 percent of teachers in public primary schools disagreed that curriculum supervision influenced quality education. However, 16.7 percent of the head teachers and 0 percent of teachers in private primary schools disagreed that curriculum supervision affected quality education.

Further findings on data contained in Table 4.28, 33.3 percent of the head teachers and 35 percent of teachers in public primary schools agreed that curriculum supervision influenced quality education. However, 33.3 percent of the head teachers and 25 percent of teachers in private primary schools agreed that curriculum supervision affected quality education. Besides, 33.3 percent of the head teachers and 34.7 percent of teachers in public primary schools strongly agreed that curriculum supervision influenced quality education. However, 33.3 percent of the head teachers and 63.3 percent of teachers in private primary schools disagreed that curriculum supervision affected quality education.

Overall, the findings revealed that curriculum supervision positively influenced the implementation of quality education in primary schools. It was an implication that curriculum supervision influenced the implementation of quality education in public and private primary schools. This was in concurrence with Oliva and Pawlas (2001) who noted that monitoring was necessary for inexperienced and experienced teachers in schools.

4.7.2 Testing of hypothesis 3 on curriculum supervision.

To determine the influence of curriculum supervision on the implementation of quality education in public and private primary schools, the third hypothesis was tested. The hypothesis stated that; H3: curriculum supervision does not significantly influence the implementation of quality education in public and private primary schools. The results of Regression analysis done to test the hypothesis were indicated in Table 4.28

Table 4.28 Regression model on Influence of curriculum supervision on Quality education.

Change statistic								
R	R Square	Adjusted R Square	Std Error of the Estimate	R Square Change	F Change	df1	df2	Sig F Change
.376	.141	.006	.469	.141	1.041	3	19	.397

a. Predictors: (Constant), QASOs, head teacher, subject panel head
 b. Dependent Variable: Quality education

Concerning the data contained in Table 4.28, the results revealed that the significance level was at sig F= 0.397. It was greater than $p= 0.05$. The relationship $F(3, 19) = 1.041$. $p>0.05$, $R^2=14.1$ percent. This implied that curriculum supervision predicted implementation of quality education in public and private primary schools by 14.1 percent. The independent variable for the hypothesis H_2 in the study was the curriculum supervision and its influence on the implementation of quality education in public and private primary schools.

The hypothesis was therefore rejected. The study consequently revealed that curriculum supervision predicted implementation of quality education in public and private primary schools by 14.1 percent. The findings did not concur with Khan (2004) who stated that that supervision did not provide the required support to the teachers.

The study further used ANOVA to determine the total variability curriculum supervision when sub subdivided into head teachers, SPHs and QASOs. It was used to establish the

degree to which changes in curriculum supervision can influence changes in the implementation of quality education in public and primary schools. The results are represented in Table 4.29

Table 4.29 ANOVA results of curriculum supervision

Model		Sum of Squares	Df	Mean Square	F	Sig
1	Regression	.687	3	.229	1.041	.397 ^a
	Residual	4.182	19	.220		

a. Predictors: (Constant), QASOs, head teacher, subject panel head

b. Dependent Variable: type of school, public or private school

Concerning the data contained in Table 4.29 on ANOVA, F is 1.041; DF numerator is three and DF denominator is nineteen. Therefore, the p-value is 1.041. The significance level is 0.05. F is not significant at $p < 0.05$. Since the F-test was greater than the F value, then the null hypothesis was rejected. The null hypothesis was therefore rejected, and the variables (curriculum supervision) predicted the quality of education in public and private schools. The Collinearity Statistical test was further used to determine the correlation of variables as indicated in Table 4.30

Table 4.30 Collinearity Statistical test on Curriculum supervision

Model	Unstandardized		Standardized	Correlations					Collinearity	
	Coefficients		Coefficients	Zero-o					Statistics	
	B	Std. Error	Beta	T	Sig.	rder	Partial	Part	Tolerance	VIF
(Constant)	.552	.624		.884	.388					
Head teacher	.211	.143	.376	1.480	.155	.376	.321	.315	.700	1.428
SPHs	-.006	.183	-.011	-.034	.974	.183	-.008	-.007	.417	2.395
QASOs	.009	.311	.010	.029	.977	.199	.007	.006	.402	2.490

a. Predictors: (Constant), head teachers, SPHs, QASOs)

b. Dependent Variable: quality education

Concerning data contained in Table 4.30, (a) is the independent variables of QASOs, head teachers, and SPHs. (b) is the dependent variable of quality education. The independent variables were significant to quality education as indicated by beta coefficients. The p values were higher than .005 which was the significant level. From the Collinearity Statistics test, it was further revealed that the variance was moderately inflated. The VIF ranged from 1.428 to 2.490, $p > 0.05$. The VIF was therefore somewhat inflated. This correlated with earlier findings that the null hypothesis is rejected and the variables predicted the quality of Education in public and private schools.

The null hypothesis was therefore rejected, and the variables predicted the quality of education in public and private schools. However, it denoted that not only curriculum supervision can predict the influence of implementation of quality education in public and private primary schools. The results revealed that curriculum supervision partially influenced the implementation of quality education in public and private primary schools.

Wilcoxon signed-rank test was further used to ascertain comparison of the influence of curriculum on the implementation of quality education in public and private primary schools. The tabulation was computed from the Table 4.31.

Table 4.31 Wilcoxon signed-rank test on Curriculum supervision

		Sum of		Mean		
Model		Squares	Df	Square	F	Sig
1	Regression	.687	3	.229	1.041	.397
	Residual	4.182	19	.220		

Concerning data in Table 4.31 above, $t(3) = 1.041$. Therefore, $p > 0$. Since $p > 0$, then the

null hypothesis was rejected. It was concluded that curriculum supervision significantly influenced implementation of quality education in public primary schools than in private primary schools.

The Cronbach's alpha test was used to determine the variable reliability. The findings were reflected in Table 4.32

Table 4.32 The Cronbach's alpha test on curriculum supervision

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.773	.775	16

Concerning data in Table 4.32 on the Cronbach' alpha test, the coefficient was 0.773. Therefore, the p-value was 0.773. Since the significance level is at 0.67, the questionnaire items were reliable as the coefficient was above 0.67 ($0.773 > 0.67$).

Overall, the Regression analysis was done on the testing of the hypothesis: Curriculum supervision does not significantly influence the implementation of quality education in public, and private primary schools rejected the null hypothesis. The study used the Regression analysis, ANOVA statistical test, Collinearity Statistical test, Wilcoxon signed rank test and Cronbach's alpha. Through the various tests done, it was evident that the significant factor (0.397) was the same in almost all the tests. This justified the rejection of the null hypothesis that had been advanced.

4.8 Data Analysis on the influence of teachers' characteristics of Quality education

After the analysis of data on the influence of curriculum supervision on the implementation of quality education in public and private primary schools, the study

focused on the analysis of data on objective four and research hypothesis four. Research objective four sought to establish the influence of teachers' characteristics on the implementation of quality education in both public and private primary schools in Kakamega County.

Data collected addressed the study objective and research hypothesis. The data obtained comprised of, keeping of records, professional development and teaching approaches.

4.8.1 Analysis of data on influence of teachers' characteristics

To establish the extent to which teachers' characteristics significantly influenced the implementation of quality education information was collected from QASOs, head teachers and teachers. Data collected addressed the study objective and research hypothesis. The data obtained comprised of professional records, teaching approaches, teaching and learning aids and assessment of pupils' work. The QASAs, head teachers and teachers' information on these variables provided information on the extent to which teachers' characteristics influenced implementation of quality education in public and private primary schools in Kakamega County. The information was captured in Table 4.33

Table 4.33 Head teachers' views on maintenance of professional records

Professional records	Public primary schools				Private primary schools			
	Maintained		Not maintained		Maintained		Not maintained	
	n	%	n	%	n	%	n	%
Schemes of work	36	100	0	0	12	100	0	0
Lesson plans	6	16.7	30	83.3	8	66.7	4	33.3
Pupils' progress records	36	100	0	0	12	100	0	0
Teaching aids	10	27.8	26	72.2	9	75	3	25
Class registers	36	100	0	0	12	100	0	0

Regarding data contained in Table 4.33, 100 percent of head teachers in both public and private primary schools indicated that teachers maintained their schemes of work. This was an implication that teachers prepared their work in advance before embarking on the teaching process. In addition, 16.7 percent of the head teachers from public primary schools and 66.7 percent of head teachers in private primary schools noted that teachers maintained lesson plans. However, 83.3 percent of the head teachers from public primary schools and 33.3 percent of head teachers in private primary schools indicated that teachers did not maintain lesson plans. This implied that there was adherence to the maintenance of lesson plans in private primary schools, unlike public primary schools.

Further findings on data contained in Table 4.33 indicated that 100 percent of head teachers in both public and private primary schools noted that teachers maintained pupils' progress records. However, 27.8 percent of the head teachers from public primary

schools indicated that teachers maintained teaching aids while 72.2 percent of head teachers from public primary schools noted that teachers did not maintain teaching aids. Besides, 75 percent of the head teachers from private primary schools indicated that teachers maintained teaching aids while 25percent of head teachers from private primary schools noted that teachers did not maintain teaching aids. This was an implication that teachers in public primary schools hardly used teaching aids for reinforcement of the learning process as compared to their counterparts in private primary schools.

Besides, the data contained in Table 4.33 revealed that 100 percent of head teachers in both public and private primary schools indicated that teachers maintained class registers. This was an indication that teachers in both public and private primary schools tracked the progress of learners' achievement. This was in concurrence with Verwimp (1999) who noted that quality teaching of teachers was visualized in schools that embraced efficiency.

The study further sought perceptions QASOs, head teachers and teachers on the importance of maintaining professional records. They were asked whether they strongly agree, agree, strongly disagree or disagree on maintenance of professional documents.

The responses were reflected in Table 4.34

Table 4.34 Perceptions of QASOs, head teachers and teachers on the importance of maintaining professional records

Perception	QASOs		Public primary schools				Private primary schools			
			Head teachers		Teachers		Head teachers		Teachers	
	n	%	n	%	n	%	n	%	n	%
Strongly agree	13	100	30	83.3	100	55.6	10	83.3	40	66.7
Agree	0	0	6	16.7	80	44.4	2	16.7	20	33.3
Disagree	0	0	0	0	0	0	0	0	0	0
Strongly disagree	0	0	0	0	0	0	0	0	0	0
Total	13	100	36	100	180	100	12	100	60	100

Regarding data contained in Table 4.34, 100 percent of QASOs strongly agreed that maintenance of professional records were important in the implementation of quality education in primary schools. Besides, 83.3 percent of the head teachers in both public and private primary schools strongly agreed that maintenance of professional records was important. However, 55.6 percent of teachers in public primary schools strongly agreed that that maintenance of professional records was essential while 66.7 percent of teachers in private primary schools strongly agreed that maintenance of professional records was necessary. Another 44.4 percent of the teachers agreed that maintenance of professional records was essential while 33.3 percent of the teachers in private primary schools agreed that maintenance of professional records was necessary

However, 16.7 percent of the head teachers in both public and private primary schools agreed that maintenance of professional records was important. In addition, 44.4 percent of the teachers in public primary schools agreed that maintenance of professional records was important while 33.3 percent of the teachers in private primary schools agreed that maintenance of professional records. None of the respondents neither disagreed nor disagreed that maintenance of professional records was crucial in the implementation of quality education primary schools.

Overall, QASOs, head teachers and teachers agreed that professional records should be maintained. Maintenance of professional records entailed teachers having schemes of work, lesson plans and pupils' record of work. This implied that professional records were crucial in learning achievement as they assist teachers in reinforcement and tracking of learners' progress. Teachers as professionals were therefore charged with the responsibility of keeping professional records for tracking of learners' progress. This was in concurrence with Rice (2003) who noted that teachers' professional qualification positively correlated with students' achievement.

The study further sought to establish teaching approaches used by teachers in public and private primary schools. Teaching approaches were very important for learning achievement. Head teachers and teachers were asked whether teacher-centered approaches or learner-centered approaches were used. Their responses were indicated in Table 4.35

Table 4.35 Head teachers and teachers' information teaching approaches

Approaches	Public primary schools				Private primary schools			
	Head teachers		Teachers		Head teachers		Teachers	
	n	%	N	%	n	%	n	%
Teacher-centered	30	83.3	150	83.3	8	66.7	40	66.7
Learner-centered	6	16.7	30	16.7	4	33.3	20	33.3
Total	36	100	180	100	12	100	60	100

The information contained in Table 4.35 revealed that 16.7 percent of the head teachers in public primary schools indicated that teachers used learner-centered approaches while 33.3 percent of the head teachers in private primary schools reported that teachers used teacher-centered approaches when teaching. Another 83.3 percent of the teachers in public primary schools indicated that teachers used teacher-centered approaches while 66.7 percent of the teachers in private primary schools reported that teachers used teacher-centered approaches when teaching.

Further findings from Table 4.35 revealed that 83.3 percent of the teachers in public primary schools indicated that used teacher-centered approaches when teaching while 16.7 percent of the teachers in public primary schools reported that teachers used learner-centered approaches when teaching. However, 33.3 percent of teachers in private primary schools indicated that they used learner-centered approaches when teaching.

Overall, most teachers in both public and private primary schools use teacher centered

approaches. This implied that interactive learning was not experienced in both public and private primary schools leading to the use of traditional methods of teaching. This was in concurrence with Verwimp (1999) when they noted that 50 percent of professionally trained teachers used teacher-centered approaches

The study further sought to establish whether teachers were updated on their knowledge and professional skills. In-service courses were essential for any professional development. This was because on-the-job training updated professionals on new skills about their professions. For teachers, in-service courses equipped them with new teaching approaches in respective subject areas. Head teachers and teachers were therefore asked whether they had attended in-service courses for the subjects, they explain. The findings were reflected in Table 4.36

Table 4.36 Headteachers and teachers' information on in-service courses

Attendance	Public primary schools				Private primary schools			
	Head teachers		Teachers		Head teachers		Teachers	
	n	%	n	%	n	%	n	%
Not Attended	24	66.7	120	66.7	8	66.7	40	66.7
Attended	12	33.3	60	33.3	4	33.3	20	33.3
Total	36	100	180	100	12	100	96	100

Regarding data contained in Table 4.36, 66.7 percent of head teachers and teachers in both public and private primary schools had not attended in-service courses. However, 33.3 percent of the head teachers and teachers in both public and private primary schools had not attended the service courses. Besides, 33.3 percent of the head teachers in private

primary schools had not participated in-service courses.

Overall, it was established that at least 33.3 percent of teachers in both public and private primary schools lacked opportunities to attend in-service courses. This was an indication that modern trends in methods were not being enhanced in public and private primary schools. This was an implication that was negative influence on implementation of quality education. The findings concurred with KNEC (2010) which revealed that 37.8percent of teachers had not participated in-service courses in Kenya since 2003.

