

**INSTITUTIONAL FACTORS INFLUENCING PUPILS' ACADEMIC
PERFORMANCE AT KENYA CERTIFICATE OF PRIMARY
EXAMINATION LEVEL IN PUBLIC SCHOOLS IN MANDERA EAST
SUB-COUNTY, KENYA**

Adow Issack Adan

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the Award of the Degree of Master of Education in Educational
Administration**

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DECLARATION

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

Adow Issack Adan
E55/70700/2013

This research project has been submitted for examination with our approval as university supervisors

Dr. Phylisters Daisy Matula
Lecturer
Department of Educational Administration and Planning
University of Nairobi

Dr. Mari E. Nelson
Lecturer
Department of Educational Administration and Planning
University of Nairobi

DEDICATION

I dedicate this project to my wife Abdia Dahia Hanshi our beloved children Ramza Adow and Razanaah Adow and my parents Mr. Issack Adan and Mrs. Khadija Hussein.

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First, I wish to thank the almighty ALLAH for giving me sufficient grace to be able to progress this far in my academic quest. I am thankful to my supervisors Dr. Phylisters Daisy Matula and Dr. Mari E. Nelson for their scholarly and insightful guidance, advice, encouraging and accepting to be my supervisors. Their guidance and patience to me from the beginning made my work to be integral and impartial in every way. Special thanks go to Dr. Jeremiah Kalai, Chairman Department of Educational Administration and Planning, University of Nairobi and the entire faculty members in the Department of Educational Administration and Planning University of Nairobi fraternity for giving me a favorable environment for learning and achieving my dreams.

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ABBREVIATIONS AND ACRONYMS

EFA	Education for All
FPE	Free Primary Education
GOK	Government of Kenya
KCPE	Kenya Certificate of Primary Education
KEMI	Kenya Education Management Institute
KICD	Kenya Institute of Curriculum Development
MOE	Ministry of Education
MOEST	Ministry of Education Science and Technology
NACOSTI	National Council for Science and Technology Innovation
PTR	Pupil Teacher Ratio
T.S.C	Teachers Service Commission
UNESCO	United Nations Educational Scientific and Cultural Organization
UNICEF	United Nation International Child Education Fund

ABSTRACT

The purpose of this study was to establish institutional factors influencing pupils' academic performance at Kenya certificate of primary examination level in public schools in Mandera East Sub-County. Specifically, the study was set to establish the influence of availability of teaching and learning resources, influence of physical facilities, influence of teacher-pupil ratio and the influence of checking of teachers' professional records by head teachers on pupils' academic performance. The study was influenced by the fact that KCPE performance in Mandera East Sub-County is low compared to that of the neighboring sub counties. There were also limited researches done in Mandera East Sub-County on factors influencing pupils' performance at KCPE. The design used was ex-post facto research design, the target population comprised of 27 head teachers in the public day primary schools in Mandera East Sub-County, 274 primary school teachers, 1821 class eight pupils and Sub-County Director of Education Mandera East Sub-County. The sample size consisted of 30 percent of head teachers target population and 10 percent of both teachers and pupils target population and Sub-County Director of Education Mandera East. The study adopted stratified sampling technique to select head teachers, teachers and pupils. Purposive sampling was used to select Sub-County Director. From the study it was established that; pupils' performance is highly determined by the availability of teaching and learning resources, adequacy of physical facilities, teacher-pupil ratio as well as checking the teachers' professional records by head teacher. The following were the conclusions of the study; availability of the teaching and learning resources greatly influenced pupils' performance at KCPE since in most schools pupils shared books with one textbook shared among 3-4 pupils. Adequacy of physical facilities had an effect on pupils' performance at KCPE since head teachers and teachers reported that none of the public primary schools had library and there are inadequacy of desks, latrines. Pupil teacher ratio had an impact at KCPE since there was problem of staffing and the few teachers were overworked hence no time for revisions. Checking of teachers' professional records by the head teachers had no effect on pupils' academic performance since head teachers checked on teachers' professional records regularly. The study findings recommended that the headteacher and school committees assisted by the government should provide adequate teaching and learning resources which include textbooks, wall charts, chalk board, maps, and atlases. Parents should also together with school committees organize to raise funds for building and equipping libraries for better performance at K.C.P.E. QASO and the head teachers should inspect teachers in class to ensure that teaching methods are improved. T.S.C should employ more teachers to curb teachers' shortages in the Sub-County.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Education is the process by which human beings ensure that knowledge, skills, values and attitudes are passed on from one generation to the other (Shiundu & Omulando, 1992). Education is the foundation of progress in any given society in the world. Societies that have documented advancement attribute their success to a vibrant system of education. Education in itself is an effective weapon against illiteracy, poverty and diseases which are the root causes of distress throughout the world (Chetalam, 2004). The objective of primary education is to provide access to quality education to all children of primary school going age on an equitable basis thus meeting the goal of Education for All (E.F.A) at this level (Ministry of Education, 2003). Education, therefore, aims to provide a basis for social, moral and financial development. Children need education that will secure their social, ethical and economic welfare; an education that will be a true device of societal transformation allowing each individual learner to appreciate his or her potential and live in dignity (Chetalam, 2004).

United Nations Educational Scientific Cultural Organization (2009) noted that education is significant in societal and financial development hence it is a basic right for every child without discrimination. Education is therefore a foundation to human progress and is critical to broad based economic growth. However, these

aims may not be sufficiently apprehended due to the influence of institutional factors such as availability of teaching and learning resources, adequacy of physical resources, teacher-pupil ratio and checking on teachers' professional records by head teachers that influence performance of education in Kenyan public primary schools. In England and Wales (Blatchford & Paul, 2011) noted that classes with too many pupils are frequently distracting to education and many pupils in a class results in a varied field of pupils, with varying degrees of learning capability. Subsequently, the class will spend a lot of time for less academic pupils to integrate the information, when that time could be better spent progressing through the curriculum.

In Pakistan, Arshad (2009) asserted that there was considerably disparity and misallocation in teacher-pupil ratio, class size and per student spending among schools which led to the resource wastage and lowering level of academic attainment. Therefore, decrease in student teacher ratio, class size and addition in per student's spending may lead to the effective use of school resource inputs and produce higher level of academic achievement. He also specified that schools are extremely lacking in teaching and learning resources and this is one reason which has been deterring quality of education in primary schools. In Malawi, after the introduction of Free Primary Education (F.P.E) in 1994, there was a rapid upsurge in enrolment which brought about an extraordinary strain on the prevailing resources in the sector. Pupil-teacher ratios, pupil-classroom ratios, pupil-

textbook ratios and most other educational indicators reached intolerable levels hence affecting performance of learners (Demis, 2005).

In Kenya studies on pupils' academic performance were carried out by Osoro & Orotho (2015) and Kabui (2013) both studies had their foundations based on Eshiwani (1993) who carried out a research on factors influencing performance among primary and secondary schools in western province in Kenya. He observed that the level of material input allocated to schools per pupil and the level of efficiency with which a fixed amount of material input are planned and managed does increase student achievement. He also noted that the quality of instructional process experienced by each pupil defines the school performance at Kenya Certificate of Primary Education (KCPE). In Kenya, as a consequence of extraordinary enrolment after introduction of FPE in 2003 and endowment of free learning materials, one method that was modified by the government to cater for teacher pupil ratio was to hire low paid local contracted teachers to complement government- remunerated teachers (Duflo & Dupas, 2007). However, the subsequent overcrowding of learners in schools as well as the inflow of new students posed challenges to policy makers up to date. The accessibility and the usage of instruction and learning materials affected the efficiency of a teacher's lesson. Textbooks assisted the pupils to follow the teacher's sequence of demonstration and helped in understanding of lesson (Okobia, 2011).

Agreeing to Ausubel (1973) children who are young are proficient of understanding abstract ideas if only provided with sufficient resources and concrete phenomena that they are to understand. According to a research carried out in Texas (Holmes & Shannon, 2012), there is correlation between school facilities situations and student academic attainment. The schools selected as having new facilities were performing better than those with ancient and poor facilities. Schneider (2003) found that school physical facilities have a direct influence on teaching and learning. Lockheed (1991) observed that suitable financial allocation of physical facilities such as classrooms, workshops and laboratories can greatly influence the academic performance of the pupils. Heynemann and Loxley (1993) stated that the existence of a school library was greatly associated to the performance in Brazil, China, Botswana and Uganda. This was determined after carrying out a study on effects of adequacy of physical facilities on education.

Schmitt and Lose (2012) on the correlation amid teacher-pupil ratio and literacy learning outcomes in America, hypothesize that the trend analysis shows that there is a reduction of literacy performance as group size increases. Smaller classes benefit entire pupils because of individual attention from teachers. Pupils in large classes drift off task because of too much instruction from the teacher to the entire class instead of individual attention and low-attaining pupils are most disadvantaged (Blatchford & Paul, 2011).

Agyeman (1993) noted that when a teacher does not have required academic and professional qualification he would indisputably have a negative impact on the subject he or she teaches. However, a teacher who is academically and professionally competent but works under unfavorable conditions of service would be less devoted to his or her work and consequently be less productive than a teacher who is unqualified but works under promising environments. The school head being the first supervisor in his institution need to ensure that teachers sufficiently prepare and plan for their teachings at the exact time; lessons are planned with a stimulating commencement, revision of earlier knowledge and summarization of the main points. When the headteacher does not practice proper curriculum supervision, the curriculum execution by the teachers may be poor thus influencing the pupils' academic performance negatively.

In January 2003 the National Rainbow Coalition (NARC) Government implemented the Free Primary Education (FPE) Program with the aim of providing more opportunities to the underprivileged children (Otach, 2008). Nonetheless, serious challenges have hindered the implementation of the FPE policy (UNICEF and World Bank, 2009). They comprise overcrowded classrooms, inadequate physical facilities and scarcity of qualified teachers which negatively affected on the quality of instructions and learning and contributed to ill-discipline in schools (Okwach & George, 1997). In Manderu similar studies were carried out by Dube (2011) who focused only on girls' performance at

KCSE in Rhamu town overlooking the performance of male students. Motanya (2011) also carried out his studies in Mandera East District although he focused on performance of students at KCSE only. However study on institutional factors influencing pupils' academic performance at KCPE level has not been carried out in Mandera East Sub- County hence this study sought to bridge the gap. In Kenya a lot of values are attached to passing national examinations since it determines the future of the learners and those performing poorly are deemed doomed in life.

1.2 Statement of the Problem

The Kenyan government and the citizens have attached high significance to passing national examinations. Parents have perceived education as an instrument to equip their children with good certificate for advancement to the next level of education. The government continues to provide teaching staff to all public primary schools and to provide instructional materials. County government has put initiative in place by employing untrained teachers to curb understaffing in public schools but no improvement has been realized. The Mandera County mean score has constantly been below the national average of seven. (Refer to Appendix VI C.D.E Mandera County, 2016). Many researches have been carried out in other parts of the country however; information on how institutional factors influence pupils' performance is scanty in Mandera East Sub County. In consideration of these issues the study sought to investigate how the

school based factors influence the academic performance in primary schools in Mandera East Sub County at the K.C.P.E.

1.3 Purpose of the study

The study sought to explore institutional factors influencing pupils' academic performance at Kenya Certificate of Primary Examination level in public schools in Mandera East Sub-County.

1.4 Objectives of the study

The study was guided by the following objectives:

1. To determine the influence of availability of teaching and learning resources on the pupils' academic performance at Kenya Certificate of Primary Examination level (KCPE) in Mandera East Sub- County.
2. To examine the influence of adequacy of physical resources on the performance of learners at the KCPE level in Mandera East Sub-County.
3. To establish the extent to which teacher–pupil ratio influences pupil's academic performance at KCPE level in Mandera East Sub- County.
4. To determine the influence of checking the teachers' professional records by the head teacher on pupils' academic performance at Kenya Certificate of Primary Examination (KCPE) level in Mandera East Sub-County.

1.5 Research Questions

1. To what extent does availability of teaching and learning resources influence pupils' academic performance at Kenya Certificate of Primary Examination (KCPE) level in Mandera East Sub-County?
2. How does adequacy of physical resources influence performance of learners at KCPE examination level in Mandera East Sub-County?
3. How does teacher-pupil ratio influence student's K C P E performance in Mandera East Sub-County?
4. To what extent does the checking of the teachers' professional records by the head teacher influence pupils' academic performance at Kenya Certificate of Primary Examination (KCPE) level in Mandera East Sub-County?