The study also sought the perceptions of QASOs, head teachers and teachers on the importance of in-service courses in implementation of quality education in primary schools. Head teachers' and teachers' opinions were as indicated in Table 4.37

Table 4.37 Perceptions of QASOs, head teachers and teachers on the significance of in-service courses

Perception	QASOs		Public primary schools				Private primary schools				
			Head teachers		Teachers		Head teachers		Teachers		
	n	%	n	%	n	%	n	%	n	%	
Strongly disagree	0	0	0	0	0	0	0	0	0	0	0
Disagree	0	0	0	0	0	0	0	0	0	0	0
Agree	4	31	6	16.7	30	16.7	4	33.3	20	33.3	
Strongly agree	9	69	30	83.3	150	83.3	8	66.7	40	66.7	
Total	13	100	36	100	180	100	12	100	60	100	

Concerning the data contained in Table 4.37, 31 percent of QASOs agreed that in-service courses influenced implementation of quality education in primary schools. However,

16.7 percent of the head teachers in public schools agreed that in-service courses influenced quality education while 33.3 percent of head teachers in private primary schools agreed that in-service courses influenced quality education. However, 16.7 percent of the teachers in both public and private primary schools agreed that in-service courses influenced quality education

Further findings from the data contained in Table 4.37 revealed that 69 percent of QASOs strongly agreed that in-service courses influenced implementation. Besides, 83.3 percent of the head teachers in public primary schools strongly agreed that in-service courses affected implementation of quality education in primary schools while 66.7 percent of the head teachers in private primary schools agreed that in-service courses influenced quality education. Also, 83.3 percent of teachers in public primary schools strongly agreed that in-service courses affected implementation of quality education in primary schools while 66.7 percent of the teachers in private primary schools strongly agreed that in-service courses influenced quality education in primary schools. None of the respondents neither disagreed nor strongly disagreed that in-service courses influenced quality education in primary schools

Overall, all QASOs, head teachers and teachers indicated that in-service courses influenced implementation of quality education in primary schools. This was an indication that in-service courses has got a positive influence on implementation of quality education in public and private primary schools. The findings concurred with Graydon (2006) who noted that improvement of teachers' skills promotes the learning achievement of learners to a higher level.

The study also sought the opinion of QASOs, head teachers and teachers on the influence of the teachers' characteristics in the implementation of quality education in public and private primary schools. Head teachers' and teachers' perceptions were as indicated in Table 4.38

Table 4.38 Perceptions of QASOs, head teachers and teachers on the influence of Teachers' characteristics on Quality education

Rating	Public primary schools						Private primary schools			
	QASOs		Head teachers		Teachers		Head teachers		Teachers	
	n	%	n	%	n	%	n	%	n	%
Strongly agree	7	54	30	83.3	150	83.3	8	66.7	40	66.7
Agree	6	46	6	16.7	30	16.7	4	33.3	20	33.3
Strongly disagree	0	0	0	0	0	0	0	0	0	0
Disagree	0	0	0	0	0	0	0	0	0	0
Total	13	100	36	100	180	100	12	100	60	100

Concerning data contained in Table 4.38, 54 percent of QASOs strongly agreed that teachers characteristics influenced implementation of quality education in primary schools. Another 46 percent of QASOs agreed that teachers' characteristics influenced implementation of quality education in primary schools. Besides, 83.3 percent of head teachers in public primary schools strongly agreed that teachers' characteristics were crucial in the implementation of quality education while, 66.7 percent of head teachers in private primary schools strongly agreed that teachers' characteristics influenced the implementation of quality education.

In addition, 83.3 percent of the teachers in public primary schools agreed that teachers' characteristics influenced the implementation of quality education while 66.7 percent of teachers in private primary schools strongly agreed that teachers' characteristics were critical in the implementation of quality education. Besides, 16.7 percent of the teachers in public primary schools agreed that teachers' characteristics influenced the implementation of quality education. Also, 33.3 percent of the teachers in private primary schools agreed that teachers' characteristics influenced the implementation of quality education. However, none of the respondents either disagreed or strongly disagreed that teachers' characteristics influenced the implementation of quality education.

Overall, the findings revealed that all the respondents agreed that teachers' characteristics had an influence on implementation quality education in both public and private primary schools. This implied that teachers' characteristics significantly influenced quality education in public and private primary schools. The findings did not concur with Harris and Sass, (2006) who observed that there was little evidence to associate teachers'

characteristics with learning achievement.

4.8.2 Testing of hypothesis 4 on Teachers' characteristics

To establish the influence of teacher characteristics on the implementation of quality education in public and private primary schools, the fourth hypothesis was tested. The hypothesis stated that; H4: Teacher characteristics do not significantly influence the implementation of quality education in public and private primary schools. The results of Regression analysis done to test the hypothesis were indicated in Table 4.39

Table 4.39 Regression model on the influence of teachers' characteristics on quality education

Change Statistics								
R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
.368	.135	-.345	.531	.135	.282	5	9	.912

a. Predictors: (Constant), use of learning aids, checking pupils' exercise books, use of learner-centered approaches, maintenance of professional records, assessing learners work

b. Dependent Variable: Quality education

Concerning data contained in Table 4.39 , results revealed that the significance level was at sig F= 0.912. It was greater than $p= 0.05$. The relationship $F(5,9) =.282$. $p>0.05$, $R^2=13.5$ percent. This implied that teachers' characteristics predicted implementation of quality education in public and private primary schools by 13.5 percent. The independent variable for the hypothesis H2 in the study was the teachers' characteristics and their influence on the implementation of quality education in public and private primary schools. The findings, therefore, indicated there was a significant relationship between

teachers' characteristics and quality education. The hypothesis of the study was subsequently rejected.

The study, therefore revealed that teachers' characteristics predicted implementation of quality education in public and private primary schools by 13.5 percent. The findings concurred with Wayne and Young (2003) noted that there was relationship between teachers' characteristics and learning achievement.

The study analysis done also incorporated an ANOVA. The ANOVA was represented in Table 4.40

Table 4.40 ANOVA results of teachers' characteristics

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.397	5	.079	.282	.912
	Residual	2.536	9	.282		

a. Predictors: (Constant), use of learning aids, checking pupils' exercise books, use of learner centered approach, maintenance of professional records, assessing learners work

b. Dependent Variable: type of school, public or private school

Concerning data contained in Table 4.40 on analysis of variance, F is 0.282; DF numerator is five and DF denominator is nine. The significance level is 0.05. The p-value was therefore 0.912. It was not significant at $p < .05$. Since the F-test was greater than the F value, then the null hypothesis was rejected. The null hypothesis was therefore rejected, and the variables (teachers' characteristics) predicted the quality of Education in public and private schools.

The Collinearity Statistical test was also used to determine the correlation of variables as indicated in Table 4.

Table 4.41 Collinearity statistical test on teachers' characteristics

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
(Constant)	-.620	.842		-.737	.480					
maintenance of professional records	-.063	.252	-.117	-.251	.808	.185	-.083	-.078	.444	2.252
checking pupils exercise books	-.106	.257	-.239	-.411	.691	.141	-.136	-.127	.285	3.511
assessing learners work	.350	.454	.563	.769	.461	.297	.248	.238	.180	5.568
use of learner centered approaches	.125	.281	.179	.445	.667	.238	.147	.138	.593	1.685
use of learning aids	-.052	.242	-.101	-.216	.834	.188	-.072	-.067	.441	2.267

a. Predictors: (Constant), use of learning aids, checking pupils' exercise books, use of learner centered approaches, maintenance of professional records, assessing learners work

b. Dependent Variable: type of school public or private school

Concerning data contained in Table 4.42, a was the independent variables of Predictors: use of learning aids, checking pupils exercise books, use of learner-centered approaches, maintenance of professional records and assessing learners work. b was the dependent variable of quality education. The independent variables were significant to quality education as indicated by beta coefficients. The p values were higher than 0.005 which was the significant level. From the Collinearity Statistics test, it was further revealed that the variance was moderately inflated. The VIF ranged from 1.685 to 5.568, $p > 0.05$.

The VIF ranged from 1.428 to 2.490, $p > 0.05$. From the Collinearity Statistics test, it was further revealed that the variance was highly inflated. This correlated with earlier findings that the null hypothesis was rejected and the variables (teachers' characteristics) predicted the quality of education in public and private primary schools.

Wilcoxon signed-rank test was further used to ascertain comparison of the influence of the teachers' characteristics of the implementation of quality education in public and private primary schools. The tabulation was computed from Table 4.42

Table 4.42 Wilcoxon signed-rank test on Teachers' characteristics

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.397	5	.079	.282	.912
	Residual	2.536	9	.282		

Concerning data contained in Table 4.44, $t(5) = 0.282$. Therefore, $p < 0$. Since $p < 0$, then it was concluded that there was a significant improvement of the influence of the teachers' characteristics of the implementation of quality education in public primary

schools than private primary schools. It was therefore concluded that the teachers' characteristics influenced the implementation of quality education in public primary schools more than in private primary schools.

The Cronbach's alpha test was used to determine the variable reliability. The findings were reflected in Table 4.43

Table 4.43 Cronbach's alpha test on teachers' characteristics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.800	.801	20

Regarding data contained in Table 4.43 on the Cronbach's alpha test revealed that the coefficient was 0.800. Therefore, the p value was 0.800. Since the significance level was determined at 0.67, the questionnaire items were reliable as the coefficient was above 0.67 ($0.800 > 0.67$).

Overall, the Regression analysis done on the testing of the hypothesis: Teachers' characteristics do not significantly influence the implementation of quality education in public and private primary schools rejected the null hypothesis. The study used the Regression analysis, ANOVA statistical test, Collinearity Statistical test, Wilcoxon signed rank test and Cronbach's alpha. Through the various tests done, it was evident that the significant factor (0.912) was the same in almost all the tests. This justified the rejection of the null hypothesis that had been advanced.

4.9 Data Analysis on influence of learners' characteristics on quality education

After the analysis of data on the influence of teachers' characteristics on the

implementation of quality education in public and private primary schools, the study focused on the analysis of data on objective five and research hypothesis five. Research objective four sought to determine the influence of learners' characteristics on the implementation of quality education in both public and private primary schools in Kakamega County

Data collected addressed the study objective and research hypothesis. The data obtained comprised of learners characteristics which included attitudes, nutrition and health, school attendance and socioeconomic status of pupils. The QASOs, head teachers', teachers' and pupils' information on these variables provided information on the extent to which instructional materials influenced the implementation of quality education in public and private primary schools in Kakamega County.

4.9.1 Analysis of data on influence of learners' characteristics

To establish the influence of learners' characteristics on implementation of quality education primary schools, the study sought information from QASOs, head teachers, teachers, and pupils. Data collected addresses the study objective and research hypothesis. The data obtained comprised of pupils' attitudes, pre-primary education, family's socioeconomic status, health and nutrition. The head teachers 'and teachers' views were sought to establish whether pupil' attitudes influenced learning achievement. The information on pupils' attitudes was captured in Table 4.44

Table 4.44 Head teachers' and teachers' views on learners' attitudes

Rating	Public primary schools				Private primary schools			
	Head teachers		Teachers		Head teachers		Teachers	
	n	%	n	%	n	%	n	%
Strongly disagree	0	0	0	0	0	0	0	0
Disagree	0	0	0	0	0	0	0	0
Agree	0	0	0	0	0	0	0	0
Strongly agree	36	100	180	100	12	100	60	100
Total	36	100	180	100	12	100	60	100

Concerning data contained in Table 4.44, none of head teachers and teachers in both public and private primary schools either strongly disagreed or disagreed or agreed that pupils' attitudes influenced implementation of quality education in public and private primary schools. However, 100 percent of all the respondents in both public and private primary schools strongly agreed that pupils' attitudes influenced learning achievement.

Overall, head teachers and teachers in both public and private primary schools indicated that pupils' attitudes had a significant influence on learning achievement. These findings did not concur with Brazdău and Mihai (2011) who stated that there was no correlation between learning and attitudes.

The head teachers, teachers' and pupils views were also sought to establish whether pupils had attended ECDE before being enrolled in class one. ECDE experiences and interactions were important in preparing a child as a quality learner when he or she was enrolled in primary school. Children who participated in early childhood Education intervention did better at primary level than those who did not benefit from formal early childhood programs. Provocation in a child's early years influences the brain development. Information on ECDE attendance was captured in Table 4.45

Table 4.45 Head teachers', teachers' and pupils' information on ECDE attendance

Attendance	public primary schools						private primary schools					
	head teachers		Teachers		pupils		head teachers		Teachers		Pupils	
	n	%	n	%	n	%	n	%	n	%	n	%
Attended	36	100	180	100	288	100	12	100	60	100	96	100
Didn't attend	0	0	0	0	0	0	0	0	0	0	0	0
Total	36	100	180	100	288	100	12	100	60	100	96	100

Concerning data contained in Table 4.45, 100 percent the of head teachers, teachers and pupils in both public and private primary schools indicated that children had attended early childhood Education before being enrolled in class one. However none of the respondents in both public and private primary schools noted that the pupils had not attended ECDE before joining class one.

Overall, all the pupils in public and private primary schools attended ECDE classes before being enrolled in class one. This implied that ECDE attendance significantly influenced quality education. These findings concurred with Willms (2000) who stated that children who attended day care centers performed better in higher classes.

The study also sought to establish the influence of good health and nutrition on the implementation of quality education in primary schools. Healthy children who got good nutrition learned well. Good health and nutrition were directly linked to academic achievement. Good health and nutrition also enhanced school attendance and academic performance. Children from higher socioeconomic status were more likely to aspire to higher Education since their health and nutrition were guaranteed. Pupils had to provide information on the frequency of meals served per day. This was captured in Table 4.46

Table 4.46 Pupils' information on meals taken per day

Frequency	Public primary schools		Private primary schools	
	n	%	n	%
Once	100	34.7	0	0
Twice	50	17.4	20	20.8
Thrice	54	47.9	76	79.2
Total	288	100	96	100

Concerning data contained in Table 4.46, 34.7 percent of pupils in public primary schools indicated that they got meals once a day. However, none of pupils in private primary schools stated that they took meals once a day. Besides, 25 percent of pupils in public primary schools got meals twice a day while 20.8 percent of pupils in private primary schools indicated that they got meals twice a day. In addition, 47.9 percent of pupils in public primary schools got meals thrice a day. However, 79.2 percent of pupils in private primary schools indicated that they got meals thrice a day.

Overall, at least 60 percent of pupils in public primary schools and 100 percent of pupils in private primary schools got meals thrice per day. This implied that most parents in public and private primary schools perceived significant role played by nutrition on learning achievement. However, the rate was higher in private primary schools. It was an indication that the attendance in private primary schools was more enhanced than in primary public schools. This was in concurrence with Afridi (2010) when he noted that the midday meal program improves nutritional value as well as school attendance.

The study further sought to establish head teachers' and pupils' views on the availability of services in the schools. The services offered included physical education activities, health services and parent support and school transport offered to children in public and private primary schools. Their findings were reflected in Table 4.47

Table 4.47 Head teachers', and pupils' views on availability of school services

Services	Public primary school								Private primary school							
	Head teachers				Pupils				Head teachers				Pupils			
	Available		Not Available		Available		Not Available		Available		Not Available		Available		Not Available	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Physical education	0	0	36	100	0	0	288	100	0	0	12	100	0	0	96	100
Health service	0	0	36	100	0	0	288	100	0	0	12	100	0	0	96	100
Parental support	9	25	27	75	72	52	216	75	12	100	0	0	288	100	0	0
School transport	4	10	32	90	0	0	288	100	12	100	0	0	96	100	0	0

Regarding data contained in Table 4.47, 100 percent of head teachers and pupils in both public and private primary schools indicated that physical education was not taught in primary schools. This implied that teachers did see the need to teach physical education since it was not examinable by KNEC. The findings contradicted Tremblay et al (2000) who noted that when pupils received additional physical activity, they improved in attributes such as brain function and behavior.

Further findings contained in Table 4.47 indicated that 100 percent of the head teachers, and pupils in both public and private primary schools indicated that health services were not available in schools. Overall, both public and private primary schools lacked medical facilities for their pupils. This implied that primary schools relied on medical facilities provided by the ministry of health. Schools, therefore, did not administer first aid for emergency cases.

Besides, 25 percent of head teachers and pupils, in public primary schools indicated that parents provided the necessary parental support for pupils. In addition, 100 percent of head teachers and pupils in private primary schools indicated that parents were supportive in the provision of the necessary support for pupils. However, 75 percent of head teachers and pupils, in public primary schools noted parents never submitted the required support for pupils. This concurred with Desai (2010) who revealed that private school choosers assisted their children at home with educational activities.

Further findings from Table 4.47 revealed that 10 percent of head teachers and pupils in public primary schools indicated that pupils were provided with transport services while 90 percent of head teachers and teachers in public primary schools noted pupils were not

provided with the required school transport support. However, 100 percent of head teachers and pupils in private primary schools indicated that pupils were presented with the necessary school transport support. This implied that learning achievement of pupils was significantly influenced by the availability of school transport. The findings concurred with Zamudio (2004) who noted that mobility had a negative impact on academic achievement of pupils.

The study further sought to establish the parental academic qualification. The parental level of education was an indication of the ability of a parent to provide the necessary assistance for the child's education. The level of Education was an indicator the parents' abilities engage in economic activities that generated income. Education also created a socialization stratum that valued Education. Hence parental academic qualification determined the socioeconomic status of a parent. It was a pointer and guided on how one participated in educational matters about his or her child. Pupils were, therefore, asked to state the educational level of their parents. The information on parental academic qualification was captured in Table 4.48

Table 4.48 Pupils' information on parental academic qualification

Qualification	Public primary schools		Private primary schools	
	n	%	n	%
Degree	30	10.4	60	62.5
KCSE	72	25	24	25.0
KCPE	186	64.6	12	12.5
Total	288	100	96	100

Regarding data contained in Table 4.48, 10.4 percent of the pupils in public primary

schools indicated that parents possessed a degree as an academic qualification while 62.5 percent of pupils in private primary schools reported that their parents had a degree as an academic qualification. Besides, 25 Percent of the pupils in public primary schools indicated that their parents had an educational level of KCSE while 25 percent of pupils in private primary schools reported that their parents had KCSE academic level. However, 64.6 percent of the pupils in public primary schools showed that their parents had KCPE level of Education while 12.5 percent of the pupils in private primary schools reported that their parents had KCPE as the highest educational level.

Overall, at least 35 percent of parents in public had a minimum of KCSE certificate while at least and private primary schools had the minimum educational qualification of KCPE. This is an indication that parents in public and private primary schools are more informed on the importance of education. However, most parents in private primary schools had at least the KCSE level of education while at least 85 percent of parents in private primary school had a minimum academic qualification of KCSE. This was an indication that pupils in private primary schools performed better than their counterparts in public primary schools. This was in concurrence with Willms (2000) who revealed that children, whose parents had primary school education or none, were likely to perform poorly in class than those whose parents had secondary education.

The study also sought information on the employment status of parents. The employment status of parents was crucial as it was an indicator of the parents' abilities to engage in economic activities that generate more income. It also created an interactive cycle that enabled parents to facilitate the learning process through support of educational development programs. Head teachers and pupils were asked to indicate the employment

status of their parents. The information on the employment status of parents was captured in Table 4.49

Table 4.49 Head teachers and pupils' views on parental employment status

Status	Public Primary Schools				Private Primary Schools			
	Head Teachers		Pupils		Head			
					Teachers		Pupils	
	n	%	n	%	n	%	n	%
Employed	10	27.8	80	27.8	10	83.3	80	83.3
Self employed	6	16.7	48	16.7	2	16.7	16	16.7
Not employed	20	55.5	160	55.5	0	0	0	0
Total	36	100	288	100	12	100	96	100

Regarding data contained in Table 4.49 on the employment status of parents, 27.8 percent of the head teachers in public primary schools indicated that parents were employed. Another 27.8 percent of pupils in public primary schools reported that their parents were employed. However, 83.3 percent of the head teachers and pupils in private primary schools indicated that parents were employed. Besides, 16.7 percent of the head teachers and pupils in both public and private primary schools indicated that parents were self-employed.

Further findings from Table 4.50 revealed that 55.5 percent of head teachers and pupils in public primary schools indicated that parents were not employed. However, none of the

head teachers and pupils in private primary schools indicated that parents were not employed.

On the overall, the findings indicated that at least 55 percent of parents in public primary schools were unemployed while none of the parents in private primary schools were unemployed. This was an indication that the socioeconomic status of parents in private primary schools was higher than that of parents in public primary schools. This implied that pupils' learning achievement in private primary schools was higher than that of their counterparts in public primary schools. This concurred with Bowden and Doughney (2011) who noted that children with a higher socioeconomic status were more likely to aspire to higher education.

The study also sought information on the distance of the school from home. This was in light of studies that indicated that long distances challenged pupils physically and psychologically. Long distances entailed learners getting up earlier, walking long distances and suffered from exhaustion and headaches. Schools of any type ought to be accessible and close to home. Head teachers and pupils were asked to estimate distances to schools from the pupils' homes. The information on the distance of the school from home was captured in Table 4.50

Table 4.50 Head teachers and pupils' views on distance from home to school

Distance	Public primary schools				Private primary schools			
	Head teachers		Pupils		Head teachers		Pupils	
	n	%	n	%	n	%	n	%
0-1 km	24	66.7	200	69.4	2	16.7	16	16.7
1-2 km	8	22.2	72	25.0	2	16.7	16	16.7
2-3 km	4	11.1	16	5.6	4	33.3	33	33.3
Over 3km	0	0	0	0	4	33.3	33	33.3
Total	36	100	288	100	12	100	96	100

Information on data contained in table 4.50 revealed that 66.7 percent of head teachers in public primary schools indicated that pupil distance from home to school ranged from 0-1km. Besides, 69.4 percent of pupils in public primary schools reported that the distance from their homes to school ranged from 0-1 km. However, 16.7 percent of the head teachers in private primary schools indicated that pupils' homes were 0-1 km away from schools. Another 16.7 percent of pupils in private primary schools reported that they were 0-1 km away from their schools. Besides, 22.2 percent of head teachers in public primary schools indicated that pupils stayed 1-2 km away from their homes. Moreover, 25 percent of pupils in public primary schools noted that their homes were 1-2 kilometers away from the school. However, 16.7 percent of head teachers in private primary schools indicated that pupils stayed 1-2 km away from their homes. Another 16.7 percent 16.7 percent of pupils in private primary schools reported that they stayed 1-2 km away from their homes.

Further findings from Table 4.50 revealed that 11.1 percent of head teachers in public

primary schools indicated that pupils stayed 2-3 km away from schools. Besides, 5.6 percent of pupils noted that their homes were 2-3 km away from their schools. However, 33.3 percent of head teachers in private primary schools indicated that pupils stayed 1-2 km away from their homes. Another 33.3 percent of pupils in private primary schools reported that they stayed 1-2 km away from their homes. Besides, 16.7 percent of head teachers and pupils in private primary schools indicated that pupils stayed 0-1 km away from their schools. Besides none of the head teachers and pupils in public primary schools reported that pupils stayed over 3 km away from their schools.. However, 33.3 percent of head teachers in private primary schools reported that pupils stayed over 3 km away from their schools. Another 33.3 percent of the pupils in private primary schools indicated that their homes were over 3 km away from their schools.

On the overall, the findings indicated that most pupils in both public and private primary schools stayed between 0-3 km away from their schools. This was an indication that learning achievement was influenced differently. This was in concurrence with GEI (2012) which noted that journeys to school impacted differently on learning achievement levels.

The study further sought information on the mode of transport to school by pupils. This was in light of studies which indicated that long distances challenged pupils physically and psychologically. Appropriate mode of transportation protected pupils from trekking long distances and getting up earlier. Head teachers' and pupils' were, therefore, asked to indicate the mode of transport pupils used while going to school. Information on the mode of transport to school from home was captured in Table 4.51

Table 4.51 Head teachers and pupils' views on the mode of transport to school

Mode	Public				Private			
	Head teachers		Pupils		Head teachers		Pupils	
	n	%	n	%	n	%	n	%
On foot	32	88.9	264	91.7	2	16.7	17	17.7
Motorcycle	4	11.1	24	8.3	3	25	19	19.8
School bus	0	0	0	0	7	58.3	60	62.5
Total	36	100	288	100	12	100	96	100

Regarding the data contained in Table 4.52, 88.9 percent of head teachers in public primary schools indicated that pupils go to school on foot. Besides, 91.7 percent of pupils in public primary schools reported that they went to school on foot. However, 16.7 percent of the head teachers in private primary schools noted that pupils went to school on foot while 17.7 percent of the pupils in private primary schools indicated that they went to school on foot. Besides, 11.1 percent of head teachers in public primary schools noted that pupils went to school by motorcycle while 19.8 percent of the pupils in private primary schools acknowledged that they went to school by motorcycle.

Further findings from Table 4.52 revealed that none of the head teachers and pupils in public primary schools indicated that pupils went to school by school bus. However, 58.3 percent of head teachers in private primary schools indicated that pupils went to school by school bus. Besides, 62.5 percent of pupils in private primary schools reported that they went to school by school bus.

On the overall, the findings indicated that most pupils in public primary schools went to

school on foot while most pupils in private primary schools went school by school bus. This is an indication that mobility influenced learning achievement differently. This was in concurrence with Zamudio (2004) who noted that movement had a negative impact on academic performance of pupils.

The study also sought information on the frequency of school attendance by pupils. This was in light of studies, which indicated that school attendance significantly influenced learning achievement. Regular school attendance promoted the level of learning achievement as opposed to absenteeism that hurt learning achievement. Irregular school attendance was, therefore, a deficiency to learning achievement. Head teachers and teachers were, consequently asked to indicate pupils' frequency of absenteeism. The information on the frequency of absenteeism of pupils was captured in Table 4.52

Table 4.52 Head teachers and teachers' views on the frequency of absenteeism

Frequency	Public				Private			
	Head teachers		Teachers		Head teachers		Teachers	
	n	%	n	%	n	%	n	%
High	24	66.7	120	66.7	-	-	-	-
Low	9	25	45	25	10	83.3	50	83.3
Moderate	3	8.3	15	8.3	2	16.7	10	16.7
Total	36	100	180	100	12	100	60	100

Regarding data contained in Table 4.52, 66.7 percent of head teachers in public primary schools indicated that the rate of pupil absenteeism was high. Another 66.7 percent teachers in public primary schools indicated that the rate of pupil absenteeism was high. However, none of the head teachers and teachers in private primary schools indicated that

the absenteeism rate for pupils was high. Besides, 25 percent of head teachers in public primary schools indicated that the rate of absenteeism for pupils was low. Another 25 percent of teachers in public primary schools indicated that the rate of absenteeism for pupils was low. However, 83.3 percent of head teachers and teachers in private primary schools indicated that the rate of absenteeism for pupils was low.

Further findings from Table 4.52 revealed that 8.3 percent of the head teachers and teachers in public primary schools indicated that the absenteeism rate for pupils was moderate. However, 16.7 percent of the head teachers in private primary schools indicated that the absenteeism rate for pupils was moderate while 8.3 percent of teachers in private primary schools reported that the absenteeism rate for pupils was reasonable.

On the overall, the findings indicated that the rate of absenteeism for pupils was higher in public primary schools in private primary schools. This was in concurrence with Altonji et al (2005) who noted that school attendance was higher in private schools than in public schools.

The study further sought to establish head teachers' and teachers' perceptions of the influence of school attendance on quality education. The study sought ratings of strongly agree, agree, strongly disagree and disagree. The information was captured in Table 4.53

Table 4.53 Head teachers' and teachers' perceptions of the influence of school attendance

Rating	Public				Private			
	Head teachers		Teachers		Head teachers		Teachers	
	n	%	n	%	n	%	n	%
Strongly agree	30	83.3	150	83.3	9	75	45	75
Agree	6	16.7	30	16.7	4	25	15	25
Strongly disagree	0	0	0	0	0	0	0	0
Disagree	0	0	0	0	0	0	0	0
Total	36	100	180	100	12	100	60	100

Regarding data contained in Table 4.53, 83.3 percent of head teachers and teachers in public primary schools strongly agreed that regular school attendance promoted learning achievement. Besides, 75 percent of head teachers and teachers in private primary schools strongly agreed that regular school attendance promoted learning achievement.

Further findings from Table 4.53 revealed that 16.7 percent of head teachers and teachers in public primary schools agreed that regular school attendance promoted learning achievement. Besides, 25 percent of head teachers and teachers in private primary schools agreed that regular school attendance promoted learning achievement. However, none of the head teachers and teachers in both public and private primary schools either strongly disagreed or disagreed that regular school attendance promoted learning achievement.

On the overall, head teachers and teachers in both public and private primary schools

agreed that regular school attendance significantly influenced learning achievement. This implied that school attendance would either positively or negatively affect learning achievement in both public and private primary schools. It concurred with Zubrick et al. (2006) who noted that there was a gap in educational attainment based on school attendance.

The study further sought to establish the influence of learners' characteristics on Quality education. The study sought ratings of strongly agree, agree, strongly disagree and disagree with head teachers and teachers. This information was captured in Table 4.54

Table 4.54 QASOs, head teachers and teachers' perceptions on the influence of learners' characteristics on implementation of quality education

Rating	QASOs Public primary schools						Private primary schools			
	QASOs		Head teachers		Teachers		Head teachers		Teachers	
	n	%	n	%	n	%	n	%	n	%
Strongly agree	8	62	30	83.3	150	83.3	9	75	50	83.3
Agree	5	38	6	16.7	30	16.7	4	25	10	16.7
Strongly disagree	0	0	0	0	0	0	0	0	0	0
Disagree	0	0	0	0	0	0	0	0	0	0
Total	13	100	36	100	180	100	12	100	60	100

Regarding the data contained in Table 4.54, 62 percent of QASOs strongly agreed that learners' characteristics influenced implementation of quality education in primary schools. Another, 38 percent of QASOs strongly agreed that learners' characteristics influenced implementation of quality education in primary schools. However, 83.3 percent of head teachers and teachers in public primary schools indicated that they strongly agreed that learners' characteristics promoted learning achievement of pupils.