1.6 Significance of the study

The study findings may benefit parents, teachers and educationists on how to eliminate factors that cause low performance in schools. Teacher training colleges, Kenya Institute of Curriculum Development (KICD) and Kenya Education Management Institute (KEMI) may use the findings of the study to organize for in-service and teacher training courses to promote pupils' academic performance at K.C.P.E. level. The research findings may pave way for future researchers to be able to identify priority areas in which to carry out more

research in Mandera East Sub County. The research findings may impart more knowledge on institutional factors that may influence performance in general.

1.7 Limitations of the study

Best & Khan (1998) defined limitations as circumstances beyond control of the researcher. The first limitation is that Mandera East is remote and vast with a poor road network with schools scattered miles apart this limited accessibility and other logistical requirements. It was anticipated that getting the respondents would be difficult due to their busy teaching and learning schedules. This was overcome by early booking of appointments and adjustment of time for data collection where necessary.

1.8 Delimitation of the study

Delimitations are borders of study (Mugenda & Mugenda, 1999). The study was carried out in Mandera East Sub County. In this study the first delimitation was that the study was conducted in one out of six administrative Sub-County of Mandera. The research study was delimited to institutional factors influencing pupils' academic performance at Kenya Certificate of Primary Education in public primary schools in Mandera East Sub County that is availability of teaching and learning resources, adequacy of physical resources, teacher pupil ratio and checking of the teachers' professional records by the headteacher. Also it was delimited to only Public day primary schools in Mandera East Sub County.

1.9 Basic assumption of the study

The study was based on the following assumptions:

1. All pupils study the (8-4-4) system of education.
2. All teachers in the sampled schools are trained and qualified.

1.10 Definitions of significant terms

Academic Performance refers to the student's academic accomplishment in the Kenya Certificate of Primary Education (KCPE) examination; it is normally rated from the lowest grade E to the highest grade A.

Influence refers to ability of something to have a consequence over something else so that a change is seen or felt.

Institution factors refers to factors found within the school setting that influences academic performance at K.C.P.E

Library resources refer to all those learning materials with in the library that provides necessary information to both teachers and learners.

Physical facilities refer to all material resources that are desirable to impart formal education. They may comprise of furniture, classrooms and libraries.

Primary education refers to the first stage of compulsory education coming between early childhood education and secondary education.

Public school refers to an institution of learning where pupils learn and is kept and run by government in conjunctions with parents.

Teacher pupil ratio refers to the number of pupils one teacher should attend to for effective learning for example 1:40.

Teaching and learning materials refers to the resources which help in teaching and learning for instance maps, text books and charts.

1.11 Organization of the study

This project was organized into five chapters. Chapter one comprised of the introduction of the study, it incorporated the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitation of the study, delimitation of the study, assumption of the study and definition of significant terms. Chapter two comprised of literature review of related literature on school based factors influencing performance at K.C.P.E level in Mandera East Sub County. It included; influence of teaching and learning resource, influence of physical facilities, and influence of teacher- pupil ratio and influence of checking teachers' professional records by head teacher on performance, theoretical framework and conceptual frame work for the study. Chapter three deals with research methodology, this encompassed research design, target population, sampling techniques, sample size, research instrument, validity and reliability, data collection procedures and data analysis techniques. Chapter four dwelt on information on data analysis, interpretation and discussion. Chapter five was on the summary of the findings, conclusions, recommendations and suggestions.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provided an overview of existing literature from earlier studies on the institutional factors influencing pupils' academic performance at Kenya Certificate of Primary Examination level. It covered general summary of institutional factors and pupils' academic performance, influence of teaching and learning resources, adequacy of physical resources, teacher-pupil ratio and influence of checking of the teachers' professional records by the head teacher on the pupils' academic performance, theoretical and conceptual framework.

2.2 General overview of institutional factors and pupils performance

Academic performance is a student's success in meeting short or long term goals in education (Changeiywo 2000). Eshiwani (1993) acknowledged determinants of academic performance in the third world countries as follows; school resources and processes which include textbooks, class size, administration and management, library and teacher characteristics. Teacher characteristics include teacher experiences, teacher-pupil ratio, professional obligation and transfer index.

2.3 Availability of teaching and learning resource and academic performance

Teaching and learning materials are generally visual and they comprise wall pictures, chalkboard, plans, atlases and diagrams. They help in teaching and learning since the pupils are able to comprehend and often sense what the teacher demonstrates. They arouse ideas, demand a vigorous response from the learners and provide gratification. The lesson becomes more dynamic, captivating and grasping and understanding the major concepts becomes easier. The study by Lowe (2009) on effective teaching and learning resources in South Africa found that lack of appropriate teaching material instigated dismal learners' performance. Teaching and learning activities can be acquired through cultivating pupils' inventiveness and motivation by a way of linking a classroom with natural and social environment. According to Asikhia (2010), appropriate well organized instructional resources determine the extent of learning that can be employed in a school setting. A quality resource can arouse curiosity, maintain attention and make learning more meaningful.

Mulwa (2004) in a study on influence of pupil academic performance at KCPE in Mutonguni division in Kitui Sub-County noted that lack of revision books in schools was a great drawback to the pupils, as insufficient revision by pupils would definitely result in poor performance at the KCPE examination. She noted that schools which had supplementary resources performed better than those with less resources.

2.4 Physical resources and the pupils' performance

Physical infrastructure encompasses structures such as classrooms, desks, libraries, kitchen, toilets, water tanks, play-field and workshops. Such physical structures should be sufficient and properly positioned free of any menaces of users or to those around them to boost effective school learning atmosphere which uphold educational performance (MOEST, 2001). School physical facilities provide the basic teaching and learning environment. The learning environment including classrooms and other school amenities also has an influence on learning outcomes. Motanya (2011) noted that poor learning environment in third world countries has been singled out as one of the main factors that lead to poor performance. This is due to enlarged enrolment without further extension of the facilities. This leads to overstraining of resources which in turn affects the effectiveness of the teaching and learning process occasioning in poor performance of pupils.

Ayoo (2002) and Eshiwani (1993) stated that school environment such as desks, enough books and classrooms have greater influence on good performance among pupils in developing countries. Fabunmi and Okore (2000) view class factors as very significant in the teaching-learning activities, mainly when students' academic performance is being considered. He continued that physical resource is a vital factor in relation to academic performance of pupils. A research carried out in India which investigated 59 schools concluded that only 20 had electricity, 25

had latrines, 10 had a school library and 4 had television. It was found that schools which had adequate physical facilities performed better than those which were not well equipped. It was concluded that the quality of learning environment is intensely interrelated with pupils' attainment (Carron & Chau, 1996).

2.5 Teacher-pupil ratio and pupils' performance

According to the Uwezo Assessment Report (2011) teachers' scarcity is acute and is highly affecting learning. On average every Kenyan school has a deficiency of four teachers. Nationally a teacher is in command of fifty two children except in Western province where a teacher is in control of 64 children. Counties with poorest pupil teacher ratio are also having the worst learning levels.

School with smaller class size is often associated with more pupils individual attention, learners have high opportunities for involvement, less pupils anonymity and offer excellent academic environment, this leads to positive behavioural and academic outcomes for pupils (Endya, 2007). According to Huebler (2008) the countries with lowest pupil teacher ratio (PTR) were Sam Marino (6:3) and Bermuda (8:3). Most urbanized countries in Eastern Europe had PTR stretching from ten to nineteen pupils per teacher. Asia has PTR of between twenty and twenty nine. In Britain the PTR by 2000 had gone down to 17:1. In Bangladesh the ratio is 90:1. In arid and semi-arid areas the PTR is 25:1 and in the densely populated areas the PTR can raise to 70:1 or 90:1. In Kenya the PTR increased

from 39:1 in 2003 to 45:1 worst affected areas being ASAL (Arid and Semi-Arid Areas) counties which are affected by insecurity and where the number of pupils is large per teacher, it has been found that the performance in the school is poor as in the case of Bangladesh.

2.6 Checking of the teachers' professional records by the head teacher and pupils' performance

Instructional supervision is a constituent of general supervision that the headteacher is involved in within the school. The prime purpose of supervision is the improvement of instruction. In France, school supervisors endure to accomplish their tasks with authoritative approach. There existed centralized system and a highly structured form of instructions. Such structure aided the Ministry for Education be aware of what a teacher is doing at a specific time of the year in terms of coverage (Gluckman & Gordon, 1990).

In Britain supervision began with the establishment of His majesty the inspectorate in 1939. A council consisting of minister of crown was appointed to prepare a plan for education and introduce improvement in the education system. The council obtained details of the plan and specifications of the buildings arrangements of desks and playgrounds (Okumbe, 1999). Head teachers are charged by the Ministry of Education (MOE) and their employer Teachers Service Commission (T.S.C) with the obligation of handling teachers as

professionals by giving them freedom to perform their work. They are also supposed to create positive environment of great expectations for staff and pupils. The headteacher is considered the curriculum overseer of a school programme. He/ she is anticipated to possess higher knowledge about curriculum and instruction and to provide skilled leadership in all areas of the programme.

The headteacher has to ensure that all the school activities are conducted efficiently without rift among teachers and pupils, pressure and interference by making sure that there is proper control, supervision, good planning and use of school amenities for the gains of the learners. The head teacher must make sure that teachers are well prepared for their lessons at the right time; instructions are structured with a stimulating commencement, review of earlier knowledge and summary of the major points. When the headteacher does not practice proper curriculum supervision, the curriculum implementation by the teachers may be poor hence influencing the pupils' academic performance undesirably.

According to UNESCO Institute for Statistics (2011), levels of education required by national qualification standards for entering primary school teaching and the proportion of the teaching force that meets these requirements in sub Saharan African countries vary in lower secondary in South Africa. Teacher subject knowledge is critical and has been shown to be a good predictor of pupils' academic performance (Postlethwaite, 2004). Establishment of training and

practice support based on relevant quality indicators can help build the self-assurance and know-how in teachers.

2.7 Summary of literature review

This section dealt with various factors that influence examination performance not only in Kenya but also in other parts of the world as has been asserted by Eshiwani (1993), Huebler (2008) and Postlethwaite (2004). All assert that institutional factors influence pupils' academic performance. However, their study overlooked parental guidance as important aspect of learning experience and did not put into consideration co-curricular activities as an important source in child performance at school. In documenting information on instructional materials and its effect on learning Asikhia (2010) also disregarded the importance of the content of the materials while putting more emphasis on quality of materials. Information on how institutional factors influence pupils' performance in public primary schools in Mandera East Sub-County is yet to be established. Therefore the study sought to fill the gap and investigate institutional factors influencing pupils' academic performance in Mandera East Sub-County.

2.8 Theoretical Framework

The study adopted the systems theory first published by a biologist known as Ludwig Von Bertalanffy in 1968. The systems theory collects interdependent elements which functions together as an entity to yield a product unique to assemblage. Systems theory states that there is direct relationship between education inputs and educational outputs and interrelationship with school atmosphere. The school exists as a form of an open system as it gets its input from the society which comprises of teachers and pupils. The headteacher executes instructional supervision tasks such as inspecting teachers' professional records and pupils' notes in order that the schools objectives could be realized.

Head teachers ensures that the school environment is favorable for learning through provision of desks, chairs, tables, books and other learning resources. The theory is preferred because it distinguishes interdependence of personnel, environmental impact on organizational structure and function. It also focuses on how changes can impact the institution and environment and seeks to explain interdependence and synergy.

2.9 Conceptual framework

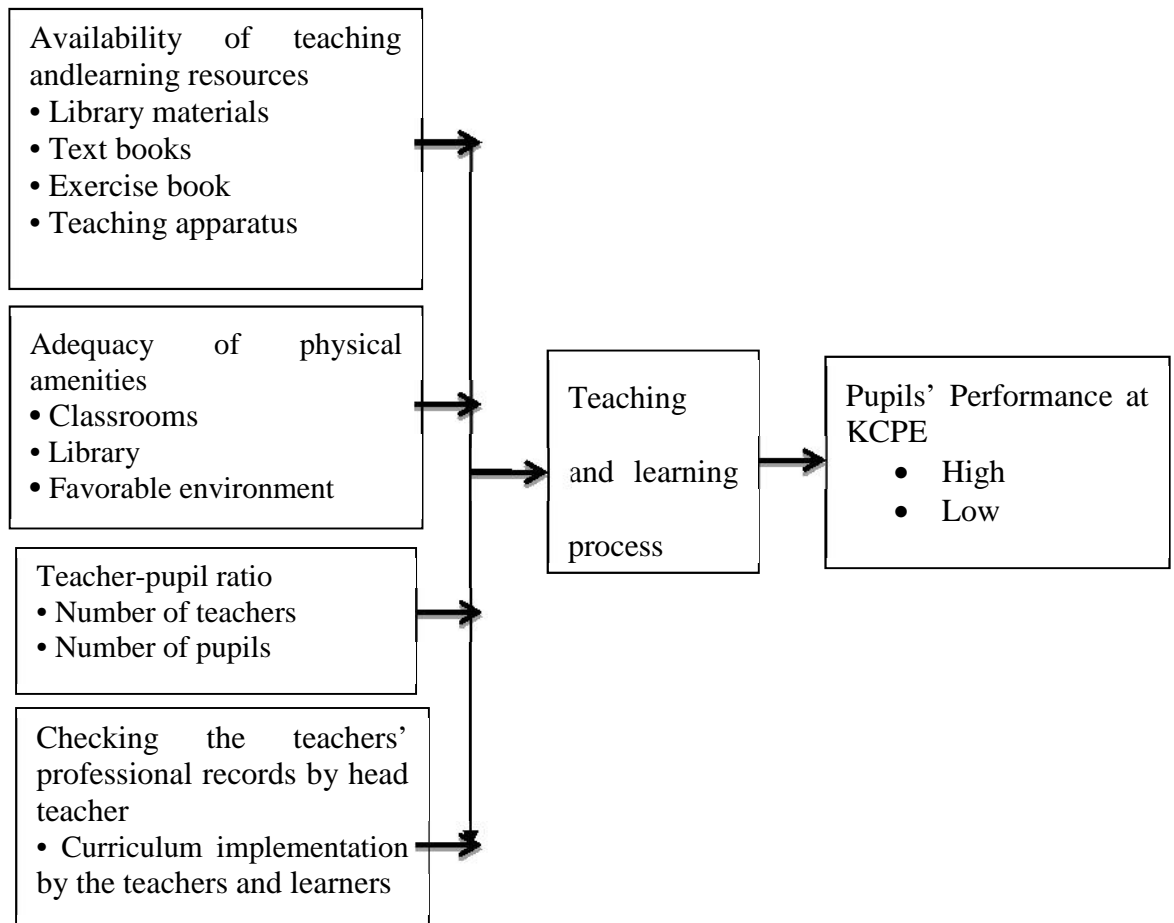


Figure 2.1: Institutional factors influencing pupils' academic performance

The conceptual framework diagram shows the relationship between institutional factors and pupils academic performance at KCPE level. These factors are anticipated to be directly interrelated such that a change in the independent variables causes a change in the dependent variable. They influence the teaching learning process which in turn influences the outcome which in this study is the academic performance at KCPE.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the different methods and techniques that were employed to collect data. The reason is that the accomplishment of any research rest on the means of gaining the relevant data. It covered the study design, location of the study, the target population, sampling procedure and sample size, instrumentation, ethical considerations, data collection and data analysis techniques.

3.2 Research Design

A research design is a logical and valuable way of looking at the world (Borg & Gall, 1996). It constitutes the blue print for data collection. Mugenda & Mugenda (2003) state that a survey is an effort to collect data from members of the population in order to determine the status of that populace with respect to one or more variables. The design which was used in the research was ex-post facto research design since the study was on performance and their manifestation has already occurred.

Ex-post facto survey was selected because it allows the collection of data relatively quickly and effectively and that the data are previously collected and getting of consent to conduct the study is less involved than enrolling new

participants, and since no new data is created less time is involved in conducting the study.

3.3 Target Population

Mugenda & Mugenda (2003) define population as an entire group of individuals, events or objects having common observable characteristics to which a researcher desires to generalize the outcomes of the research study. Mandera East Sub-County has 27 public primary schools with 274 teachers, 1821class eight pupils and one Sub County Director of Education.

3.4 Sampling Size and Sampling Procedures

Orodho (2004) defines sampling as the process of selecting a subset of cases in order to draw conclusion about the entire set. A sample is therefore a smaller group acquired from the population. To make the study practicable as well as representative, the procedure which was adopted to decide the sample size was 10 to 30 percent as proposed by Mugenda & Mugenda (2003). Therefore 30 percent of 10 schools in central zone were 3 schools, 30 percent of 7 schools in Arabia zone was 2 and 30 percent of 10 schools in Khalalio zone was 3 schools. The sample size comprised of one Sub County Director of Education 30 percent of head teachers target population, 10 percent of both teachers and pupils population that means 8 out of 27 head teachers in public primary schools in Mandera East Sub-County, 28 out of 274 teachers and 182 out of 1821 standard eight pupils

were sampled. Stratified sampling was used to select teachers and pupils so that each had an equivalent chance of being selected. It comprises division of population into smaller groups called strata and stratum is more homogenous than the total population. The three education zones that are Central, Khalalio and Arabia in Mandera East Sub County served as stratum.

Table 3.1: Sampling framework

Category	Target population	Sample Percentage	size
Head teachers	27	8	30
Teachers	274	28	10
Class 8 pupils	1821	182	10
Sub county director	1	1	100
Total	2123	219	

3.5 Research instruments

The study used questionnaires and an interview guide. Orodho (2005) noted that the questionnaires are more efficient in collecting data because they require less time, are less expensive and allow collection of information from large populations. The prepared questionnaires were given to the respondents to fill and avail data for the purpose of the study. Analysis on the collected questionnaires was done to identify any inconsistencies and make the necessary corrective

measures. In this study there were three different sets of questionnaires targeting three groups of respondents namely the head teachers, teachers and the standard eight pupils. The headteachers' questionnaire had five sections. Section A enclosed items on demographic details of the respondents which included their age, gender and professional background information. Section B contained questions related to teaching and learning resources. Section C contained questions linked to school physical facilities. Section D contained questions related to Teacher-Pupil Ratio and section E contained questions related to checking the teachers' professional records by head teacher. Teachers' questionnaire had five sections. Section A had items on demographic details of the respondents which included their age, gender and professional background information. Section B was confined to questions related to teaching and learning resources. Section C contained questions related to school physical facilities. Section D contained questions related to Teacher-Pupil Ratio and section E contained questions related to checking the teachers' professional records by the head teacher.

The pupils' questionnaire also had five sections. Section A contained items on demographic details of the respondents which included their age, gender. Section B contained questions linked to the teaching and learning resources. Section C contained questions related to school physical facilities, section D contained questions related to Teacher-Pupil Ratio and section E contained questions related

to checking the teachers' professional records by the head teacher. The interview was preferred for the Sub County Director because it allows more probing and takes less time to administer.

3.6 Validity of the instrument

Validity is defined as the appropriateness, correctness and meaningfulness of the specific inferences, which are selected on research results (Best & Khan, 2006). To establish the validity of the instrument the researcher used content validity to check whether the items in the questionnaire answered the research objectives and measure the degree to which the sample tests item represented the content that the tests were designed to measure. The researcher used this type of validity to ensure that indicators tap to the meaning of a concept as defined by the researcher. Furthermore a pilot study was conducted by the researcher which generated a consistent result hence confirming the validity of the concept study.

3.7 Reliability of the instrument

According to Gay (1992), reliability is the degree to which a test consistently measures what it measures. Mugenda & Mugenda (2003) also stated that it is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. It is influenced by random error which is the deviation from a true measure due to factors that have not been effectively addressed by the researcher. To ensure reliability in the study, the researcher used the test-retest

method. A questionnaire form was given to each respondent in the pilot study to answer. After the questionnaires were answered, they were collected and then the respondents were requested to answer a similar questionnaire after one week. The resultant scores were correlated using Pearson Correlation Coefficient. This was to establish the extent to which the contents of the questionnaire were consistent in producing the same results all the times the questionnaires were administered. A Pearson's Product Moment Correlation Coefficient formula;

$$r = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{(\sum x^2) - (\sum x)^2 (\sum y^2) - (\sum y)^2}}$$

Where r = person correlation co-efficient

x = result from the first test

y = results from the second test

N = number of observations

The correlation coefficient obtained was 0.733 for headteachers' questionnaire, 0.709 for teachers' questionnaire and 0.765 for pupils' questionnaire. This means the research instruments could be relied upon for this study. A correlation coefficient of 0.7 to 1 is considered reliable (Mugenda & Mugenda, 2003).

3.8 Data collection procedure

After checking research instruments validity and reliability, the researcher proceeded to the field for the purpose of data collection. Permission was sought from the National Council for Science Technology and Innovation (NACOSTI). Written letters of introduction seeking permission to avoid any mistrust and withholding of information was submitted. The researcher then paid visit to various institutions to personally administer the questionnaires to the respondents for the purpose of data collection. In dealing with the responses the respondents were assured that strict confidentiality was maintained. The questionnaires were collected at the agreed time after completion.

3.9 Data Analysis

Data analysis refers to the interpretation of the collected raw data into useful information Kombo & Tromp (2006). In this research the data was analyzed both qualitatively and quantitatively. Mugenda & Mugenda (2003), state that after raw data is collected from the field, it must be cleaned, coded, entered into a computer and analyzed. The researcher is able to make sense of the data from results gathered during analysis. The data was quantitatively analyzed using statistical package for social sciences (SPSS) version 21, the software yielded percentages and frequencies that were used to analyze data. Data was presented in statistical tables, pie charts and graphs. Qualitative data was analyzed thematically whereby, responses were gathered into themes and the most prominent and frequently

occurring responses were assembled into the same theme. The first step of analyzing the quantitative data was to generate frequencies and percentages representing responses regarding the variables being tested. Second step was to reduce and organize the data where the researcher discarded all irrelevant result and used the valid result to populate the tables and generate the charts. Thirdly, the researcher used the frequencies and percentages to draw relevant tables that were used to summarize and present the study findings. The researcher then drew conclusions from the mass of the data. The analysis was mainly on opinions of the respondents pertaining to institutional factors influencing performance of Kenya Certificate of Primary Examination level.

3.10 Ethical Considerations

According to Mugenda & Mugenda (2003) ethical considerations are important for a researcher. In this study, the research ethics were reviewed by an Ethics Board to ascertain ethical guidelines for carrying out the research so that moral values are not violated. Such issues comprised of good behavior of the researcher during the research period, evading of fraud and plagiarism, keeping confidentiality and secrecy of the information gotten from the respondents, avoidance of physical and psychological harm to the respondents, the researcher sought authority to conduct research from NACOSTI before start of the study. Voluntary and informed consent of the respondents were encouraged and the findings of the study were disseminated.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter deals with the analysis, presentation and interpretation of the data collected and discussions founded on the objectives. The study sought to investigate institutional factors influencing pupils' academic performance at Kenya Certificate of Primary Examination level in public schools in Mandera East Sub-County. The interpretations for this chapter are based on each of the objectives and questionnaire that guided this study. Presentation was done using Tables, charts and graphs. The analysis was based on the predefined objectives and intended at answering the research questions. The chapter begins with questionnaire return rate, demographic information of head teachers, teachers and pupils, followed by presentation and discussions of research findings based on the research question.

4.2 Response rate

The respondents involved were the head teachers, teachers, class eight pupils and Sub-County Director of Education. They returned the questionnaires as tabulated in Table 4.1.

Table 4.1: Instrument return rate

Respondents	Sampled size	No. collected	Return rate (%)
Head teachers	8	8	100.0
Teachers	28	25	89.0
Pupils	182	180	99.0
Sub-County director of education	1	1	100.0

Table 4.1 shows that the average questionnaire return rate was well above 80 percent which according to Mugenda & Mugenda (2003) is an acceptable proportion and can be termed satisfactory for analysis.

4.3 Demographic information

4.3.1 Demographic data of head teachers and teachers

The demographic data of teachers and headteachers was based on their gender, age, highest academic qualification and professional experience. Respondents were asked to specify their gender the logic behind this attribute is that they help to explore the institutional factors influencing pupils' academic performance at KCPE in Mandera East Sub-County. Responses are summarized and presented in Figure 4.1.