Besides, 16.7 percent of the head teachers and teachers from public primary schools agreed that learners' characteristics promoted learning achievement. However, 25 percent of the head teachers and teachers from private primary schools agreed that learners' characteristics promoted learning achievement. However, none of the head teachers and teachers from both public and private primary schools either strongly disagreed or disagreed that learners' characteristics promoted learning achievement.

On the overall, the findings of QASOs, head teachers and teachers indicated that learners' characteristics influenced implementation of quality education in primary schools. However, the influence of learners' characteristics was higher in private primary schools than in public primary schools. The findings concurred with Corten & Dronkers (2004) who noted that pupils' characteristics in public and private schools differed due to parental differences in education, professional and economic characteristics.

4.9.2 Testing of hypothesis 5 on Learners' characteristics

To establish the influence of learner characteristics on the implementation of quality education in public and private primary schools, the fifth hypothesis was tested. The hypothesis stated that; H5: Learner characteristics do not significantly influence the

implementation of quality education in public and private primary schools. The results of Regression analysis done to test the hypothesis were indicated in Table 4.55

Table 4.55 Model on Regression analysis of Learners' characteristics

Change statistic								
R	R Square	Adjusted R Square	Std Error of the Estimate	R Square Change	F Change	df1	df2	Sig F Change
.683	.466	.253	.447	.466	1.260	9	13	.342

a. Predictors: (Constant), pupils in Class, meals the student takes per day, use of library services, student age, textbook ratio, parents assistance, disc ratio, Class enrolment, ECDE attendance.

b. Dependent Variable: Quality education

Regarding information from the Table 4.56, the results revealed that the significance level was at sig F= 0.342. It was greater than $p= 0.05$. The relationship, $F(9, 13) = 1.260$. $p>0.05$, adjusted $R^2= 25.3$ percent. This implied that learners' characteristics predicted implementation of quality education in public and private primary schools by 25.3 percent. The independent variable for the hypothesis H2 in the study was that the learners' characteristics and their influence on the implementation of quality education in public and private primary schools.

The findings, therefore, indicated a significant relationship between learners' characteristics and Quality education. The hypothesis of the study was subsequently rejected. The study, therefore revealed that learners' characteristics predicted implementation of quality education in public and private primary schools by 25.3 percent. The findings did not concur with Brazdau and Mihai (2011) who noted that there

was no correlation between learning and learners attitudes.

The study further used ANOVA to determine the total variability of learner characteristics when sub subdivided into pupils in class, meals the student takes per day, use of library services, student age, textbook ratio, parents' assistance, disc ratio, Class enrolment, ECDE attendance. It was used to establish the degree to which changes in learners' characteristics can influence changes in the implementation of quality education in public and primary schools. The results are represented in Table 4.56.

Table 4.56 ANOVA results of Learners' characteristics

		Sum of	Mean			
Model		Squares	Df	Square	F	Sig.
1	Regression	2.269	9	.252	1.260	.342 ^a
	Residual	2.601	13	.200		

a. Predictors: (Constant), pupils in Class, meals the student takes per day, use of library services, student age, textbook ratio, parents assistance, disc ratio, Class enrolment, ECDE attendance.

b. Dependent Variable: Quality education

Regarding information in Table 4.56 on ANOVA, F is 1.260, DF numerator is nine, and DF denominator is thirteen. Therefore, the p-value is 1.260. The significance level was 0.05. F was not significant at $p < 0.05$. Since the F-test was greater than the F value, then the null hypothesis should be rejected. The null hypothesis was therefore rejected, and the variables predicted the quality of Education in public and private schools.

The study further used VIF to measure the variance of the estimated Regression coefficients. The findings were reflected in the Table 4.57

Table 4.57 Collinearity Statistics test on learners' characteristics

	Unstandardized Coefficients		Standardized Coefficients		Correlations			Collinearity Statistics	
	B	Std. Error	Beta	Sig	Zero-order	Partial	Part	Tolerance	VIF
(Constant)	.385	1.164	.746						
Student age	.089	.095	.338	.944	.363	-.033	.253	.191	.320
Class enrollment	.012	.008	.614	1.461	.168	.532	.376	.296	.233
Text book ratio	.070	.163	.116	.430	.674	.215	.118	.087	.561
Desk ratio	-.232	.241	-.326	-.961	.354	.152	-.258	-.195	.357
Library services	-.035	.242	-.038	-.145	.887	.008	-.040	-.029	.606
Meals per day	-.311	.263	-.358	-1.182	.258	.031	-.312	-.240	.449
Parental support	-.247	.289	-.268	-.855	.408	.066	-.231	-.173	.418
ECDE	-1.186	.717	-.727	-1.655	.122	-.467	-.417	-.335	.213

- a. Predictors: (Constant), assisting pupils in Class, meals the student takes per day, use of library services, student age, textbook ratio, parents, disc ratio, Class enrolment, ECDE attendance.
- b. Dependent Variable: Quality education

Concerning data in Table 4.57, is the independent variables of assistance pupils in class, meals the student takes per day, use of library services, student age, textbook ratio, parents, disc ratio, Class enrolment, ECDE attendance, b is the dependent variable of quality education.

The p values were higher than .005 which was the significant level. From Collinearity Statistical test, it was revealed that the variance was moderately inflated. The VIF ranged from 1.650 to 4.693, $p > 0.05$. The VIF was therefore somewhat correlated. This correlates with earlier findings that the null hypothesis is rejected and the variables of learners' characteristics predicted the quality of education in public and private schools. The null hypothesis was, therefore, and the variables predicted the quality of Education in public and private schools.

Wilcoxon signed-rank test was further used to ascertain comparison of the influence of learners' characteristics of implementation of quality education in public and private primary schools. The tabulation was computed from the Table 4.58

Table 4.58 Wilcoxon signed-rank test on Learners' characteristics

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.269	9	.252	1.260	.342
	Residual	2.601	13	.200		

Concerning data contained in Table 4.57, $t(9) = 1.260$. Therefore, $p < 0$. Since $p < 0$, then it was concluded that there was a significant improvement of the influence of learners' characteristics of the implementation of quality education in public primary schools than private primary schools. It was therefore concluded that the learners' characteristics

influenced the implementation of quality education in public primary schools more than in private primary schools.

The Cronbach's alpha statistical test was determined the variable reliability. The findings were reflected in Table 4.59

Table 4.59 Cronbach's alpha test on learners' characteristics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
.787	.799	15

Regarding information on the data contained in Table 4.60 on the Cronbach's alpha test revealed that the coefficient was 0.787. Therefore, the p-value was 0.787. Since the significance level was determined at 0.67, the questionnaire items were reliable as the coefficient was above 0.67 ($0.787 > 0.67$).

Overall, the Regression analysis was done on the testing of the hypothesis: Learners' characteristics do not significantly influence the implementation of quality education in public, and private primary schools rejected the null hypothesis. The study used the Regression analysis, ANOVA statistical test, Collinearity Statistical test, Wilcoxon signed rank test and Cronbach's alpha. Through the various tests done, it was evident that the significant factor (0.342) was the same in almost all the tests. This justified the rejection of the null hypothesis that had been advanced.

4.10 Influence of combined factors on quality education

After testing individual hypotheses i.e. hypotheses on influence of physical facilities on implementation of quality education in public and private primary schools; influence of

institutional materials on implementation of quality education in public and private primary schools; influence of curriculum supervision on implementation of quality education in public and private primary schools; influence of teachers' characteristics on implementation of quality education in public and private primary schools and influence of learners' characteristics on implementation of quality education in public and private primary schools, the study sought to test the combined influence of physical facilities, instructional materials, curriculum supervision, teachers characteristics and learners characteristics on implementation of Quality education in public and private primary schools. The hypothesis stated that H6: combined factors of physical facilities, instructional materials, curriculum supervision, teachers' characteristics and learner characteristics do not significantly influence implementation of quality education in public and private primary schools. The results of Regression analysis done to test the hypothesis are indicated in Table 4.60

Table 4.60 Regression model of Influence of combined factors

Model	R	Std. Error of the Estimate	Change Statistics				
			R Square	F Change	df1	df2	Sig. F Change
	1.000 ^a	1.000	1.000	.	15	0	.

a. Predictors: (Constant), parents assistance with homework, average number of students per Class in the school, subject panel head, administration block, professional qualification for the head teacher, marker pens, teachers' reference books, wall charts, classrooms, chairs, gender, use of visual aid in the Class by the teachers, chalk, experience in years as a head teacher, are exercise books checked by teachers

b. Dependent Variable: Quality education

Regarding the data contained in Table 4.61, the significance level was at sig F= 0. It was less than p which is 0.05. The relationship was F (0, 15) =.0, F<0.05, R₂=100 percent.

Since F was < 0.05, it depicted that the model was not perfect. The hypothesis was

therefore rejected. This meant that X= combined factors predicted implementation of quality education in public and private primary schools. The findings, therefore, indicated a significant relationship between combined factors and quality education. The study, therefore revealed that the combined factors predicted implementation of quality education in public and private primary schools by 100 percent. The findings concurred with UNESCO (2002) which noted that quality education was the adjustment of learning processes that ensured achievement of competencies by learners.

The study further used ANOVA to determine the total variability of combined efforts when subdivided into parents assistance in homework, average number of students per Class in the school, subject panel head, administration block, professional qualification for the head teacher, marker pens, teachers reference books, wall charts, classrooms, chairs, student gender, use of visual aid in the Class by the teachers, chalk, experience in years as a head teacher and exercise books checked by teachers. It was used to establish the degree to which changes in curriculum supervision can influence changes in the implementation of quality education in public and primary schools. The results were represented in Table 4.61

Table 4.61 ANOVA results of combined factors

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.938	15	.263	.	. ^a
	Residual	.000	0	.		

a. Predictors: (Constant), parents assistance in homework, average number of students per Class in the school, subject panel head, administration block, professional qualification for the head teacher, marker pens, teachers reference books, wall charts, classrooms, chairs, student 1 gender, use of visual aid in the Class by the teachers, chalk, experience in years as a head teacher, are exercise books checked by teachers

b. Dependent Variable: Quality education

Regarding information in Table 4.61 on ANOVA, F is 0; DF numerator is zero and DF denominator is sixteen. Therefore the p-value is zero. The significance level is 0.05. F is not significant at $p < .05$. Since the F-test was greater than the F value, then the null hypothesis rejected. The null hypothesis was therefore rejected, and the variables predicted the quality of Education in public and private schools. However, this implied that the combined factors influence the implementation of quality education in public and private primary schools.

The study further used VIF to measure the variance of the estimated Regression coefficients. The findings were reflected in the Table 4.62

Table 4.62 Collinearity Statistics test on combined factors

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zeroorder	Partial	Part	Tolerance	VIF
(Constant)	.385	1.164		.331	.746					
student age	.089	.095	.338	.944	.363	-.033	.253	.191	.320	3.124
Class enrollment	.012	.008	.614	1.461	.168	.532	.376	.296	.233	4.300
text book ratio	.070	.163	.116	.430	.674	.215	.118	.087	.561	1.781
Desk ratio	-.232	.241	-.326	-.961	.354	.152	-.258	-.195	.357	2.804
library services	-.035	.242	-.038	-.145	.887	.008	-.040	-.029	.606	1.650
meals per day	-.311	.263	-.358	-1.182	.258	.031	-.312	-.240	.449	2.228
Parental support	-.247	.289	-.268	-.855	.408	.066	-.231	-.173	.418	2.394
ECDE	-1.186	.717	-.727	-1.655	.122	-.467	-.417	-.335	.213	4.693

- a. Predictors: (Constant), parents assistance with homework, average number of students per Class in the school, subject panel head, administration block, professional qualification for the head teacher, marker pens, teachers' reference books, wall charts, classrooms, chairs, gender, use of visual aid in the Class by the teachers, chalk, experience in years as a head teacher, are exercise books checked by teachers
- b. Dependent Variable: Quality education

Concerning data contained in Table 4.62, the VIF ranged from 1.790 to 11.916, $p > 0.05$. It indicated multi-collinearity of predictor variables. This implied that the Regression model was highly correlated. The variables, therefore, predicted from others with a high degree of accuracy.

The null hypothesis was therefore rejected, and the variables predicted the quality of Education in public and private schools. The results revealed that the combined factors of physical facilities, instructional materials, curriculum supervision, teachers' characteristics and learners' characteristics contribute to the implementation of quality education in public and private primary schools.

Wilcoxon signed-rank test ascertained the relative influence of combined factors on the implementation of quality education in public and private primary schools. The findings were reflected in Table 4.63.

Table 4.63 Wilcoxon signed-rank test on combined factors

		Sum of	Mean			
Model		Squares	Df	Square	F	Sig.
1	Regression	3.938	15	.263	.	. ^a
	Residual	.000	0	.		

From the findings in the table above, $t(15) = .a$ Therefore, $p = 0$. Since $p = 0$, then it was concluded that the combined factors equally influenced the implementation of quality education in both public and private primary schools.

The Cronbach's alpha test was used to determine the variable reliability. The findings were reflected in Table 4.64

Table 4.64 Cronbach’s alpha test on combined factors

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.827	.740	49

With regard to data contained in Table 4.65 on the Cronbach’ alpha test, the coefficient was 0.827. Therefore, the p value was 0.827. Since the significance level was at 0.67, the questionnaire items were reliable as the coefficient was above 0.67 (0.827>0.67).

Overall, the Regression analysis done on the testing of the hypothesis: combined factors do not significantly influence the implementation of quality education in public and private primary schools rejected the null hypothesis. The study used the Regression analysis, ANOVA statistical test, Collinearity Statistical test, Wilcoxon signed rank test and Cronbach’s alpha. Through the various tests done, it was evident that the significant factor (.^a) was the same in all the tests. This justified the rejection of the null hypothesis that had been advanced.

In conclusion, the combined factors influenced the implementation of quality education in both public and private primary schools. The variables in the study subsequently predicted quality education in public and private primary schools by 100 percent. The results, therefore, indicated that there was a significant relationship between the influence of combined factors and implementation of quality education in public and private primary schools.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

The purpose of this study was to investigate factors that influence the implementation of quality education in public and private primary schools in Kakamega County, Kenya. This chapter presented information in summary, conclusions, and recommendations. The chapter was divided into four sections. The first section presented the summary of the significant findings of the study. The second section presented the conclusions of the study. The third section presented the recommendations of the study from the significant findings. Finally, section four made suggestions for further studies.

5.2 Summary of the study

The study identified six research objectives that guided data collection and data analysis. These were: to determine the influence of physical facilities on the implementation of quality education in public and private primary schools in Kakamega County; to establish the impact of instructional materials on the implementation of quality education in public and private primary schools in Kakamega County; to determine the influence curriculum supervision on the implementation of quality education in public and private primary schools in Kakamega County; to establish the influence of teacher characteristics on the implementation of quality education in public and private primary schools in Kakamega County; to determine the influence of learner characteristics on the implementation of quality education in public and private primary schools in Kakamega County and to assess the influence of the combined factors of physical facilities, instructional materials, teachers' characteristics and learners' characteristics of quality education.

The review of related literature covered five main themes addressed by the objectives of the study. Overview of quality education on global, regional and national levels was also surveyed.