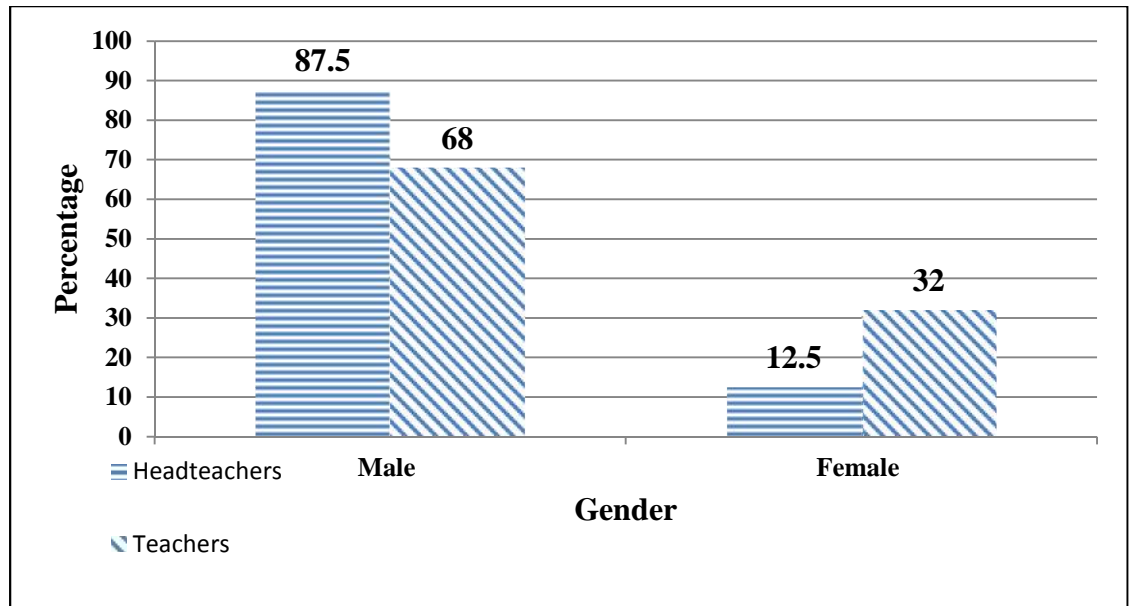


Figure 4.1: Gender of head teachers and teachers

Findings in Figure 4.1 show that most of the head teachers (87.5%) were male and a good number of the teachers were male. This shows that the majority of schools in Mandera East Sub-County are dominated by male head teachers and teachers. The study sought to establish the age of school heads and teachers to check if they fall within mature, responsible age group and able to perform good job. Responses are summarized and presented in Figure 4.2.

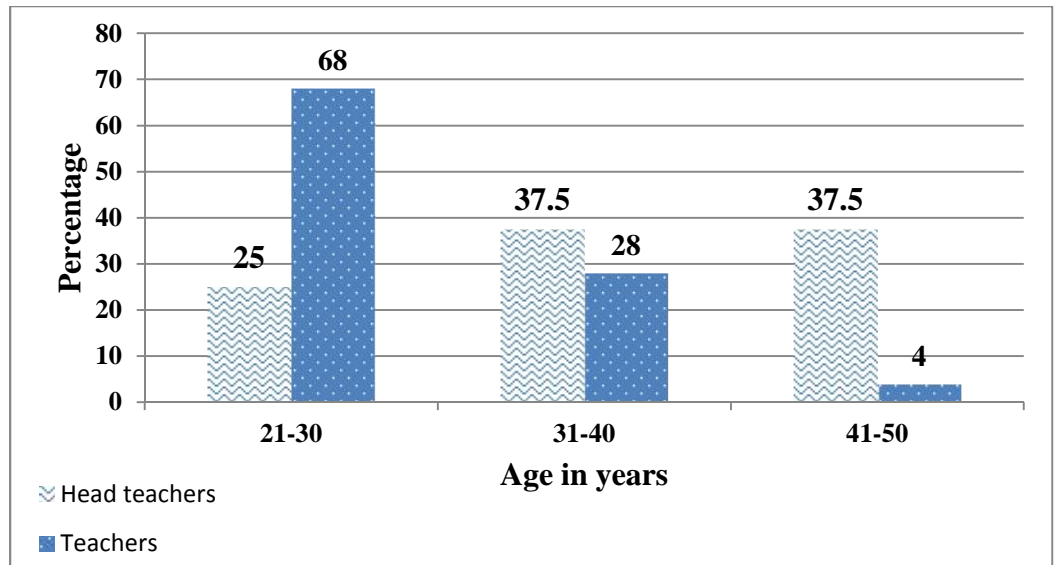


Figure 4.2: Age of head teachers and teachers

Findings in Figure 4.2 shows that a good number of the head teachers were aged between 31-40 years and slightly more than half (68%) of the teachers were aged between 21-30 years. This shows that the head teachers and teachers were moderately of young age capable of initiating strategies for implementing curriculum hence improve on national examination performance.

The head teachers and teachers were requested to indicate their level of education. This is to show how well they were educated and have knowledge of the subject they taught. Responses are summarized and presented in Figure 4.3.

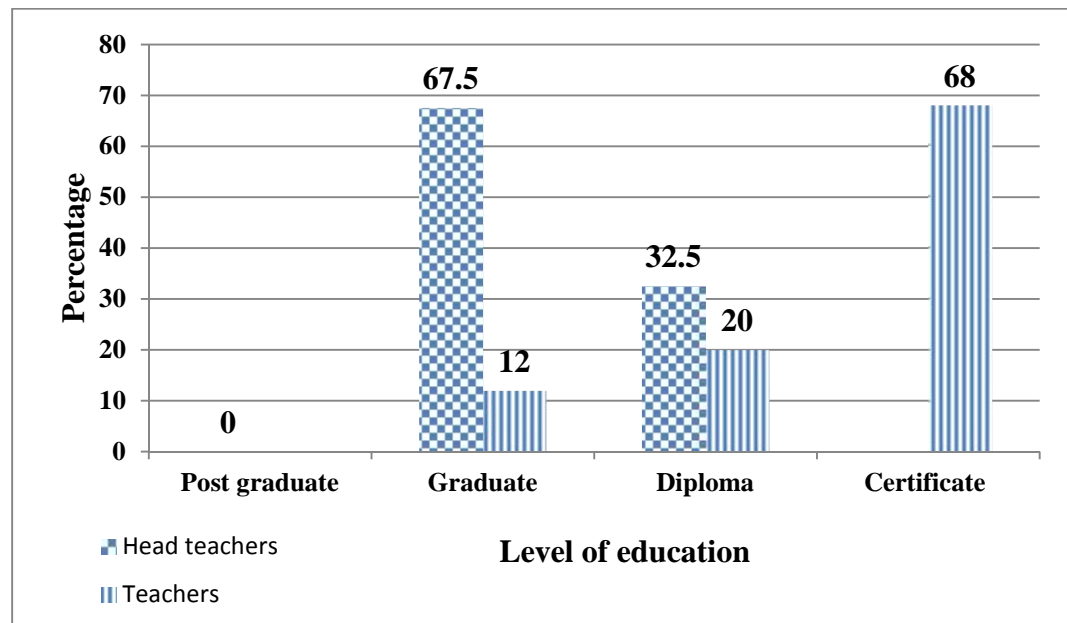


Figure 4.3: Head teachers’ and teachers’ level of education

Findings in Figure 4.3 show that a good number of the head teachers (67.5%) had attained undergraduate degree in education and most of the teachers had attained P1 certificate. This shows that the head teachers were well educated to take up school leadership and the teachers in Mandera East Sub-County public primary schools have the required professional qualifications for their job.

Respondents were asked to indicate the number of years they have worked as school head teachers since the more they are experienced the more they become good administrators and influence pupils' performance. Responses are summarized and presented in Figure 4.4.

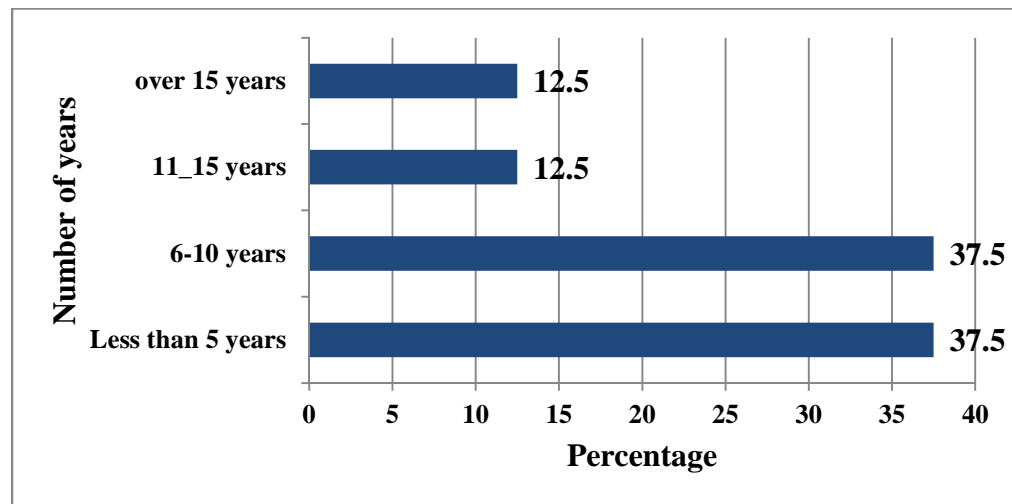


Figure 4.4: Number of years as school head teacher

Findings in Figure 4.4 show that majority of the head teachers (75%) have been serving as school heads for between 6-15 years. This shows that the head teachers were in a position to understand institutional factors influencing pupils' academic performance in Mandera East Sub-County due to the number of years they have remained as the head of school. The more familiarity the head teachers have the more effective they become as supervisors in public primary schools.

Teachers were also asked to indicate their teaching experience since teaching requires language of instruction, knowledge of the subject matter and varied methodology. Responses are summarized and presented in Figure 4.5.

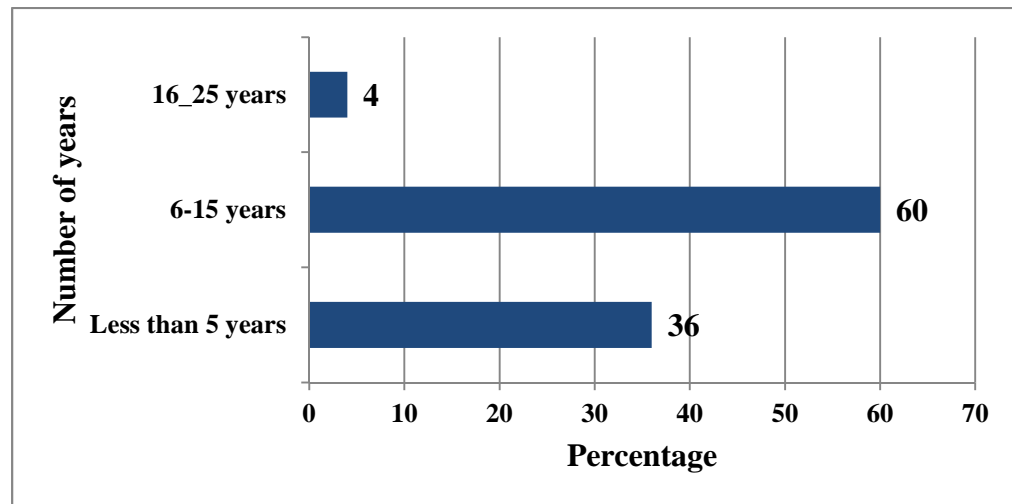


Figure 4.5: Teachers' teaching experience

Findings in Figure 4.5 show that more than half of the teachers (60%) have been teaching for between 6-15 years. This shows that the teachers were not new in the profession and the experience they had helps in understanding institutional factors influencing pupils' performance in Mandera East Sub-County.

4.3.2 Demographic data of pupils

The demographic data of pupils was based on their gender and age. Responses on pupils' gender are summarized and presented in Figure 4.6.

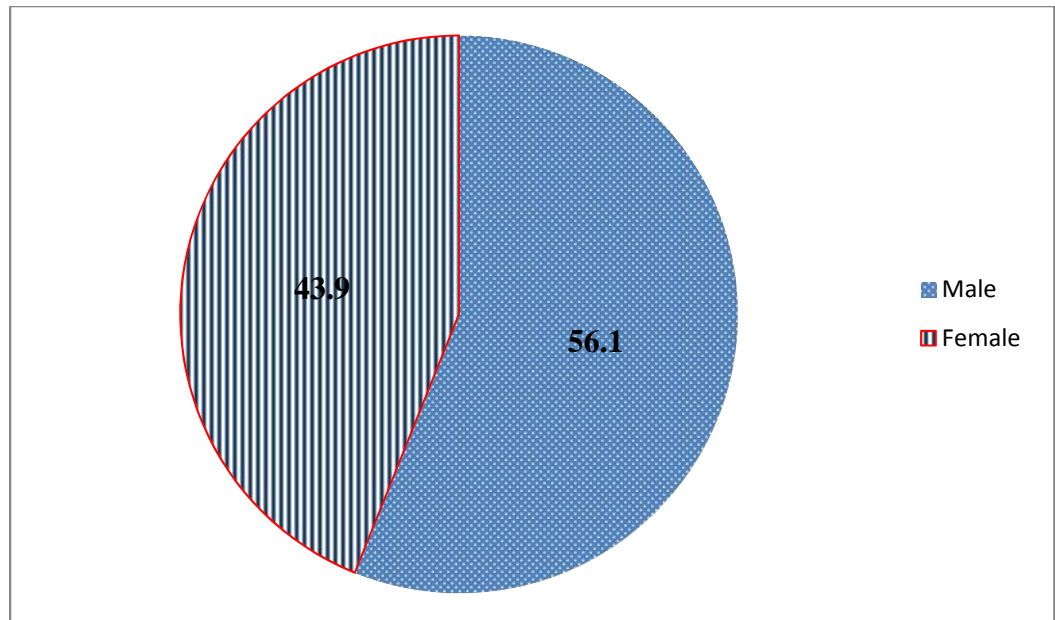


Figure 4.6: Gender of pupils

Findings in Figure 4.6 show that slightly more than half (56.1%) of the pupils were male. This shows that both genders of pupils were well represented in this study. Pupils were also asked their age to show that they had attained school going age since most of them were aged above 15 years. Responses are summarized and presented in Figure 4.7.

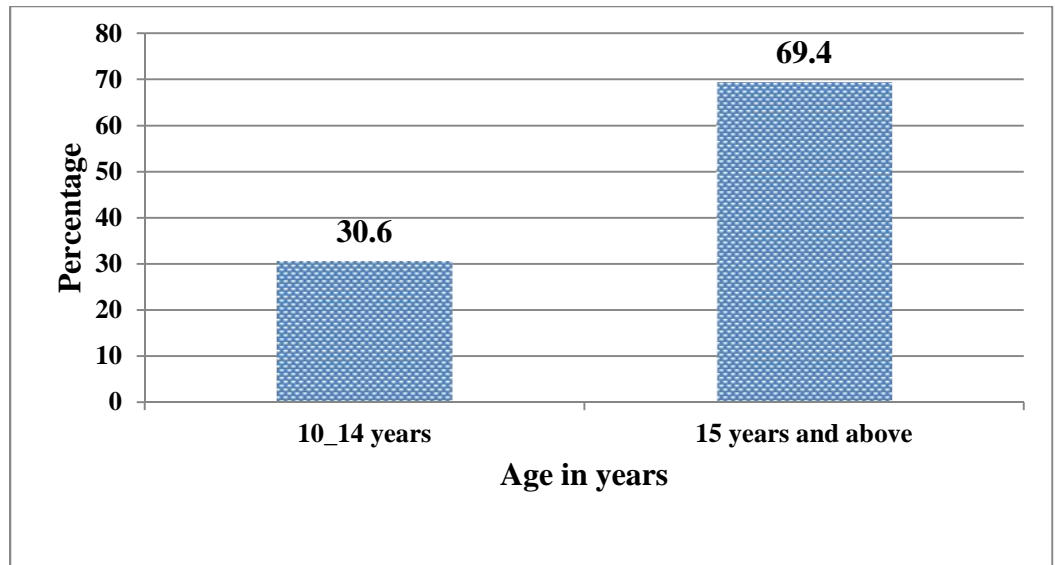


Figure 4.7: Age of pupils

Findings in Figure 4.7 show that a good number (69.4%) of the pupils were aged more than 15 years. This implies that the pupils were old enough to understand factors influencing their performance.

4.4 Influence of availability of teaching and learning resources

The first objective of the study was to establish whether availability of teaching and learning resources influences pupils' performance. Responses are summarized and presented in Table 4.2.

Table 4.2: Influence of availability of teaching and learning resources

Responses	Frequency	Percentage
Yes	31	94.0
No	2	6.0
Total	33	100

Findings in Table 4.2 show that almost all (94%) of the respondents said that pupils' academic performance are greatly influenced by teaching and learning materials.

Respondents were asked to indicate whether the listed teaching and learning resources were available in their schools to show how availability of teaching and learning resources influence pupils academic performance at Kenya Certificate of Primary Examination. Responses are summarized and presented in Table 4.3 below.

Table 4.3: Pupils responses on availability of teaching and learning resources

Material	Adequate		Inadequate		Not available	
	F	%	F	%	F	%
Class 8 text books	36	20.0	141	78.3	3	1.7
Revision books for pupils	83	46.1	91	50.6	6	3.3
Teaching aids for example charts, wall maps	102	56.7	71	39.4	7	3.9

Findings in Table 4.3 show that most of the respondents indicated that the text books were inadequate; others indicated that teaching aids were adequate and almost half of respondents indicated that they did not have enough revision books. This implies that textbooks help learners to access information easily, revision books help pupils to practice handling many exercises and teaching aids help to observe what is learnt. Shortage of revision books and teaching aids could contribute to poor performance in most schools. This result are in line with Mulwa (2004) study on influencing pupils' performance at KCPE in Mutonguni division in Kitui Sub-County that stated lack of revision books in schools was great disadvantage to pupils as inadequate revision by pupils definitely results in poor performance and schools which had more revision books performed better than the one with fewer.

Table 4.4 shows head teachers and teachers' responses on availability of teaching and learning resources.

Table 4.4: Head teachers and teachers' responses on availability of teaching and learning resources

Material	Adequate		Inadequate	
	F	%	F	%
Chalk boards	32	97.0	1	3.0
Reference books for teachers	25	75.7	8	24.2
Pupils books	13	39.4	20	60.6
Number of text books in every subject	19	57.6	14	42.4

Findings in Table 4.4 show that majority (97%) of the respondents indicated that there were enough chalk boards; they also indicated that reference books for teachers and number of text books in every subject was adequate though some of the respondents indicated that the pupils' books were inadequate. The Sub-County Director of Education indicated that the teaching and learning materials enhance positive relationship between the teachers and pupils. Teachers who use teaching aids while teaching are adored by pupils. It also enhances performance since the use of teaching and learning materials allows the learners to hear, touch and comment on what is taught, the rate of retention of knowledge is high. This result concurred with Lowe (2009) study on effective teaching and learning resources in South Africa that lack of relevant teaching and learning materials caused dismal pupils performance in examination. The Sub-County Director also indicated that chalk boards enables teachers to capture pupils' attention and the charts breaks the monotony of theoretical lesson and enables learners to give feedback. This showed that shortage of pupils' book caused poor performance.

The researcher sought to establish the pupils' book ratio per class. Responses are summarized and presented in Figure 4.8.

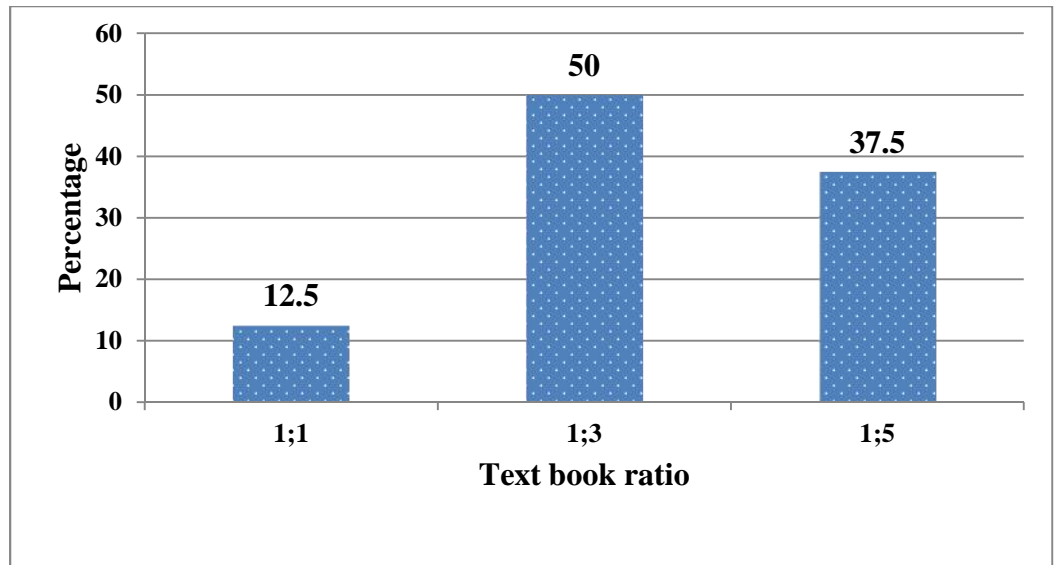


Figure 4.8: Pupils' book ratio per class

Findings in Figure 4.8 show that half (50%) of the respondents indicated that a book was shared amongst three students. This implies that enough textbooks enhance a comfortable learning atmosphere whereby pupils were able to access information with ease and they can cover more work on their own. This result concurs with Uwezo Assessment Report (2011) those counties with worst pupils' book ratio having worst learning levels.

Table 4.5: Relationship between availability of teaching and learning process and performance

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.247	.433		2.877	.009
	chalk boards	-.391	.420	-.171	-.931	.363
	reference books	-.210	.196	-.200	-1.074	.295
	pupils books	.785	.234	.868	3.359	.003
	number of text books in every subject	-.307	.241	-.335	-1.274	.217

a. Dependent Variable: Impact of teaching and learning resources on pupils performance

The results in Table 4.5 indicate that availability of pupils books had significant ($p < 0.05$) influence on pupils performance.

4.5 Influence of physical facilities

The second objective of the study was to establish whether physical facilities influence pupils' academic performance. Responses are summarized and presented in Table 4.6.

Table 4.6: Influence of physical facilities

Name of facility	Adequate		Inadequate		Not available	
	F	%	F	%	F	%
Classrooms	176	82.6	37	17.4		
Desks	136	63.8	74	34.7	3	1.4
Libraries	36	17.0	64	30.0	113	53.0
Toilets	119	55.8	91	42.7	3	1.4
Play fields	121	56.8	87	40.8	5	2.3

Findings in Table 4.6 show that to some extent more than half (53%) of the respondents indicated that they did not have a school library. The Sub-County Director of Education indicated that the classrooms in the Sub-County primary schools are inadequate and in depilated conditions especially the classroom floors that are full of pot holes leading to accidents and were also poorly ventilated to let in enough natural light and air.

The classes are also congested thus teachers cannot freely move and attend to individual pupils. The Sub-County Director also indicated majority of primary schools in the sub-county did not have libraries and that although the play grounds were adequate, the schools lacked play materials which include; balls, nets, javelin and short put materials thus students who were talented in these games were confined in class and not given a chance to explore their talents. Libraries are essential resource centre which help pupils to access a lot of educational information and lack of this facility could contribute to poor

performance. This result agrees with the study by Motanya (2011) where he noted that learning environment in third world countries has been singled out as one of the major factors that lead to poor performance this is due to increased enrolment without further expansion of facilities that lead to overstretching of resources which in turn affects the effectiveness of teaching and learning hence resulting in poor performance of students.

The researcher also sought to find out the impact of physical facilities on pupils performance. Responses are summarized and presented in Table 4.7 below.

Table 4.7: Impact of physical facilities on pupils performance

Impact	Frequency	Percentage
Positive	17	68.0
Negative	8	32.0
Total	25	100

Findings in Table 4.7 show that the majority (68%) of the respondents indicated that physical facilities have a positive impact on pupils' academic performance. This result concurs with the study in India by Fabunmi & Okore (2000) where 59 schools were sampled out of that 49 schools had buildings and of these, 25 had toilets, 20 had electricity, 10 had a school library and four had television and established that the schools which had sufficient physical facilities performed better than those which are not well equipped.