The review examined the influence of physical facilities for the implementation of Quality

education. The review also examined the impact of instructional materials on the implementation of quality education in public and private primary schools. The review also discussed the influence of curriculum supervision in the implementation of quality education in public and private primary schools. The role of teachers' characteristics in the implementation of quality education in public and private schools was also reviewed. Learners' characteristics in the implementation of quality education in public and private schools were also reviewed. The related literature reviewed led to the specification of knowledge gaps that the study required to be filled.

The study design used a mixed method including descriptive survey research design and Regression analysis. The descriptive survey research design was used to establish the status of implementation of quality education in public and private primary schools in Kakamega County. Regression analysis was used to test the hypotheses to the extent of influencing of implementation of quality education in public and private primary schools in Kakamega County.

The study was conducted among head teachers, teachers, and pupils in selected public and private primary schools in Kakamega County. These schools were sampled across the County and effort was made to ensure that the entire County was represented. A sample of forty-eight schools was used. This sampling was clustered to cover the twelve sub-counties of Kakamega County. The sample was composed of three public primary schools and one private primary school in every sub-County. Sampling was done on the expert advice of the supervisors.

During data collection, the forty-eight (48) primary schools involved in the study comprised of thirty-six (36) public primary schools and twelve (12) private primary schools (see appendix vii). Thirty six (36) head teachers in public primary schools and twelve (12) head teachers in private

primary schools; two hundred and eighty eight (288) teachers in public primary schools and ninety six (96) teachers in private primary schools; and two hundred and eighty eight (288) pupils in public primary schools and ninety six (96) pupils in private primary schools were involved in the study. The eight hundred and sixteen (816) respondents from the forty-eight primary schools filled the questionnaires.

Three sets of questionnaires, interview guide, and observation schedule were used to collect data. One set of questionnaires was administered to head teachers. The other set of questionnaires was distributed to teachers. The third set of questionnaires was administered to pupils. The researcher through observation of the learning environment administered the observation schedule. The results focused on the effects of institutional factors, teacher characteristics and learner characteristics on the implementation of quality education in public and private primary schools in Kakamega County, Kenya. These variables of implementation of quality education were arrived at after extensive review of the literature on related studies.

The research findings analyzed data both quantitatively and qualitatively. The SPSS computer program was used to process and analyze quantitative data. The findings were summarized in frequency tables and percentages. The Regression analysis revealed the degree of association between the dependent and independent variables. Qualitative data were subjected to content analysis in which relevant information was deduced. Overall, the interpretation of the results was skewed towards the implementation of quality education in public and private primary schools. The data presented, discussed and interpreted formed the basis for research findings, conclusions, and recommendations which were given.

5.3 Summary of major findings

The major findings of this study were based on the hypotheses of the study. The null hypotheses

were paraphrased to form subheadings of the presentations in this chapter. The first assessment was on the influence of physical facilities for the implementation of quality education in public and private primary schools.

5.3.1 Findings on the influence of physical facilities for quality education

The findings on data contained in Table 4.10 relating to information on observation schedules on the availability of physical facilities in public and private primary schools revealed that 100 percent of public and private primary schools had inadequate physical facilities. Besides, data contained in Table 4.11 on observation schedules relating to the maintenance of physical facilities revealed that 100 percent of both public and private primary schools did not maintain their physical facilities. However, data contained in Table 4.12 relating to head teachers and teachers' views on the influence of physical facilities on the implementation of quality education in public and private primary schools revealed that majority of head teachers and teachers in public and private primary schools indicated that physical facilities play a crucial role in the implementation of quality education.

The findings in Table 4.12 indicated that 16.7 percent of head teachers and teachers in public primary schools agreed that physical facilities positively influenced quality education in primary schools. Besides, 16.7 percent of teachers in both public and private primary schools agreed that school physical facilities influenced quality education in primary schools. However, 83.3 percent of head teachers and teachers from public primary schools strongly agreed that school physical facilities influenced quality education. Also, 83.3 percent of head teachers and teachers from private primary schools strongly agreed that school physical facilities influenced quality education.

The findings, therefore, indicated that there was a significant relationship between physical facilities and the implementation of quality education in primary schools. The Regression analysis revealed that physical facilities predicted the implementation of quality education in public and private primary schools by 25.7 percent. The findings concurred with OECD (2012) which stated that school structures influenced learning achievement.

5.3.2 Findings based on the influence of instructional materials on quality education

The findings from data contained in Table 4.19 relating to the influence of instructional materials on the implementation of quality education in public and private primary schools revealed that 100 percent of head teachers, teachers, and pupils in both public primary schools strongly agreed that instructional materials positively influenced quality education in both public and private primary schools. Besides, data contained in Table 4.18 revealed that 100 percent of head teachers and teachers in both public and private primary schools indicated that writing materials and pupils' course books were adequate.

However, data contained in Table 4.18 indicated that 100 percent of teachers in both public and private primary schools noted that wall maps, marker pens, teaching aids, geometrical tins, and rulers were inadequate. The findings, therefore, indicated that there was a significant relationship between instructional materials and the implementation of quality education in primary schools. The Regression analysis revealed that instructional materials predict the implementation of quality education in public and private primary schools by 14.0 percent. The findings concurred with UNESCO (2005) which stated that learning resources were crucial for quality teaching and learning.

5.3.3 Findings based on the influence of curriculum supervision on quality education

The findings from data contained in Table 4.27 relating to views from head teachers on the influence of curriculum supervision on the implementation of quality education in public and private primary schools revealed that majority of head teachers and teachers in public and private primary schools indicated that curriculum supervision was crucial in the implementation of quality education in both public and private primary schools.

The findings from the data revealed that 100 percent of the head teachers and teachers in both public and primary schools strongly agreed that curriculum supervision influence quality education. However, data contained in Table 4.25 revealed that 66.7 percent of the head teachers from public primary schools indicated that QASOs rarely supervised public primary schools while 100 percent of the head teachers from private primary schools indicated that QASOs rarely supervised their schools. The findings from the data in Table 4.25, therefore, implied that officers from the DQAS did not supervise most of the public and private primary schools.

From the findings, it was, therefore, concluded that there was a significant relationship between curriculum supervision and implementation of quality education in public and private primary schools. The Regression analysis revealed that curriculum supervision predicted implementation of quality education in public and private primary schools by 14.0 percent. The findings concurred with Oliva and Pawlas (2001) who noted that monitoring was necessary for teachers.

5.3.4 Findings based on the influence of the teachers' characteristics on quality education

The findings from data contained in Table 4.38 relating to views from QASOs, head teachers and teachers on the influence of teachers' characteristics on the implementation of quality education in public and private primary schools indicated that the teachers' characteristics were crucial when implementing quality education in public and private primary schools. Results from Table 4.38 relating to head teachers' and teachers' views on the influence of teacher characteristics

revealed that 83.3 percent of respondents in public primary schools strongly agreed that teachers' characteristics were critical in the implementation of quality education while 16.7 percent of the respondents in public primary schools agreed that teachers' characteristics influence implementation of quality education.

Further findings indicated that 66.7 percent of respondents in private primary schools strongly agreed that teachers' characteristics are critical in the implementation of quality education. 33.3 percent of the respondents in private primary schools agreed that teachers' characteristics influence the implementation of quality education. This was a deduction that head teachers and teachers appreciated the contribution of teachers' characteristics in the implementation of quality education in public and private primary schools.

From the findings, it was, therefore, concluded that there was a significant relationship between teachers' characteristics and implementation of quality education in public and private primary schools. The Regression analysis revealed that teachers' characteristics predicted implementation of quality education in public and private primary schools by 13.5 percent. This concurred with Wayne and Young, (2003) who stated that there was a relationship between teachers' characteristics and learning achievement.

5.3.5 Findings based on the influence of learners' characteristics on quality education

The findings from data contained in Table 4.54 on influence learners' characteristics relating to views of head teachers and teachers revealed that 83.3 percent of head teachers and teachers in public primary schools indicated that they strongly agreed that learners' characteristics promoted learning achievement of pupils. 16.7 percent of these respondents from public schools agreed that learners' characteristics promote learning achievement. Further results indicated that 83.3 percent of head teachers and teachers in private primary schools noted that they strongly agreed

that learners' characteristics contribute to the learning achievement of pupils. 16.7 percent of the respondents from private schools agreed that learners' characteristics promote learning achievement.

Overall, the findings indicated that head teachers in public and private primary schools strongly agree that the learners' characteristics significantly influenced learning achievement. This implied that learners' characteristics are crucial in the implementation of quality education in public and private primary schools. The findings concurred with Wang and Newlin (2002) who indicated that self-efficacy beliefs of learners correlated with scores in the final. The Regression analysis further revealed that learners' characteristics predict the implementation of quality education in public and private primary schools by 25.3 percent.

5.3.6 Findings on the influence of combined factors on quality education

The hypothesis on combined factors was tested regarding physical facilities, instructional materials, curriculum supervision, teachers' characteristics, and learners' characteristics do not significantly influence the implementation of quality education in public and private primary schools. The study, therefore, revealed that the combined factors predicted implementation of quality education in public and private primary schools by 100.0 percent. The findings concurred with UNESCO (2002) which noted that quality education was the adjustment of learning processes that ensured the achievement of competencies by learners.

Further findings indicated that the VIF for combined factors ranged from 1.790 to 11.916, $p > 0.05$. The range depicted multi-collinearity of predictor variables. This implied that the Regression model was highly correlated. The variables were therefore predicted from others with a high degree of accuracy. In addition, findings from the study also indicated that the values of scores distributed were greater than $\pm 2SD$. The $SD = 0.926$. It, therefore, depicted that the

implementation of quality education was higher in public primary schools. It was therefore deduced that public primary schools implemented quality education better than private primary schools. This concurred with Watkins (2006) stated that public schools performed better than private schools.

5.4 Conclusions of the study

The analysis of the research data and search for trends and predictors led to conclusions that were quantitative and qualitative. However, the study revealed areas of interest for each of the six research hypotheses that would lead the researcher and others to pursue future studies to exploit the area of quality education. The following conclusions were presented for each respective research hypothesis:

Results based on the research hypothesis one on the influence of school physical facilities on quality education in public and private primary schools revealed that physical facilities were significant in predicting the implementation of quality education. The study revealed that physical facilities predicted the implementation of quality education in both public and private primary schools by 25.7 percent. Headteachers felt that adequate and well maintained physical facilities contributed to the promotion of quality education in public and private primary schools. Overall, private primary schools had adequate and well maintained physical facilities as opposed to public primary schools.

The findings, based on study hypothesis two indicated that instructional materials had a significant influence on the implementation of quality education in public and private primary schools. The study also noted that adequate and well-utilized instructional materials provided a favorable environment for the learning process. Overall, private primary schools had a higher percentage of sufficient pupils' course books as compared to their counterparts in the public

sector. The Regression analysis revealed that instructional materials predicted implementation of quality education in public and private primary schools by 14.0 percent.

Findings based on hypothesis three indicated that curriculum supervision positively predicted the implementation of quality education in public and private primary schools. The study revealed that head teachers and teachers noted that curriculum supervision was crucial in the implementation of quality education in public and private primary schools. Regression analysis showed that curriculum supervision predicted the implementation of quality education in public and private primary schools by 14.1 percent. QASOs hardly supervised curriculum in both public and private primary schools due to acute shortage of QASOs.

Results based on research hypothesis four on the influence of teachers' characteristics on quality education in public and private primary schools revealed that teachers' characteristics were significant in predicting the implementation of quality education. The Regression analysis revealed that teachers' characteristics predicted implementation of quality education in public and private primary schools by 13.5 percent. Findings of the study indicated that professional records, pedagogical approaches, and professional development were critical in the implementation of quality education in public and private primary schools.

The study established that teachers in both public and private primary schools used teacher-centered approaches when teaching. Overall, it was found that teachers in both public and private primary schools did not maintain professional records and lacked opportunities to attend services courses. Besides, the study findings indicated that class size contributed to the implementation of quality education in public and private primary schools. Overall, it was revealed that large class sizes were experienced in public primary schools, contrary to small class

sizes in private primary schools.

Findings based on hypothesis five indicated that the learners' characteristics significantly influenced the implementation of quality education in public and private primary schools. From the Regression analysis, the study revealed that learners' characteristics predicted the implementation of quality education in public and private primary schools by 25.3 percent. The study indicated that the learners' characteristics regarding age, gender, pre-primary Education, family's socioeconomic status, health, and nutrition influenced the implementation of quality education to some extent. On the overall, the findings indicated that the rate of absenteeism for pupils was higher in public primary schools than private primary schools.

Findings based on hypothesis six on the influence of the combined factors of physical facilities, instructional materials, curriculum supervision, teachers' characteristics and learner characteristics on quality education revealed that the combined factors were crucial in predicting quality education in public and private primary schools. From the Regression analysis, the study, therefore, acknowledged that the combined factors predicted implementation of quality education in public and private primary schools by 100.0 percent. It was also revealed that the combined factors equally influenced the implementation of quality education in both public and private primary schools. It was also concluded that public primary schools implemented quality education better than private primary schools.

The study finally concluded that there were challenges in relation to the provision of quality education in both public and private primary schools. These challenges were in the form of factors that continued to inhibit the implementation of quality education in public and private primary schools. However, if the obstacles were adequately addressed, then quality education

would be implemented in both public and private primary schools.

5.5 Recommendations from the study

Arising from the findings and conclusions of the study, the following recommendations were made:

- i. The national government of Kenya to source for funding from development partners to increase the annual budgetary allocation to the Ministry Education from the current 17 percent to 25 percent for mitigation of adequacy of physical facilities and instructional materials in public primary schools.
- ii. Parents and communities should be sensitized on their roles in the provision of school infrastructure and instructional materials
- iii. Parents and school administrators should be sensitized on their roles on maintenance of physical facilities and equipment for the promotion of quality education in public and private primary schools.
- iv. The DQAS to deploy adequate QASOs for effective supervision of schools.
- v. School-based curriculum supervision by head teachers and teachers should be reinforced for the promotion of quality education in primary schools.
- vi. The ministry of Education, science, and technology to actualize the policy guidelines in-service courses for upgrading teachers to accommodate learner-centered approaches.
- vii. It was also recommended that the ministry of Education, science, and technology actualize the policy on monitoring and evaluation of quality education in public and private primary schools.
- viii. Teachers should adhere to their professional ethics by keeping professional records.
- ix. To counter large class sizes, TSC should adequately deploy teachers in public primary

schools

- x. It was recommended that the Ministry of Education should develop a school policy that promotes school attendance by pupils.
- xi. Parents should be sensitized on their role of the provision of meals to pupils for enhancement of learning achievement.
- xii. It was also recommended that though the MoEST should establish proper structures for the actualization benchmarks set for the realization of quality education in public and private primary schools.

5.6 Suggestions for further studies

The study suggested areas for further research. These areas were:

- i. A tracer study on the extent to which school administration influences quality education in public and private primary schools should be conducted.
- ii. Besides, a study should be undertaken to establish pedagogical models of classroom practice in public and private primary schools.
- iii. In addition, a study of the extent to which parents' characteristics influence quality education in public and private primary schools should be conducted.

REFERENCES

- Abdille, Y. (2012). Institutional factors influencing instructional supervision in public secondary schools, Mandera West district. *Unpublished M.Ed project. University of Nairobi*
- ACER (2013). *The importance of the school staffroom*. UNESCO
- Ackers, J., & Hardman, F. (2001). Classroom Interaction in Kenyan primary schools. *Compare*, 31(2), 245-61
- ADEA (2005). *The Challenge of Learning: Improving the Quality of Basic Education in sub-Saharan Africa*. ADEA.
- Adeogun, A. A. (2001). Instructional Resources and School Effectiveness in
- Afemikhe, O. (2007). Assessment and Educational Standard Improvement Reflection from Nigeria: A paper presented at the 33rd Annual Conference of the International Association for Educational Assessment held at Baku, Azerbaijan, September 16th–21st, 2007
- Afridi, F. (2010). Child welfare programme and child nutrition: evidence from a mandated school meal programme in India. *Journal of development economics*. Vol 92, 152-165.
- Akinfolarin, C. A. (2008). Resource utilization in Vocational and Technical Education in Colleges of Education in South-West Nigeria. *Unpublished Ph.D Thesis. University of Ado-Ekiti, Ado-Ekiti*.
- Akpan, C. P. (2011). *Fundamentals of School Business Management*. Primechoire Konsult.
- Alderman H, Gilligan D, and Lehrer K (2010). The impact of food for education programmes on school participation in northern Uganda. *International Food Policy Research Institute*,
- Alexander, K., Entwisle, R., & Horsey, S. (1997). From first grade forward: Early foundations of high school dropout. *Sociology of Education*, 70(2), 87-107
- Ali, A. (2000). Supervision for teacher development: an alternative model for Pakistan. *International Journal of Educational Development*, 20(1), 177-188.
- Alimi, et al (2012). School Types, Facilities and Academic Performance of Students in Senior Secondary Schools in Ondo State, Nigeria. *International Education Studies Vol. 5, No. 3*
- Alimi, O. S. (2004). Appraisal of the Adequacy of Available School Plant for Primary Education In Ayedaade Local Government Area of Osun State. *Educational Thought*, 4(1) 64-69
- Alokan, F., (2010). Influence of Sex and Location on Relationship between student problems and Academic Performance. *The Social Sciences (TSS)*, 5(4), 340 – 345.
- ALA (2010). Every child ready to read. ALA

- Amukowa, W. (2013). A Call to Reform Secondary Schools in Kenya. *American International Journal of Contemporary Research Vol. 3 No. 1; January 2013* 196
- Anderman, L. & Anderman, M. (2009). *Oriented towards mastery: Promoting positive motivational goals for students*. Routledge
- Anderson, L.M., Holt-Reynolds,D.(1995). *Prospective teachers' beliefs and teacher education pedagogy*.
- Anderson, S. (Ed.) (2002). *School Improvement through Teacher Development: Case Studies of the Aga Khan Foundation Projects in East Africa*. Swets &Zetlinger.
- Anderson, S. E. (2000).A coordinated district consultant/teacher centre approach to school based teacher development: The Mombasa school improvement project. *Paper presented at the Annual Meeting of the Comparative and International Education Society, San Antonio, Texas, March, 2000*.
- Aoki, M. (2001).*Towards a Comparative Institutional Analysis*. MIT Press.
- Aronson et al (2007).Teachers and Student Achievement in the Chicago Public High Schools. *Journal of Labor Economics, 25(1): 95 - 135*.
- Babbie, E. (2008). *Introduction to Research*. (5th ed.). Wadsworth.
- Bargh, J.A. et al. (2001). The automated will: non conscious activation and pursuit of behavioral goals. *J. Pers. Soc. Psychol. 81, 1014–1027*.
- Beach, B.& Reinhartz, J. (2000). *Supervisory leadership: Focus on instruction*. Allyn and Bacon.
- Bedard, K. & Kuhn, P. (2008).Where class size really matters: class size and student ratings of instructor effectiveness. *Economics of education review, vol. 27 no.3, 253-265*.
- Berg, B.(2001). *Qualitative research methods for the social sciences* (4th ed.). Allyn &Bacon
- Betts, R., Zau, C. & Rice,A. (2003). *Determinants of student achievement: New Evidence from San Diego*. Public Policy Institute of California.
- Bishop C. et al (2007). The effects of personality type on web-based distance learning. *Journal of Educational Technology Systems, 35(4), 491-506*.
- Black, P. & Wiliam, D. (1998,). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan, 139-164*
- Bowden, M. & Doughney, J. (2011). The importance of cultural and economic influences behind the decision to attend higher education. *The Journal of Socio-Economics, 41; 95-103*
- Brazdău, O. & Mihai, C. (2011). The consciousness quotient: a new predictor of the students' academic performance. *Procedia Social and Behavioral Sciences,11, 245–250*
- Brookes, M., Goodall, E. & Heady, L. (2007). *Misspent youth: The costs of truancy and*

- exclusion*. New Philanthropy Capital.
- Bruhwiiler, C. & Blatchford, P. (2009). *Effects of class size and adaptive teaching competency on classroom processes and academic outcome*. Elsevier
- Buckland, P.(2004). *Reshaping the Future: Education and post conflict reconstruction*, World Bank.
- Buttenheim et al (2011). *Impact evaluation of School Feeding Programs in Lao PDR*.World Bank.
- Carron, G. & Chan, T. (1996). *The quality of primary schools in different development contexts*. UNESCO.
- Central Bureau of Statistics (2006). *Economic Survey 2006*. Government Printer.
- Chan, T. (1996).Environmental impact on student learning. *ERIC Document Reproduction Service No. ED 406722*.
- Chapman, D. & Adams, D. (2002). *The Quality of Education: Dimensions and strategies. Education in Developing Asia. Vol.5. Asia Development Bank*.
- Cohen, L.et al (2000). *Research Methods in Education*. Routledge Falmer.
- Clotfelter, C.et al (2006). High-poverty schools and the distribution of teachers and principals (Working Paper No. 1). *National Center for the Analysis of Longitudinal Data in Education Research (CALDER)*
- Collis, B. A., et al. (1996). *Children and computers in school*. Erlbaum.
- Considine, G. & Zappala, G. (2002). The influence of Social Economic disadvantage in the academic performance of school students in Australia. *Journal Sociology*, 38, 127-148.
- Coombs, H. (1985).*The World Crisis in Education: The View from the Eighties*. Oxford University Press.
- Corten, R & Dronkers, J (2004). *School achievement of pupils from lower strata in public, private Government-dependent and private-government-independents schools: Across national test of the Coleman-Hoffer-Thesis*. European University Institute
- Datnow, A., & Park, V. (2009). *Conceptualizing policy implementation: large-scale reform in an era of complexity*. Routledge.
- Delaney, L.et al (2011). Parental education, grade attainment and earnings expectations among university students. *Economics of Education Review*, 30; 1136 -1152.
- Dickerson, A. & Mc Indosh C. (2013). *The impact of distance to nearest education institutions*. Sage publications.
- Doosuur A & Igyuve (2014). The use of libraries among children in primary schools in Makurdi

- Metropolis, Benue State, Nigeria. *International journal of library and information sciences*. Vol.6 (4), pp. 65-74.
- Duemer, L. & Mendez-Morse, S. (2002). Recovering policy implementation Understanding implementation through informal communication. *Education Policy Analysis Archives*, 10(39), 1-11.
- Dunkin, M. & Barnes, J. (1985). *Research on teaching in higher education*. In M. Wittrock (ed.), *Handbook of research on teaching* (3rd ed.). Macmillan.
- Dwyer, T. et al (2001). Relation of Academic Performance to Physical Activity and Fitness in Children. *Pediatric Exercise Science*, 13, 225-238
- Ehrenberg. et al (2001). Does class size matter? *Scientific American*, 285(5), 78-85.
- Ellison, L. & Rothenberger, B. (1999). In Bangladesh: The multiple ways of teaching and learning. *Educational Leadership*, 57(1): 54-57.
- Encyclopedia of Business (2010). Quality and total quality management. <http://www.referenceforbusiness.com> Accessed on 7 September 2010
- Epstein, J. & Sheldon, S. (2002). Present and accounted for: Improving student attendance through family and community involvement. *The Journal of Educational Research*, 95(5), 308-318.
- Everston, C.W., Hawley, W., & Zlotnik, M. (1985). Making a difference in educational quality through teacher education. *Journal of Teacher Education*, 36(3), 2-12.
- Fabunmi, M. P. B.-A., & Isaiah, A. A. (2007). Class factors as determinants of secondary school student's academic performance in Oyo State, Nigeria. *J. Soc. Sci.*, 14(3), 243-247.
- Falch et al. (2013). On the determinants and implications of school choice. The influence of family, teacher, and classroom in North east Brazil. *Economica* 9(1), 971-239.
- Ferguson, P., & Womack, S. T. (1993). The impact of subject matter and education coursework on teaching performance. *Journal of Teacher Education*, 44 (1), 155-163.
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59(2), 117-142.
- Florence, M., Asbridge, M., & Veugelers, P. (2008). Diet quality and academic performance. *Journal of School Health*, 78, 209-215.
- Fuller, B. et al. (1999). How to raise children's literacy? The influence of family, teacher, and classroom in North east Brazil. *Comparative Education Review*, 43(1), 1-35
- Galabawa, E. (2001). *The quality of education in Tanzania*. University of Dar es Salaam.
- Gay, L. R. (2003). *Education Research*. Hearson Education Inc.
- Gibbons, S. & Telhaj, S (2011). Pupil mobility and school disruption. *Journal of Economics* 95(9-10).

- Glick, P. & Sahn, D. E. (2006). The demand for private schooling in Madagascar: Price, quality, and the choice between public and private providers. *Journal of Development Economics*, 79(1):118–145.
- GOK (2004). *The Pastoralist communities and Free Primary Education in Kenya: A preliminary survey*, Action Aid International Kenya.
- GOK (2013). *Basic Education Act*. Government Printers.
- Goldhaber, D.D. & Brewer, D.J. (2000). Does teacher certification matter? High school teacher certification status and student achievement. *Educational Evaluation and Policy Analysis*, 22 (2), 129-145
- Grauwe, D. (2000). *Supervision and support services in five Asian countries: a comparative analysis*. International Institute for Educational Planning.
- Greenwald, R., Hedges, V. & Laine, D. (1996). The effect of school resources on student achievement. *Review of Educational research*, 66(3), 361-396.
- Greif (2006): *Institutions and the Path to Modern Economy. Lessons from Medieval Trade*. Cambridge University Press.
- Gyabaah, D. (2009). Sanitation in basic schools: a case study in Tano South district: *paper prepared for the West Africa Regional Sanitation and Hygiene Symposium, 10-12 Nov 2009, Accra, Ghana*
- Hallfors, D. et al (2002). Truancy, grade point average, and sexual activity: A meta-analysis of risk indicators for youth substance use. *Journal of School Health*, 72(5), 205-211.
- Harbison, F. & Myers. (1964). *Education, Manpower, and Economic Growth: Strategies of Human Resource Development*. McGraw-Hill.
- Harris, N. & Sass, T. (2006). *Value-Added Models and the Measurement of Teacher Quality*. Florida State University.
- Hesse-Biber, S. & Leavy, P. (2011). *The practice of qualitative research* (2nded.). Sage
- Horwitch, L. R. (2004). *Student mobility, academic achievement, and the California Academic Performance Index: Unintended consequences in an era of high-stakes accountability*. University of Southern California.
- Hunter, L. et al (2011). Professional learning places and spaces: the staffroom as a site of beginning teacher induction and transition. *Asia-Pacific Journal of Teacher Education*, 39(1), 33-46
- Hughes, J. et al (2005). Relationship influences on teachers' perceptions of academic competence in academically at-risk minority and majority first grade students. *Journal of School Psychology*, 43, 303-320.
- IRC (2005). *School Sanitation and Hygiene*, IRC

- Israel, M., & Hay, I. (2006). *Research ethics for social scientists: Between ethical conduct and regulatory compliance*. Sage.
- Jennings, T. (2006). Addressing diversity in US teacher preparation programs: A survey of elementary and secondary programs' priorities and challenges from across the United States of America. *Teaching and Teacher Education*, 23, 1258-1271.
- John C (2010). *Assessment in the Primary School*. INTO
- Johnson, S. et al (2000). Teacher Development and Change in South Africa: A critique of the appropriateness of transfer of northern/western practice. *A Journal of Comparative and International Education*, 30(2), 179-192.
- Jomaa et al. (2011). School Feeding Programs in Developing Countries: Impacts on Children's Health and Educational Outcomes. *Nutrition Review*, 2011, 69, 83–98.
- Kane, T. & Staiger, D. (2008). Estimating Teacher Impacts on Student Achievement: An Experimental Validation. *NBER Working Paper 14607*.
- Kao L. et al (2008). Analysis of variance: Is there a difference in means and what does it mean? *PMC 144(1):158-70*.
- Kar, B., Rao, S. & Chandramouli, B. (2008). Cognitive development in children with chronic protein energy malnutrition. *Behavioral and Brain Functions*, 4, 31-43.
- Kazi, G. (1997). *Decentralization of educational management; experiences from South Asia*. UNESCO-IIEP
- Kazianga H, De Walque, & Alderman, H. (2009). *Educational and health impacts of two school feeding schemes: Evidence from a randomized trial in rural Burkina Faso*. World Bank.
- Kemizano, R. (2007). *Teaching of Reading to School Beginners: A Study on the Reading programmes in Primary One in Uganda*. University of Oslo.
- Kerlinger, F. (1973). *Foundations of Behavioral Research*. Renhart and Winston.
- Khaliq Khan, A. & Rodrigues, S. (2012). The Influence of School Type on Students' Attitudes towards Mathematics in Quetta, Pakistan. *Journal of Research & Reflections in Education (JRRE)*, 6(2) 99-102.
- Khan, H. (2004). *Core actors in educational improvement: reports on seven Asian countries*. UNESCO-IIEP
- Kimeu, J. M. (2010). Influence of Secondary School Principals Instructional Supervision Practices on KCSE Performance M. Kasikeu Division, Mukaa District Kenya, *Unpublished thesis, University of Nairobi*.
- KNBS. (2011). *Statistical abstract*, Government printer.
- KNEC. (2010). *Report on monitoring learner achievement*. KNEC.