Table 4.8: Relationship between physical facilities and performance

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.449	.398		1.127	.274
	classrooms	-.357	.224	-.249	-1.593	.128
	desks	.043	.123	.052	.344	.734
	libraries	.004	.138	.007	.031	.976
	toilets	.260	.154	.268	1.689	.108
	play fields	.572	.208	.613	2.758	.013

a. Dependent Variable: impact of physical facilities on pupils performance

The results in Table 4.8 indicate that physical facilities had no significant effect ($p > 0.05$) on pupils performance.

4.6 Influence of teacher-pupil ratio

The third objective of the study was to establish whether teacher-pupil ratio influence pupils' performance. Responses are summarized and presented in Table 4.9 below.

Table 4.9: Influence of teacher-pupil ratio

Responses	Frequency	Percentage
Yes	144	67.6
No	69	32.4
Total	213	100

Findings in Table 4.9 show most of the respondents (67.6%) said that teacher-pupil ratio influences pupils' performance. This agrees with the study by Schmitt and Lose (2012) on relationship between teacher- pupil ratios in America that indicated that there is a reduction of literacy performance as group size increases. Smaller classes benefit all pupils because of individual attention from the teacher.

Teachers were asked to rate their staffing. This was to investigate teachers' workload in schools in Mandera East Sub-County. Responses are summarized and presented in Table 4.10 below.

Table 4.10: Teachers' response on staffing levels

Teachers' rating	Frequency	Percentage
Adequate	4	16.0
Inadequate	21	84.0
Total	25	100

Findings in Table 4.10 show that nearly all (84%) of the respondents indicated that teachers were inadequate. This shows that majority of schools did not have enough teachers which meant that syllabus was not well covered and this could cause poor performance in examinations. The researcher also sought pupils' opinions on the number of teachers in their school. Responses are summarized and presented in Figure 4.9.

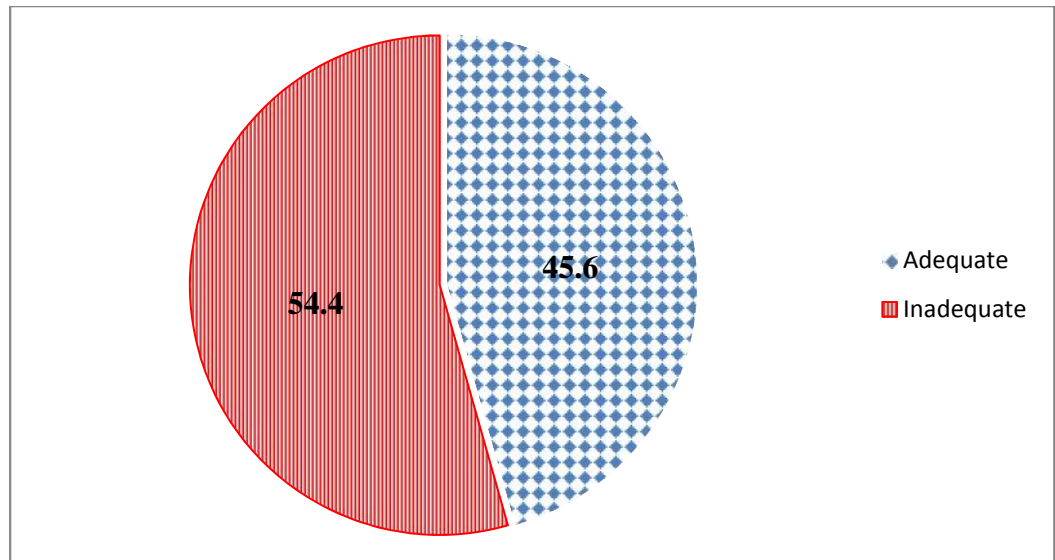


Figure 4.9: Pupils’ response on adequacy of staffing

Findings in Figure 4.9 show that half (50%) of the respondents indicated the number of teachers was not adequate. This shows that the schools faced a challenge of understaffing hence teachers lacked time for individual pupils which influenced performance. The study further sought to establish the teacher-pupil ratio in Mandera East sub-county. Responses are summarized and presented in Table 4.11.

Table 4.11: Teacher-pupil ratio

Ratio	Frequency	Percentage
1:30	1	12.5
1:40	1	12.5
1:50	3	37.5
1:60	3	37.5
Total	8	100

Findings in Table 4.11 show that majority (75%) of the respondents indicated that a teacher teaches a class of more than 50 pupils. The Sub-County Director of Education indicated that where teacher pupil ratio is big, teachers have difficulty in correcting pupils work and also making group and peer teaching. He also indicated that in a large class, teachers' concentrates on fast learners hence slow learners are left leading to poor performance. These finding agrees with the findings of Endya (2007) study which indicated that smaller school size is often associated with more personal attention, more opportunities for involvement and leads to positive behavioral academic outcome for students. This exhibited that primary schools in the sub-county are understaffed which could result to heavy work load to the teachers leaving very little time for pupils' attention which could contribute to poor performance in examinations.

Respondents were asked to indicate how teacher-pupil ratio influences pupils' academic performance at KCPE level. Responses are summarized and presented in Table 4.12.

Table 4.12: Impacts of teaching few pupils

Impacts of teaching few pupils	Frequency	Percentage
Teacher is able to attend to individual pupil	30	91.0
Pupils understand better when they are few	27	81.8
More attention is given to pupils	23	69.7
Teacher is able to know weak pupils	14	42.4

Findings in Table 4.12 show that nearly all (91%) of the respondents said that a teacher is able to attend to individual pupils when they are few in a class. This implied that heavy work load denies teachers ample time to attend to pupils' individual needs and when work is moderate teachers have sufficient time to attend to individual pupils.

The researcher also sought to establish influence of class streams on pupils' performance. Head masters were asked to indicate the number of class eight streams. This was to investigate influence of pupil-teacher ratio on pupils' academic performance. Responses are summarized and presented in Table 4.13 below.

Table 4.13: Number of class eight streams

Streams	Frequency	Percentage
Single	2	25.0
Double	5	62.5
Triple	1	12.5
Total	8	100

Findings in Table 4.13 show that majority of the respondents (62.5%) said that their school have two streams of classes. This suggested that schools in Mandera East Sub-County have a considerable large number of pupils hence increasing teacher- pupil and pupil –book ratios.

Table 4.14: Relationship between teacher-pupil ratio and performance

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	2.046	.105		19.401	.000
	Number of teachers	-.436	.065	-.449	-6.713	.000

a. Dependent Variable: does the number of pupils affect performance

The results in Table 4.14 indicate that teacher-pupil ratio had significant ($p < 0.05$) influence on pupils performance.

4.7 Influence of checking the teachers’ professional records by head teacher

The third objective of the study was to establish whether checking the teachers’ professional records by head teacher influence pupils’ performance. Respondents were asked whether employment of untrained teachers influence pupils’ performance. Responses are summarized and presented in Table 4.15.

Table 4.15: Influence of untrained teachers

Responses	Frequency	Percentage
Yes	167	78.4
No	46	21.6
Total	213	100

Findings in Table 4.15 show that a good number of the respondents (78.4%) said that employment of untrained teachers influence pupils' performance. The Sub-County Director of Education said employment of untrained teachers influence performance in Mandera East since the teachers lack professional skills although they help to reduce understaffing rate in schools. This implies that the head teacher should check the teachers' professional records to ascertain whether they are trained in the subjects they teach. This result agrees with Agyeman (1993) that a teacher who does not have both academic and professional qualification would undoubtedly have a negative influence on teaching and learning of his / her subject hence influencing pupils academic performance.

Teachers were requested to indicate whether they are observed while teaching. Responses are summarized and presented in Table 4.16.

Table 4.16: Teachers' response on frequency of supervision while teaching

Responses	Frequency	Percentage
Yes	25	100
No	-	-
Total	25	100

Findings in Table 4.16 show that all teachers said that they were observed by head teachers while teaching. This implied that the headteachers supervised teachers regularly, which encouraged teachers' preparation thus affecting performance. Respondents were also requested to indicate the frequency with which head teachers check teachers professional documents and schemes of work. Responses are summarized and presented in Table 4.17 below.

Table 4.17: Frequency of checking teachers professional documents

Frequency of checking teachers professional documents	Frequency	Percentage
Once a week	9	27.3
Once per month	2	6.0
Once per term	22	66.7
Total	33	100

Findings in Table 4.17 show that slightly more than half (66.7%) of the respondents said the head teachers check teachers’ professional documents and schemes of work once per term. The Sub-County Director of Education indicated that checking of teachers’ professional records enables the teacher to prepare for lessons, have good time management, helps in early coverage of syllabus and gives room for remedial lessons to help slow learners. This revealed that head teachers do not supervise teachers regularly; it may encourage lack of preparation which may affect teaching and cause poor performance.

Pupils were asked the number of times which the head teacher checked their exercise book. Responses are summarized and presented in Table 4.18 below.

Table 4.18: Frequency of checking exercise books

Frequency of checking exercise books	Frequency	Percentage
Once	58	32.2
Twice	47	26.1
Thrice	70	38.9
Never	5	2.8
Total	180	100

Findings in Table 4.18 show that nearly half of the respondents said the head teachers check their exercise books 3 times per term. This indicated that head teachers check whether teachers mark pupils’ assignments regularly.

The study sought to establish whether the schools were inspected by Quality Assurance and Standard Officer (QASO). Responses are summarized and presented in Table 4.19 below.

Table 4.19: Head teachers’ responses on school inspection by QASO

Responses	Frequency	Percentage
Yes	8	100
No	-	-
Total	8	100

Findings in Table 4.19 show that all schools were inspected by QASO. This implies that the quality of education delivered in schools is assessed which help formulate in-service courses for the teachers where necessary which improve performance. This concurs with the findings of Gluckman & Gordon (1990) that supervision enable the Ministry for Education be aware of what the teacher is doing at particular time of the year. Head teachers were further asked the frequency of QASO inspection. This was to investigate how regular inspections were done in the schools in the Sub-County. Responses are summarized and presented in Table 4.20.

Table 4.20: Frequency of QASO inspection

Responses	Frequency	Percentage
Once per month	2	25.0
Once per term	6	75.0
Total	8	100

Findings in Table 4.20 show that QASO inspected schools once per term suggesting that teachers training gaps were identified and they were able to train and improve their teaching skills.

Table 4.21: Relationship between checking teachers professional documents and performance

Model	Coefficients ^a				t	Sig.
	Unstandardized Coefficients		Standardized Coefficients	Beta		
	B	Std. Error	Beta			
(Constant)	1.281	.236		5.427	.000	
1 How often does the head teacher check professional documents	-.114	.130	-.180	-.875	.391	

a. Dependent Variable: do you think employment of untrained teachers influence pupils performance

The results in Table 4.21 indicate that checking teachers professional documents had no significant effect ($p > 0.05$) on pupils performance.

CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSIONS AND
RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the major findings and giving conclusions which attempt to give answers to specific questions that were examined. It also presents recommendations for likely actions and suggestions for upcoming research.

5.2 Summary of the study

The purpose of this study was to establish institutional factors influencing pupils' academic performance at Kenya certificate of primary examination level in public schools in Mandera East Sub-County. Specifically, the study was set to establish the influence of availability of teaching and learning resources, influence of physical facilities, influence of teacher-pupil ratio and the influence of checking of teachers' professional records by head teachers on pupils' academic performance. The study was influenced by the fact that KCPE performance in Mandera East Sub-County is low compared to that of the neighboring sub counties. There were also limited researches done in Mandera East Sub-County on factors influencing pupils' performance at KCPE. The design used was ex-post facto research design, the target population comprised of 27 head teachers in the public day primary schools in Mandera East Sub-County, 274 primary school

teachers, 1821 class eight pupils and Sub-County Director of Education Mandera East Sub-County. The sample size consisted of 30 percent of head teachers target population and 10 percent of both teachers and pupils target population and Sub-County Director of Education Mandera East. The study adopted stratified sampling technique to select head teachers, teachers and pupils. Purposive sampling was used to select Sub-County Director.

5.3 Summary of the study findings

Following the presentation of the data and an in-depth look at the specific matters arising from the study findings, the researcher made the following observations and findings based on the specific variables that the study focused on.