- Koul, L. (2005). *Methodology of Educational Research*. Vikas Publishing House.
- Krueger, A. B. (1998). *Experimental Estimates of Education Production Functions*. Princeton University.
- Lamichhane, S. et al. (1997). *Decentralization of educational management; experiences from South Asia*. UNESCO.
- Lawrence, L. (2015). Validity, reliability and generalization in qualitative research. *Journal of family medicine and primary care*. 4 (3), 324-327
- Likoko, S. et al (2013). The Adequacy of Instructional Materials and Physical Facilities and their Effects on Quality of Teacher Preparation in Emerging Private Primary Teacher Training Colleges in Bungoma County, Kenya. *International Journal of Science and Research (IJSR), India Online ISSN: 2319-7064*
- Linder, K. J. (2002). The Physical Activity Participation. Academic Performance Relationship Revisited: Perceived and Actual Performance and the Effect of Banding (Academic Tracking). *Pediatric Exercise Science, 14, 155-170*.
- Lumpkin, R. B. (2013, October). School Facility Condition and Academic Outcomes. *International Journal of facility Management, Vol. 4, No. 3*
- McEwan, K. (2003). *10 traits Of highly effective principals: From good to great performance*. Corwin Press.
- Mackatiani, C. (2008). Factors influencing provision of private primary education in post free primary education era in Ogembo division, Gucha district. *Unpublished thesis, University of Nairobi*.
- Maheshwari, A. & Raina, V. (1998). In service training of primary teachers through interactive video technology: An Indian experience. *International Review of Education, 44 (1), 87:101*.
- Majra, J. & Gur, A. (2010). School environment and sanitation in rural India. *Journal of Global Infectious Diseases volume 2(2) pg 109 -111*
- Marsh, P. (2000). Truancy or absenteeism? A school governance perspective. *Queensland Journal of Educational Research, 16(2), 147-157*.
- Martinez, V. et al. (1995). The Consequences of School Choice: Who Leaves and Who Stays in the Inner City. *Social Science Quarterly, Vol. 76, No.3, 485-501*.
- Matthews, P. & Smith, G. (1995). Inspecting schools and improvement through inspection. *Cambridge Journal of Education 25(1), 23-34*.
- McDonough, K. (2009). Pathways to critical consciousness: A first-year teacher's engagement with issues of race and equity. *Journal of Teacher Education, 60(5), 528-537*.
- McKeachie, W. (1980). *Class size, large classes, and multiple sections*. *Academe, 66, 24-27*.

- Miske J. et al. (1998). *Training and learning in Mangochi classrooms combining qualitative and quantitative information to study twelve primary schools in Malawi*. S.N
- MoE (2005/2006). Strengthening FPE: A Case study of Suba District: *Unpublished*.
- MOEST (2005). *Kenya education sector support programme 2005-2010*. Government printers.
- Mokatsi, R. (2005). *Sharing resources- how library network can help reach education goals*. Book Aid International.
- Mosteller, F., R. J. Light, & J. A. Sachs. (1996). Sustained Inquiry in Education: Lessons from Skill Grouping and Class Size. *Harvard Education Review*, 66(4): 797–842.
- Mtana, N & Hojhund, G. (2004). *Teaching and Learning in Primary Education in Tanzania*. MOEVT.
- Mtika, P. & Gates, P. (2010). Developing learner-centred education among secondary trainee teachers in Malawi: the dilemma of appropriation and application. *International Journal of Educational Development*, Vol. 30, No. 4, pp. 396-404.
- Mukwa, C. & Jowi, O. (1988). *General Methods*. University of Nairobi Press.
- Muriithi, M. (2014). *Influence of head teachers' instructional supervision strategies on curriculum implementation in public Primary schools in Imenti South district*. Kenya Information Preservation Society.
- Murgatroyd, J. & Morgan, C. (1994). *Total quality management and the school*. Open University Press
- Murray, S. et al (2012). Student disengagement from primary schooling: A review of research and practice. *A report to the CASS Foundation*.
- Mwiria, K. & Wamahiu, S. (1995). *Issues in Educational Research in Africa*. E.A.E.P.
- Nathalie A. & Alaga C. (2016). Motivation and Attitude of Students towards Learning English Language. *International Conference on Research in Social Sciences, Humanities and Education. Cebu*.
- NCES (1997). *Public and private schools: How do they differ?* U.S Department of Education.
- Nicholas, J. (2003). Predicting indicators for students failing state of Indiana high school graduation exam. *Preventing school failure*, 47(3):112-120.
- Njuguna V. et al (2008). *The Sustainability and Impact of School Sanitation, Water and Hygiene Education in Kenya*. United Children's Fund.
- Nungu, M. (2010). Universalizing Access to Primary Education in Kenya: Myths and Realities. *Canadian Journal for New Scholars in Education*. 3 (2).
- Nutting PA et al. Initial lessons from the first national demonstration project on practice transformation to a patient-centered medical home. *Ann Fam Med* 2009;7(3):254–60.

- Nzabonimpa, B (2013). Influence of head teachers' general and Instructional supervisory practices on teachers' work performance in secondary schools in Entebbe Municipality. Makerere University.
- Oates, G. (2003). Teacher-student racial congruence, teacher perceptions, and test performance. *Social Science Quarterly*, 84(3), 508-525.
- O'Neill, D & Oates. A (2001). Impact of school facilities on student achievement behaviour, attendance and teacher turnover rate in Central Texas middle schools. *Educational Facility Planner*, 36(3) 14-22
- OECD (2012), *Public and Private Schools: How Management and Funding Relate to their Socioeconomic Profile*. OECD Publishing
[Http://dx.doi.org/10.1787/9789264175006-en](http://dx.doi.org/10.1787/9789264175006-en)
- Ofovwe, G.(2007). Knowledge, Attitude and Practice of School Health Programme among Head Teachers of Primary Schools in Egor Local Government Area of Edo State Nigeria. *Annals of African Medicine*, Vol 6, No.3, pp 99-103
- Olayemi, A. (2001). Closure of private schools. *Nigerian Tribune*, p11
- Oliva, F. & Pawlas, G. (2001). *Supervision for today's schools*. Wiley & Sons.
- O'Sullivan, M. C. 2006. Lesson observation and quality in primary education as contextual teaching and learning processes. *International Journal of Educational Development*, Vol. 26, No. 3, pp. 246-260.
- Parveen, K. & Mohammad, I. (2012). Role of physical facilities in teaching learning process. *Interdisciplinary journal of contemporary research in business* vol 4, no 3 pp 210-216
- Patton, M. (1990). *Quantitative Evaluation and Research Methods*. Sage Publication.
- Perera, W. (1997). *Changing schools from within. A management intervention for improving school functioning in Sri Lanka*. International Institute for Educational Planning.
- Postlewaithe, N. (1998). The conditions of primary schools in least-developed countries. *International Review of Education*, 44(4): 289-317.
- Private and Public Schools in Lagos State. *Journal of Educational Administration and Planning* Vol.1 pp78-81
- Pruss-Ustun (2008). *Safer Water, Better Health: Costs, benefits and sustainability of interventions to protect and promote health*, WHO.
- Punch, K. F. (2005). *Introduction to social research: Quantitative and qualitative approaches (2nded.)*. Sage.
- Purdie, N. & Buckley, S. (2010). School attendance and retention of Indigenous Australian students. *Issues Paper No 1. Closing the Gap Clearinghouse*.

- Raudenbush, et al (1993). On the job improvements in teacher competence: Policy options and their effects on teaching and learning in Thailand. *Educational Evaluation and Policy Analysis*, 15(3), 279-297.
- Rausch, R. (2013). *Nutrition and academic performance in school age children. The relation to obesity and food insufficiency*. St. John's University.
- Reedy. (2006). *Administration of Secondary Education*. Rajat
- Reid, K. (2008). The causes of non-attendance: an empirical study. *Educational Review*, 60(4), 345-357.
- Riaz, A. et al (2011). Students' acceptance and commitment to e- learning: Evidence from Pakistan. *Proceedings of the 2011 International Conference on Teaching, Learning and Change*.
- Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of Teacher Attributes*. The Economic Policy institute.
- Richards, L. & Morse, J. (2007). *Read me first: A user's guide to qualitative methods*. (2nd ed.) Sage Publications.
- Rivkin, G., Hanushek, E & Kain, J (2005). Teachers, Schools and Academic Achievement. *Econometrica*, 73(2): 417 – 458.
- Robinson, G, & Wittebols, H. (1986). *Class Size Research: A Related Cluster Analysis for Decision Making*. Arlington.
- Robinson, M. 2003. Teacher education policy in South Africa: the voice of teacher educators. *Journal of Education for Teaching*, Vol. 29, No. 1, pp. 19-34.
- Rockoff, E. & Staiger, D.(2010). Searching for Effective Teachers with Imperfect Information. *Journal of Economic Perspectives*, 24(3): 97-118
- Rothman, S. (2001). School absence and student background factors: A multilevel analysis. *International Education Journal*, 2(1), 59-68.
- SACMEQ (2004). *Achievement scores*. UNESCO
- SACMEQ(2007). *SACMEQ III Project 2005-2010. Quality of Primary School Inputs in Kenya*. UNESCO
- Salem I. (2017). Attitudes of Public and Private Schools' students towards learning. *International Journal of Education Vol. 9, No. 2, pp70-83*.
- Samoff, J. (2005). *Education Quality: Difficult Choices Prepared for Experts Meeting on Researching Quality for Education For All in South: Main Research Issues and Current Gaps*. University of Amsterdam.
- Sapsford, R. (2007). *Survey Research (2nd ed.)*. Sage Publications

- Scarcella, R. & Oxford, R. (1992). *The individual in the communicative classroom*. Heinle & Heinle.
- Schofthaler, T. (1986). *Social Economic Aspects of democratization of education*. UNESCO.
- Schultz, T.W. (1961). *The American Economic Review*. Vol.51.No.1. 1-17.
- Schwab, R. G. (1999). *Why only one in three? The complex reasons for low indigenous school retention*. Centre for Aboriginal Economic Policy
- Schweisfurth, M. 2002. Democracy and teacher education: negotiating practice in the Gambia. *Comparative Education Vol. 38, No. 3, pp. 303-314*.
- Shepard, R. J. (2002). *Ethics in exercise science research*. Sports Med. 32: 169–183.
- Sifuna, D. N. & Sawamura, N. (2008). Universalizing primary Education in Kenya: Is it beneficial and sustainable? *Journal of international cooperation in Education, 11(3), 103-118*.
- Sorhaindo, A. & Feinstein, L. (2006). What is the relationship between child nutrition and school outcomes? Retrieved from the Centre for Research on the Wider of Learning website: <http://www.learningbenefits.net/publications/ResRep18.pdf>
- SPSS, (2010). *IBM SPSS statistics 19 Core System*. User's Guide. SPSS Inc
- Stake, R. E. (1995). *The art of case study research*. Sage Publications
- Stephens. (1991). The quality of Primary Education in Developing Countries: Who Defines and Who Describes? *Comparative Education*. 27 (2).
- Thatcher, R. (2010). Validity and reliability of quantitative electroencephalography. *Journal of neurotherapy, (14) 122-152*.
- Tremblay, M. S., Inman, J.W., & Willms, J. D. (2000). The Relationship Between Physical Activity, Self-Esteem, and Academic Achievement in 12-Year-Old Children. *Pediatric Exercise Science, 12, 312-324*.
- Tsavga, J. (2011). *The effect of environment on the academic performance of students in Tarka Local Government Area of Benue State*. Benue State University.
- Twycross, A., Shields, L. (2004). Validity and reliability. *Paediatric nursing 17(9)43-44*.
- U. N. (2005). *The Millennium Development Goals report*. UN
- U.N (2009). UN Secretary-General's Report: *Implementing the Responsibility to Protect, 2009*. U.N.
- U.N. (2013). *A New Global Partnership: Eradicating Poverty and Transform Economy through Sustainable Development. The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda*. The United Nations.

- U.S. Department of Education (1991). *Education indicators for the National Center for Education Statistics*. U.S. Government Printing Office.
- UNDESA (2014). *Electricity and education: The benefits, barriers, and recommendations for achieving the electrification of primary and secondary schools*. UNICEF
- UNESCO (1961). *Conference of African states on the development of education in Africa Addis Ababa, 15-25 may 1961*. UNESCO
- UNESCO, (1984). *Management and Maintenance in Use of Educational Buildings and Equipment*. UNESCO.
- UNESCO (1990). *World Conference on Education for All*. UNESCO.
- UNESCO (1996). *Education For All: Achieving the goal*. UNESCO
- UNESCO (2002). *Systematic monitoring of Education for All*. UNESCO
- UNESCO (2003). *Ministerial round table on quality education*. UNESCO
- UNESCO (2004). *Challenges of Implementing Free Primary Education in Kenya* (Assessment report). UNESCO.
- UNESCO (2005). *EFA Global Monitoring Report: The Quality Imperative*. UNESCO.
- UNESCO (2011). *Role of Education in peace building: A literature review*. UNESCO.
- UNESCO (2012). *Systematic monitoring of Education For All*. UNESCO
- UNESCO (2015). *Education For All 2000-2015: Achievements and challenges*. UNESCO
- UNICEF (2000). *Defining Quality in Education. Working Paper Series*, UNICEF
- UNICEF (2004). *The State of the World's Children 2004: Girls, education and development*. UNICEF.
- UNICEF (2007). *A Human Rights-bases Approach to Education For All*. UNICEF
- UNICEF (2008). *Education in Kenya*. UNICEF.
- UNICEF (2011). *The Role of Education in Peace building: A synthesis report of findings from Lebanon, Nepal and Sierra Leone*. UNICEF
- UNICEF (2014). *Basic education statistical booklet, Kenya*. UNICEF
- UNICEF. (1998). *Early childhood care for survival, growth and development (programming for young children 0-8)*. UNICEF
- Uwezo Kenya (2011). *Kenya National Learning assessment report*. Uwezo Kenya
- Van Teijlingen & Hundley, (2001). *The importance of pilot studies*. NCBI

- Verwimp, P (1999). Measuring the quality education at two levels: A case study of primary schools in rural Ethiopia. *International review of education*, vol. 45 no 2, pp. 167-196.
- Waite, D. (1995). *Re thinking instructional supervision: Notes on its language and culture*. Falmer Press
- Wang, A. & Newlin, M..(2002). Predictors of web student performance: The role of self-efficacy and reasons for taking an on-line class. *Computers in Human Behavior* 18 (2002) 151–163
- Wayne, A. J. & Young, P. (2003). Teacher characteristics and student achievement gains: A review. *Review of Educational Research*, 73(1), 89-122.
- Wedgwood, R. (2007). Education and poverty reduction in Tanzania. *International Journal of Educational Development*, 27(4), 383-396.
- Wenglinsky, H. (2002). The link between teacher classroom practices and student academic performance. *Education Policy Analysis Archives*, 10(12).
- Westerlund, J. (2008). Class size and student evaluations in Sweden. *Education economics* vol. 16 no.1 pp19-28.
- Wiliam, D., & Lee, C. (2001). Teachers developing assessment for learning: Impact on student achievement. *Paper presented at the annual meeting of the British Educational Research Association, Leeds, England*.
- Willms, J. D. (2000). Standards of care: Investments to improve children's educational outcomes in Latin America. *Paper presented at the "Year 2000 Conference of Early Childhood Development" sponsored by the World Bank*.
- Wolfgang, V. et al (2015). A simple formula for calculation of sample size in pilot studies. *Journal of Clinical Epidemiology*.vol. 65, pp1375-1379.
- World Bank (2007). *Education Quality and Economic Growth*. World Bank.
- World Bank (2012). *LEARNING FOR ALL: Strengthening Education Systems to Improve Learning*. World Bank.
- Xin, T., Xu, Z. & Tatsuoka, K. (2004). Linkage between teacher quality, student achievement, and cognitive skills: A rule-space model. *Studies in Educational Evaluation*, 30, 205-223
- Zamudio, G. (2004). *Student mobility: the relationship between student population stability and academic achievement*. University of Arizona.
- Zohrabi, M. (2013). Mixed Method Research: Instruments, Validity, Reliability and Reporting Findings. *Theory and Practice in Language Studies*, Vol. 3, No. 2, pp. 254- 262.
- Zubrick, S. et a l. (2006). *The western Austrian aboriginal child health survey: Improving the educational experiences of aboriginal children and young people*. Curtin University of Technology.