The study findings on the influence of availability of teaching and learning resources on the pupils academic performance revealed that teaching aid were inadequate in public primary schools in Mandera East Sub County. This greatly influenced the pupils' performance at national examination (KCPE) as indicated by headteachers and teachers. However it was established that pupils' book ratio was 1:3 in some of the schools. The number of text books in a class determines the kind of learning environment. Enough text books enhances comfortable learning atmosphere whereby pupils are able to access information with ease and can cover more work on their own. Lack of enough text books makes it difficult for both teachers and pupils to attend to homework effectively.

The findings on the influence of adequacy of physical resources on pupils' academic performance strongly agreed that adequacy of physical resources had positive impact on pupils' academic performance. However majority of the schools did not have a library (Table 4.6). Libraries helps pupils read more on their own and lack of them could affect the pupils' academic performance as library act as a resource centre for both teachers and pupils.

The findings on the extent to which teacher pupil ratio influenced pupils' academic performance strongly indicated that teachers were inadequate (Table 4.10). The findings also established that teacher pupil ratio was low that is 1:50 and above hence teachers had more work load and were unable to attend to pupil individual need which greatly influenced their performance. It was also established that employment of untrained teachers by County government influenced performance since teachers lacked professional skills although they reduced understaffing rate in public schools.

The findings on influence of checking the teachers' professional records by the headteacher revealed that most of the headteachers checked the records once per term. It was also proven that schools where headteachers supervised teachers frequently performed better at KCPE than those which were not frequently supervised. The findings also established that QASO inspected schools once per

term hence able to identify the gaps and this enabled them to offer in-service courses to fill the gaps on both teachers and headteachers.

5.4 Conclusions of the study

It was concluded that schools did not have adequate teaching and learning resources which influenced pupils' academic performance at KCPE since pupils shared books with one text being shared among 3-4 pupils. Pupils were unable to complete their assignment this affected their performance.

The study also concluded that adequacy of physical facilities had an effect on pupils' academic performance at KCPE since the head teachers reported inadequacy of latrines, desks and non-availability of a library in their schools. Libraries are vital resource centers which help pupils to access a lot of educational information and lack of this facility could contribute to poor performance. The ideas from teachers noted that there are no enough classrooms hence the few classes available are congested and teachers had a heavy workload which affected pupils' academic performance.

The study concluded that the schools have insufficient teachers and this occasioned to heavy teacher's workload which hindered individual attention. The number of pupils attended to by one teacher affects pupils' performance either positively or negatively. The bigger the class, the more demanding the class is and

individual needs and interests of learners' especially slow ones are not adequately attended to. Smaller classes are more comfortable to handle with teacher- pupil ratio of between 1:30 and 1:40 per class.

It was also concluded that checking of professional records by head teachers had no significant effect on pupils' academic performance since the head teachers checked on teachers' records of regularly. The researcher noted the head teacher checked on the teachers' professional documents once per term and pupils exercise books three times per term.

5.5 Recommendations

Based on the findings of this study, the researcher makes the following recommendations aimed at improving pupils' academic performance at KCPE in Mandera East Sub-County:

- The headteachers and school committees aided by the government should provide sufficient teaching and learning resources which include textbooks, wall charts, chalk board, maps, and atlases. This may increase the service delivery by the teachers and improve learning of the pupils.
- The stakeholders should ensure that there are adequate physical facilities, which include classroom, desks, library and toilets to enable pupils learn better.

- The head teachers, school committees and parents should organize to raise funds for construction and equipping libraries in order to improve K.C.P.E. performance.
- The government should employ more teachers and post to needy schools in order to reduce the teaching load. This would enable teachers to work effectively and competently.
- Head teachers should carry out their professional role in curriculum implementation through checking teachers' professional documents regularly and supervising teachers as they carry out their teaching duties.
- The headteachers should improve the instructional supervision strategies to ensure that the teachers attend to their teaching roles promptly and willingly.

5.6. Suggestions for further study

Given the scope of this study, the researcher recommends the following as areas for further studies:

1. A study on institutional factors influencing pupils' academic performance at KCPE should be carried out in other counties for comparison purpose.
2. A replication of the study should be carried out incorporating more variables that possibly influence pupils' academic performance at KCPE. These variables also include social factors as well as cultural factors.

REFERENCES

- Aftin, K. D. (2011). *Factors affecting transition, performance and retention of girls in secondary schools in arid and semi-arid land: A case of Rhamu town- Mandera*. Unpublished M.Ed project. Kenyatta university.
- Agyeman, D. (1993). *Sociology of education of African students* Accra: Black Mask Limited.
- Arshad, M. (2009). *Mis-allocation of student teacher ratio, class size and per student expenditure leads to the wastage of school resource inputs and lower academic achievement: Islamabad University, Pakistan*.
- Asikhia, O. A. (2010). *Students and Teachers Perception on the Cause of Poor Academic Performance in Ogun State Secondary Schools*. (Nigeria): Implications for Counseling for National Development. European Journal of Social Sciences Vol. 13, No. 2.229-242.
- Ausubel, D. (1993). *The psychology of meaningful verbal learning*. New York: Harvard University Press.
- Ayoo, S. J. (2002). *Factors Affecting Students' Performance in Kenya Certificate of Secondary Education in Public secondary Schools in Maseno Division*. Unpublished M.Ed project. Kenyatta University.
- Best, J. W., & Kahn, A. G. (2006). *Research in Education 9th ed*. Boston: Allyn & Bacon Publishers.
- Blatchford, P., & Bassett, P. (2011). *Examining the effect of class size on classroom engagement and teacher pupil interaction: learning and instruction*. London: Routledge.
- Borg, W. B., & Gall, M. D. (1996). *Education Research. An Introduction*. (6TH Edition) New York: Longman.
- Carron, G. G., Chau, T. N. (1996). *The Quality of Primary Schools in Different Development Contexts*. Paris: UNESCO.
- Changeiywo, J. M. (2000). *Students Image of Science in Kenya: A Comparison by Gender difference of Schooling and Regional Disparities*. Unpublished PhD Thesis, Egerton University Kenya.

- Chetalam, S. J. (2004). *Factors Affecting Performance in Kenya Certificate of Primary Education in Kabarnet Division of Baringo District*. University of Nairobi, Kenya.
- Demis, K. (2005). *The SACMEQ 11 project in Malawi, A study of conditions of schooling and quality of education*: University of Malawi.
- Duflo, E., Dupas, P., & Michael, K. (2007). *Peer effects, Pupils – Teacher Ratios and Teacher Incentives in Kenya; Introduction of FPE in Kenya*. Nairobi: Acts Press.
- Endya, B. Stewart. (2007). *School Structural Characteristics Students' Effort Peer Association and Parental Involvement: The Influence of School and Individuals Level Factors on Academic Achievement*: New York: SAGE Publications.
- Eshiwani, G. S. (1993). *Factors influencing performance among primary and secondary schools in Western Province of Kenya*. Unpublished research report, Bureau of Educational Research, Kenyatta University.
- Fabunmi, M., & Okore, A. (2000). Analysis of the relationship between average class size and secondary school academic performance. *Africa Journal of Educational Planning Policy Studies* 1(2):107-115.
- Gay, L. R. (1992). *Education Research, Competence for Analysis and application*. Columbus: Charles Merrill Publishing Co.
- Glickman, C. D., & Gordon, S. P. (1990). *Supervision and instructional leadership. A development approach (5th edition)* Needham Heights, MA: Allyn and Bacon.
- Heynemann, S., & Loxley, W. (1993). *The effects of primary school Quality on academic achievement across 29 high schools and low income countries*. *Journal of Sociology*. Vol. 88.
- Huebler, F. (2008). *International Education Statistics*. Huebler: blogspot.com/2008/11/ptr.htm/. Accessed 20th June 2009.
- Kabui, S. K. (2013). *Institutional factors influencing pupils performance in K.C.P.E in public primary schools in Naivasha central division, Kenya*. Unpublished M.Ed. project. University of Nairobi.
- Komb, D. K., & Tromp, D. L. (2006). *Proposed thesis writing: South Africa*: Paulines Publication.

- Lockheed, M. E., & Verspoor, A. (1991). *Improving primary education in developing countries*. Washington, D.C: Oxford University Press.
- Lowe, W. T. (2009). *Structure and social studies. Ithasa. Lrudon*. Cornell University press. Ministry of Education, Science and Technology (2003). *Free Primary Education Every Child in School* .Nairobi; MOEST.
- MoEST. (2003). *Kenya Education Sector Support Programme 2005 – 2010 Delivering Quality Education and Training to all Kenyans* University of Nairobi. (Unpublished, M.Ed Thesis).
- Motanya, J. O. (2011). *Factors Affecting Students' Performance in KCSE. Case Study in Mandera East District*. M. Ed, project. University of Nairobi.
- Mugenda, O. M., & Mugenda, A. G. (1999). *Research methods Qualitative and quantitative approaches*. Nairobi: Acts Press.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research Methods: Quantitative and Qualitative Approaches* .Nairobi: Acts Press.
- Mulwa, A. S. (2004). *A study of factors influencing pupils academic performance in Kitui Sub County. Unpublished MED. Thesis Kenyatta University Nairobi, Kenya*.
- Okobia, E. O. (2011). *Availability and Teachers' Use of Instructional Materials and Resources in the Implementation of Social Studies in Junior Secondary Schools*. University of Benin, Benin City, Edo State, Nigeria.
- Okumbe, J. A. (1999). *Educational management: Theory and practice*, Nairobi: University of Nairobi Press, Kenya.
- Okwach, A., & George, O. (1997). *Efficiency of primary education in Kenya: situational analysis and implications for educational reform*. Nairobi: Institute of Policy Analysis and Research.
- Orodho, J. (2004). *Techniques of writing research proposals and reports*. Nairobi: Reata Printers.
- Osoro, P. O., & Orotho, J. (2015). *School based factors influencing performance of pupils on transition from lower primary to upper primary in Ekerenyio division, Nyamira County*. Unpublished thesis Jaramogi Oginga Odinga University of Science and Technology, Bondo, Kenya.

- Otach, O. (2008). *Abolishing school fees in Africa: Lessons from Ethiopia, Ghana, Kenya, Malawi and Mozambique*. Washington D.C: Oxford University Press.
- Postlethwaite, T. N. (2004). *Monitoring educational achievement*. Paris: International Institute for Educational Planning.
- Schneider, M. (2003). *Do School Facilities Affect Academic Outcomes?* Washington, DC: National Clearinghouse for Educational Facilities.
- Schwartz, R. M., Schmitt, M. C., & Lose, M. K. (2012). *The Elementary School Journal; Effects of Teacher-Student Ratio in Response to Intervention Approaches*.
- Shannon, R. H. (2012). *Preliminary Effects of Conjoint Behavioral Consultation in Rural Communities*. Nebraska Center for Research on Children, Youth, Families and Schools (CYFS).
- Shiundu, J., & Omulando, J. (1992). *Curriculum: Theory and practice in Kenya*. Nairobi: Oxford University Press.
- UNESCO (2009). *Education For All, Overcoming Inequality why Governance Matters EFA Global Monitoring Report 2009*; Paris: UNESCO.
- UNESCO (2011). *International Standard Classification of education*. Montreal, Canada: UNESCO Institute for Statistics.
- Uwezo Kenya (2011). *Are Our Children Learning Annual Assessment Report*. www.pokot.org/wp-Content/uploads/2012/05/uwezo2011. Access date 15thMay, 2012.
- World Bank & UNICEF (2009). *Abolishing School Fees in Africa: Lessons from Ethiopia, Ghana, Kenya, Malawi and Mozambique*. Washington DC: World Bank.
- World Bank (2004). *School fees roadblock to FFA, Education Notes*. Washington DC: World Bank.

APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

School of Education

University of Nairobi

10th OCT 2016

The Head teacher

.....school.

Dear sir/ madam.

RE: PERMISSION TO CARRY OUT STUDY IN YOUR SCHOOL.

I am a post graduate student at the department education, educational administration. I am conducting a research on **the school based factors influencing performance of pupils in public primary schools in Mandera East Sub-County**. I will be grateful if you allow me carry out the research in your school.

I would like to assure you that all the information provided will be for the purpose of research only and the identity of the respondents will be treated with utmost confidentiality.

Yours faithfully

Adow Issack Adan.

APPENDIX II

HEAD TEACHERS QUESTIONNAIRE

Instruction: Kindly answer all the questions by indicating your choice by a mark () where appropriate or fill in the blank spaces. The answers provided will be confidential and will only be used for the purpose of this research. Please do not indicate your name and that of your school.