APPENDIX I

LETTER OF INTRODUCTION

Department of Educational Foundations,

University of Nairobi,

P.O. Box 30197-00100 Nairobi

Date.....

HEADTEACHERS,

SAMPLED PUBLIC AND PRIVATE PRIMARY SCHOOLS,

KAKAMEGA COUNTY,

Dear Respondent,

I am a PhD student in the department of Educational Foundations at the School of Education, University of Nairobi collecting data towards my doctoral thesis. I am doing research on **Comparative study on implementation of quality education in public and private primary schools in Kakamega County, Kenya.**

I sincerely request for your support through filling the questionnaires provided to you. All information given will be treated with utmost confidentiality. Your contribution and sincerity will be highly appreciated.

I take this opportunity to thank you in advance for the corporation.

Yours faithfully,

Caleb Mackatiani

APPENDIX II

REQUEST OF AUTHORITY TO INTERVIEW PUPILS

Department of Educational Foundations,

University of Nairobi,

P.O. Box 30197-00100 Nairobi

Date.....

THE PARENTS OF PARTICIPATING PUPILS

THROUGH

HEADTEACHERS,

SAMPLED PUBLIC AND PRIVATE PRIMARY SCHOOLS,

KAKAMEGA COUNTY,

Dear Parent,

I am a PhD student in the Department of Educational Foundations at the School of Education, University of Nairobi collecting data towards my doctoral thesis. I am doing research on **Comparative study on implementation of quality education in public and private primary schools in Kakamega County, Kenya**. I sincerely request you to allow your children to participate in the study through filling the questionnaires that will be provided to them. All information given will be treated with utmost confidentiality. I take this opportunity to thank you in advance for the corporation.

Yours faithfully

Caleb Mackatiani

APPENDIX III

QUESTIONNAIRE FOR HEAD TEACHERS

- **Kindly fill this questionnaire by responding to all questions**
- **Do not write your name on this questionnaire**
- **Information given by you will be treated confidential.**

1. Personal information

- a) Please indicate your gender. Male () Female ()
- b) Please indicate your home sub County.....
- c) Please indicate your professional qualification. P1 () Diploma () University degree () Any other ()
- d) For how long have you served as a head teacher.....years

2. School data

a) Please indicate:

- i. Type of school: Private () Public ()
- ii. How many pupils are in the school?.....
- iii. Indicate the staffing position of your school. Male () Female () Total ()
- iv. Indicate the average number of pupils per Class.....
- v. What is the ratio of teachers to pupils.....
- vi. How many pupils share one textbook? Lower () Upper ()

b) Please indicate the adequacy of the following school facilities

Facility	Adequate	Inadequate	None
School administration blocks			
Classrooms			
Libraries			
Desks			
Teachers' tables			
Teachers' chairs			
Water			
Electricity			
Latrines			
Play fields			

2b. In your own opinion, indicate the influence of physical facilities on quality education in your school

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2c) Please indicate with a tick the adequacy of instructional materials in your school

Facility	Adequate	Inadequate
Exercise books		
Writing pens		
Wall maps		
Marker pens		
Teaching aids		
Teachers' reference books		
Pupils' course textbooks		
Geometrical sets		
Rulers		

2d) In your own opinion, indicate with a tick whether instructional materials influence quality education.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2e) In your own opinion, indicate with a tick whether you agree on adequacy of QASOs.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2f) In your opinion, indicate with a tick whether you agree on importance of curriculum supervision.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2g) Indicate with a tick whether teachers maintain professional records.

Facility	Maintained	Not maintained
Schemes of work		
Lesson plans		
Pupils' progress records		
Teaching aids		
Class registers		

2h) In your opinion, indicate with a tick whether you agree on importance of maintaining professional records.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2i) Indicate whether you have attended an in-service course for the past five years.

Attendance	Attended	Not attended
In-service		

2j) In your opinion, indicate with a tick whether you agree on importance of in-service courses.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2k). In your opinion, indicate with a tick whether you agree on importance of teachers characteristics in quality education

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

3a) In your opinion, indicate with a tick whether you agree on importance of learners' attitudes on quality education

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

3b) Indicate the availability of school services to learners.

Services	Available	Not available
Physical Education		
Health service		
Parental support		
School transport		

3c) In your opinion, indicate with a tick whether you agree on influence of learners' characteristics on quality education in your school

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

4. Implementation of Quality education

- i. Which strategies have you put in place to enhance quality education?.....
- ii. Which challenges are you facing in implementation of quality education?.....
- iii. How will you redress the challenges faced during implementation of quality education?.....
- iv. What are your suggestions for improvement of quality education in primary schools?.....

Thank you very much for your co-operation

APPENDIX IV

QUESTIONNAIRE FOR TEACHERS

I am a PhD student in the department of Educational Foundations at the School of Education, University of Nairobi collecting data towards my doctoral thesis. I am doing research on **Factors influencing the implementation of quality education in public and private primary schools in Kakamega County, Kenya.**

- I kindly request you to fill this questionnaire by responding to all questions.
- Do not write your name on this questionnaire
- Information given by you will be treated as confidential and will only be used for purpose of this research.

1. Personal information

- i. Please indicate your gender. Male () Female ()
- ii. Please indicate your qualification. P1 () Diploma () University degree ()
- iii. Please indicate your teaching experience.
1-5 years () 6-10 years () 11-15years () over 16 years ()
- iv. Please indicate whether you are a Class teacher. Yes () No ()
- v. If yes in (e) above, indicate the class.....
- vi. Indicate whether you have attended an in-service course for the past five years.

Attendance	Attended	Not attended
In-service		

2. School factors

2a) Please indicate with a tick the adequacy of the following school facilities

Facility	Adequate	Inadequate	None
School administration blocks			
Classrooms			
Libraries			
Desks			
Teachers' tables			
Cupboards			
Teachers' chairs			
Water			
Electricity			
Latrines			
Play fields			

2b) In your own opinion, indicate with a tick the influence of physical facilities on quality education in your school.

- i) Strongly agree ()
- ii) Agree ()
- iii) Strongly disagree ()
- iv) Disagree ()

2c) Please indicate with a tick the adequacy of instructional materials in your school

Facility	Adequate	Inadequate	None
Exercise books			
Writing pens			
Wall maps			
Marker pens			
Teaching aids			
Teachers' reference books			
Pupils' course textbooks			
Geometrical sets			
Rulers			

2d) In your own opinion, indicate with a tick whether instructional materials influence implementation of quality education in your school

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2e) In your own opinion, indicate with a tick whether you agree on the adequacy of QASOs.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2f) In your opinion, indicate with a tick whether you agree that curriculum supervision influence

implementation of quality education in your school.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2g) In your opinion, indicate with a tick whether you agree on importance of maintaining professional records (such as schemes of work, lesson plans) in implementation of quality education in your school.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2h) In your opinion, indicate with a tick whether you agree on importance of in-service courses in implementation of quality education in your school.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2i) In your opinion, indicate with a tick whether you agree on importance of teachers characteristics in implementing quality education in your school

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

3) In your opinion, indicate with a tick whether you agree on importance of learners' attitudes on quality education

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

4) In your opinion, indicate with a tick whether you agree on influence of learners' characteristics on implementation of quality education in your school

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

Thank you very much for your co-operation

APPENDIX V

QUESTIONNAIRE FOR PUPILS

I am a PhD student in the department of Educational Foundations at the School of Education, University of Nairobi collecting data towards my doctoral thesis. I am doing research on **Comparative study on implementation of quality education in public and private primary schools in Kakamega County, Kenya**. I kindly request you to fill this questionnaire by responding to all questions.

- Do not write your name on this questionnaire
- Information given by you will be treated as confidential and will only be used for purpose of this research.

1. Indicate your gender. Male () Female ()

2. Indicate your age. () years.

3. Home factors

3.1 How far is your home from school?.....km

3.2 Which transport do you use board to school? Motor bike () school bus () On foot ()

3.3 What does your parents do to earn a living?

3.4 What is the highest academic qualification of your parents? Certificate () Diploma ()

University Degree ()

3.5 How many times in a day do you get meals? Once () Twice () Thrice ()

3.6 Do your parents check your home work after school? Yes () No ()

3.7 Do your parents provide you with learning materials? Yes () No ()

3.8 Do your parents assist you in doing school assignment? Yes () No ()

3.9 Do your parents always pay school levies? Yes () NO () Always ()

3.10 Do your parents respond positively by taking you to hospital? Yes () No ()

4. School factors

4.1 Indicate the Class in which you are in 7 () 8 ()

4.2 Indicate your school type. Public () Private ()

4.3 How many pupils are in your class?.....

4.4 Do you have textbooks for all the subjects that are taught? Yes () No ()

4.5 Do you have story books in your school? Yes () No ()

4.6 Do you have a library in your school? Yes () No ()

4.7 Do teachers have reference textbooks? Yes () No ()

4.8 Do teachers use visual aids while teaching? Yes () No ()

4.9 Are your exercise books always checked by teachers? Yes () No ()\Rarely ()

4.10 Did you attend ECD Class before joining Class one? Yes () NO ()

4.11 Is your school regularly visited by Education Officers? Yes () No ()

4.12 Do teachers respond positively when pupils are sick? Yes () No ()

5. Please indicate with a tick whether the following school facilities are available

Facility	Available	Not Available
School administration blocks		
Classrooms		
Libraries		
Desks		
Teachers' tables		
Teachers' chairs		
Water		
Electricity		
Latrines		
Play fields		

Thank you very much for your co-operation.

APPENDIX VI

INTERVIEW SCHEDULE FOR QASOs

I am a PhD student in the department of Educational Foundations at the School of Education, University of Nairobi collecting data towards my doctoral thesis. This interview schedule is intended to seek your responses on the factors influencing implementing quality education in public and private primary schools in Kakamega County. You are requested to provide answers to the following questions as accurately as possible. Your responses will be treated as confidential and will be used for academic purposes only.

1 Personal information

a) Please indicate:

- i) Please indicate your gender. Male () Female ()
- ii) Please indicate your County/ sub County.....
- iii) Please indicate your gender. Male () Female ()
- iv) Please indicate your qualification.

P1 () Diploma () University degree () Any other ()

v) For how long have you served as a QASO?.....years

vi) Indicate the number of private primary schools in your county/ sub county. ()

2. School data

1a) Indicate the availability of physical facilities in public primary schools in your county/sub county.

Adequate () Inadequate () None ()

1b) Indicate the availability of physical facilities in private primary schools in your county/sub county.

i) Adequate ()

ii) Inadequate ()

iii) None ()

1c. In your own opinion, do you agree that physical facilities influence quality education in your County/sub county

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

1d. In your own opinion, indicate the availability of instructional materials in public primary schools in your county/sub county.

i) Adequate ()

ii) Inadequate ()

iii) None ()

1e. Indicate the availability of instructional materials in private primary schools in your county/sub county.

i) Adequate ()

ii) Inadequate ()

iii) None ()

1f) In your own opinion, indicate with a tick whether instructional materials influence quality education in your county/sub county.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2a) In your own opinion, indicate with a tick whether you agree on adequacy of QASOs in your county/sub county.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2b) In your opinion, indicate with a tick whether you agree on importance of curriculum supervision in implementation of quality education.

i) Strongly agree ()

ii) Agree ()

iii) Strongly disagree ()

iv) Disagree ()

2c) Indicate whether teachers maintain their professional records in your county/sub county

i) Maintain ()

ii) Don't maintain ()

2d) In your opinion, indicate with a tick whether you agree on importance of maintaining

professional records in implementation of quality education.

- i) Strongly agree ()
- ii) Agree ()
- iii) Strongly disagree ()
- iv) Disagree ()

2e) In your opinion, indicate whether you agree on importance of in-service courses.

- i) Strongly agree ()
- ii) Agree ()
- iii) Strongly disagree ()
- iv) Disagree ()

3).In your opinion, indicate whether you agree on the importance of teachers characteristics in implementing quality education

- i) Strongly agree ()
- ii) Agree ()
- iii) Strongly disagree ()
- iv) Disagree ()

4) In your opinion, indicate whether you agree on the importance of learners' characteristics in implementation of quality education.

- i) Strongly agree ()
- ii) Agree ()
- iii) Strongly disagree ()
- iv) Disagree ()

5. Implementation of quality education

- i) Which challenges are schools facing in implementation of quality education?.....
.....
- ii) What are your suggestions for improvement of quality education in both public and private primaryschools?.....

Thank you very much for your co-operation

APPENDIX VII

OBSERVATION SCHEDULE

The researcher observed and rated the availability and maintenance of physical facilities in schools during data collection period as enlisted below: The availability was based on the existing facilities vis-à-vis the bench marks. Maintenance of entailed repairs of depleted buildings and broken equipment. , compound cleanliness, painting buildings, leaking water pipes and hanging electrical fittings. It also involved cutting of tall grass within school environment

Item	Recommended Number	Available number	Adequate	Inadequate	Not available	Maintained	
						Yes	No
Classrooms and	40:1						
Administration block	1						
Boys' latrines	34:1						
Girls' latrines	29:1						
Football pitch	1						
Netball pitch	1						
Volleyball pitch	1						
Desks(lower primary)	3:1						
Desks(upper primary)	2:1						

General comments on maintenance of the school.....

APPENDIX VIII

KAKAMEGA SUB COUNTIES



**APPENDIX IX
RESEARCH AUTHIRIZATION LETTER**



**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

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

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref No: **NACOSTI/P/16/77120/12677**

Date:
2nd August, 2016

Caleb Imbova Mackatiani
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “*Factors influencing implementation of quality education in public and private primary schools in Kakamega County, Kenya,*” I am pleased to inform you that you have been authorized to undertake research in **Kakamega County** for the period ending **30th July, 2017.**

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

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


BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:


The County Commissioner
Kakamega County.



The County Director of Education
Kakamega County.

APPENDIX X
RESEARCH PERMIT

Permit No : **NACOSTI/P/16/77120/12677**
Date Of Issue : **2nd August, 2016**
Fee Received : **Ksh 2000**

THIS IS TO CERTIFY THAT:
MR. CALEB IMBOVA MACKATIANI
of UNIVERSITY OF NAIROBI, 0-50104
KHAYEGA, has been permitted to
conduct research in Kakamega County
on the topic: FACTORS INFLUENCING
IMPLEMENTATION OF QUALITY
EDUCATION IN PUBLIC AND PRIVATE
PRIMARY SCHOOLS IN KAKAMEGA
COUNTY, KENYA
for the period ending:
30th July, 2017


Applicant's Signature



Director General
National Commission for Science,
Technology & Innovation