Section A: Demographic Information

1. What is your gender?

Male () Female ()

2. Which is your age bracket?

21 – 30 years () 31 – 40 years () 41 – 50 years () above 50 ()

3. What is your highest academic qualification?

Post graduate level () Graduate level () Diploma level () Certificate level-P1 ()

4. How many years have you served as a school head teacher?

Less than 5 years () 6-10 years () 11-15 years () over 15 years ()

Section B: Teaching and learning resources

5. The Table below shows instructional materials that may be available in the school. Tick as appropriate

Material	Adequate	Inadequate	Not available
Chalkboards			
Reference books for teachers			
Pupils books			
Number of text books in every subject			

6. On average what is the Teacher reference book ratio?

(a) 1:1 (b) 1:2 (c) 1:4

7. On average what is the pupils' book ratio per class?

(a) 1:1 [] (b) 1:3 [] (c) 1:5 [] (d) 1:10 []

8. In your opinion, does the above establishment of textbooks contribute to your school performance?

a) Yes [] b) No []

Section C: Physical facilities

9. The table below shows some of the facilities in the school environment. By use of a tick () indicate their level of availability and adequacy in your school.

Name of facility	Adequate	Inadequate	Not available
Classrooms			
Desks			
Libraries			
Toilets			
Playfields			

10. How many streams are in your school?

(a) Single stream [] (b) Double Stream [] (c) Triple Stream []

11. What is the condition of the sanitary facilities?)

Good [] (b) Fair [] (c) Poor []

Section D: Teacher-Pupil Ratio

12. What is the teacher-pupil ratio in your school?

(a)1:10 [] (b)1:20 [] (c)1:30 [] (d)1:40 [] (e)1:50 [] (f)1:60 []

13. Are you aware of the recommended teacher-pupil ratio in any given class by the government? Yes () No () b) If yes what ratio?_____

14. Do you think employment of untrained teachers in your school influence pupils' performance at K.C.P.E?

Yes () No ()

15. Do you think teacher- pupil ratio influences pupils' academic performance in National Examinations?

Yes () No ()

16. Give reason(s) to you response.....
.....

Section E: Checking the teachers' professional records by head teacher

17. On average how many teachers have you seen in a term?

a) 1-5 teachers [] b) 6-15 teachers [] c) 16 and above []

18. How often do you check the teachers' schemes of work?

a) Once per week [] (b) Once per month []

c) Once per term [] (d) Once per year []

19. Do you have your school inspected by the QASO?

a) Yes [] (b) No []

If yes, how often do they visit your school?

a) Once per month [] (b) Once per term [].

Thank you

APPENDIX III

TEACHERS QUESTIONNAIRE

Instruction: Kindly answer all the questions by indicating your choice by a mark () where appropriate or fill in the blank spaces. The answers provided will be confidential and will only be used for the purpose of this research. Please do not indicate your name and that of your school.

Section A: Demographic Information

1. What is your gender? Male () Female ()
2. Which is your age bracket?
21 – 30 years () 31 – 40 years () 41 – 50 years () above 50 years ()
3. What is your highest academic qualification?
Post graduate () Graduate () Diploma () Certificate level-P1 ()
4. Indicate your teaching experience in years.
a) 0-5 years [] (b) 6-15 years [] (c) 16-25 years [] (d) 26 and above []

Section B: Teaching and learning resources

5. The Table below shows instructional materials that may be available in the school. Tick as appropriate

Material	Adequate	Inadequate	Not available
Chalkboards			
Reference books for teachers			
Pupils books			
Number of text books in every subject			

6. On average what is the pupils' book ratio per class?

- (a) 1:1 [] (b) 1:3 [] (c) 1:5 [] (d) 1:10 []

7. In your opinion, does the adequacy of teaching and learning resources influence pupils' academic performance? Yes [] No []

8. How would you rate the quality of teaching and learning resources used in your school?

- a) Very high quality [] b) High quality [] c) Low quality [] d) Very low

9. What is the impact of teaching and learning resources on pupils' performance?

- (a) Positive [] (b) Negative [] (c) No impact

Section C: Physical facilities

10. The table below shows some of the physical facilities in the school environment. By use of a tick () indicate their level of availability and adequacy in your school.

Name of facility	Adequate	Inadequate	Not available
Classrooms			
Desks			
Libraries			
Toilets			
Playfields			

11. What is the condition of the sanitary facilities?

- a) Good [] (b) Fair [] (c) Poor

12. What is the impact of physical facilities on pupils' performance?

- (a) Positive [] (b) Negative [] (c) No impact

Section D: Teacher-Pupil Ratio

13. How do you rate the staffing in your school?

Adequate [] b) Inadequate []

14. Which teacher-pupil ratio is comfortable to you in carrying out your work?

(a)1:10 [] (b)1:20 [] (c)1:30 [] (d)1:40 [] (e)1:50 [] (f)1:60 []

15. Do you think teacher- pupil ratio influences pupils' performance in national examinations? Yes () No ()

16. Give reason(s) to you response.....

17. Do you think employment of untrained teachers in your school influence pupils' performance at K.C.P.E? Yes () No ()

Section E: Checking the teachers' professional records by head teacher

18. Have you been observed in the class while teaching by the head teacher?

Yes [] (b) No []

(ii) If yes, did the head teacher inform you before coming to your class?

a) Yes [] (b) No []

(iii) Did you get written feedback after the observation?

a) Yes [] (b) No []

19. How often does the head teacher check professional documents are prepared as required?

a) Once a week [] b) Once a term () c) Once a year () d) Not at all ()

Thank you

APPENDIX IV

PUPILS' QUESTIONNAIRE

Answer all the questions by indicating your choice by a mark () where appropriate or fill in the blank spaces. Kindly do not write your name or that of your school.

Section A: Demographic Information

1. What is your gender? Male () Female ()
2. Which is your age bracket? (a) 10-14 years [] b) 15 years and above []

Section B: Teaching and learning resources

3. Below is a table of teaching and learning resources that are necessary in school. Please tick () against the statement that best describes their availability in your school.

Material	Adequate	Inadequate	Not available
Class 8 textbooks			
Revision books for pupils			
Teaching aids for example charts, wall maps			

4. To what extent does the sharing of text books affect your learning?
a) Average [] b) Minimal [] (c) Adverse []

Section C: Physical facilities

5. Below is a list of basic facilities necessary in a school. Please indicate by ticking () their availability in your school according to level of sufficiency.

Name of facility	Adequate	Inadequate	Not available
Classrooms			
Desks			
Libraries			
Toilets			
Playfields			

Section D: Teacher-Pupil Ratio

6. How do you rate the number of teachers in your school?

(a) Adequate [] (b) Inadequate []

7. How many students are you in your class?

(a) Less than ten [] (b) 10 – 20 [] (c) 21- 30 [] (d) 31-40 []

(e) 40-50 [] (f) Above 50[]

8. Does the number of pupils in your class affect your performance? Yes () No ()

9. Do you think employment of untrained teachers in your school influence pupils' performance at K.C.P.E? Yes () No ()

Section E: Checking the teachers' professional records by head teacher

10. Has the headteacher ever checked your exercise books? a) Yes [] b) No []

ii) If yes indicate the number of times in a term.

Once [] b) Twice [] c) Thrice []

11. What do you think could be done to improve the performance of your school at KCPE? (a) Increase the number of teachers [] (b) Extend Lessons time []

(c) Transfer the head teacher []

Thank you

APPENDIX V

INTERVIEW SCHEDULE FOR SUB COUNTY DIRECTOR OF

EDUCATION

This interview is meant for academic purpose only and will not be used for any other services, prejudicial to the respondents. The information will be held in confidence. Please answer the questions honestly.

1. For how long were you at this station.....years
2. What is your highest academic qualification.....?
3. How does availability of teaching and learning resources influence performance?
4. How does teacher pupil ratio influence performance?
5. Comment on the conditions of physical facilities in public primary schools?
6. How does headteachers monitoring of teachers' professional records influence performance?
7. How does employment of untrained teachers influence pupils' performance at K.C.P.E in Mandera East Sub-County?
8. What are your recommendations on how to improve performance of learners at K.C.P.E in public primary schools in Mandera East Sub County?

APPENDIX VI

KCPE PERFORMANCE IN MANDERA COUNTY, 2012 TO 2015


Name of sub-county	Mean score	Mean score	Mean score	Mean score
	2012	2013	2014	2015
Mandera east	198.64	174.37	193.296	219.758
Mandera north	201.90	170.23	208.26	265.95
Mandera central	200.85	288.10	237.32	272.81
Mandera west	208.86	210.00	217.47	251.08
Lafey	211.41	240.11	174.31	235.27
Banisa	213.79	219.98	219.89	248.74

Source: CDE's office Mandera County, 2016.

APPENDIX VII
RESEARCH CLEARANCE PERMIT

THIS IS TO CERTIFY THAT
MR. ADOW ISSACK ADAN
of UNIVERSITY OF NAIROBI, 0-70300
MANDERA, has been permitted to
conduct research in Mandera County
on the topic: INSTITUTIONAL FACTORS
INFLUENCING PUPILS ACADEMIC
PERFORMANCE AT KENYA CERTIFICATE
OF PRIMARY EDUCATION IN PUBLIC DAY
SCHOOLS IN MANDERA EAST SUB
COUNTY KENYA
for the period ending:
12th October, 2017

Permit No : NACOSTI/P/16/66822/14096
Date Of Issue : 12th, October, 2016
Fee Received : ksh 1000



[Signature]
Applicant's Signature

[Signature]
Director General
National Commission for Science,
Technology & Innovation

CONDITIONS

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

REPUBLIC OF KENYA
NACOSTI
National Commission for Science,
Technology and Innovation
RESEACH CLEARANCE
PERMIT
Serial No. A11267
CONDITIONS: see back page

APPENDIX VIII

LETTER OF AUTHORIZATION



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.

Date:

NACOSTI/P/16/66822/14096

12th October, 2016

Adow Issack Adan
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Institutional factors influencing pupils academic performance at Kenya Certificate of Primary Education in public day schools in Mandera East Sub County Kenya,*" I am pleased to inform you that you have been authorized to undertake research in Mandera County for the period ending 12th October, 2017.

You are advised to report to the County Commissioner and the County Director of Education, Mandera 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
Mandera County.

The County Director of Education
Mandera County.

APPENDIX IX

PERMIT FROM THE UNIVERSITY



**UNIVERSITY OF NAIROBI
COLLEGE OF EDUCATION AND EXTERNAL STUDIES
SCHOOL OF EDUCATION
DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND PLANNING**

Telegram: "CEES"
Telephone: 020-2701902
dept-edadmin@uonbi.ac.ke

P.O. BOX 30197 NAIROBI
OR P.O. BOX 92 - 00902
KIKUYU

30/9/2016

Our Ref: UON/CEES/SOE/A&P/1/4

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

SUBJECT: ADOW ISSACK ADAN - REG NO. E55/70700/2013

This is to certify that **Adow Issack Adan** is a Master of Education student in the Department of Educational Administration and Planning at the University of Nairobi. He has completed his course work and is summarizing his research proposal on "***Institutional Factors Influencing***

Pupils' Academic Performance at Kenya Certificate of Primary Education in Public Day Schools in Mandera East Sub-County, Kenya. He is specializing in Educational Administration.

Any assistance accorded to him will be highly appreciated.

Yours faithfully,

**DR. JEREMIAH M. KALAI
CHAIRMAN
DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND PLANNING**

JMK/nd

APPENDIX X

LETTER OF AUTHORIZATION FROM COUNTY COMMISSIONER

PRESIDENCY



MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telegraphic Address: "County"
Email: ccmandera@hotmail.com
When replying please quote

The County Commissioner
P. O. Box 77 - 70300
MANDERA

Ref No: CC/MDR/RM.71/ VOL I (82)

17th October, 2016

The Director General/CEO
National Commission for Science, Technology and Innovation
NAIROBI

RE: RESEARCH AUTHORISATION – ADOW ISSACK ADAN

Reference is made to a letter ref. no. NACOSTI/P/16/66822/14096 dated 12th October, 2016 from the Director General's Office, National Commission for Science, Technology and Innovation on the above subject matter.

The above named Person reported to Mandera County to undertake research on "*Institutional factors influencing pupils academic performance at Kenya Certificate of Primary Education in Public day schools in Mandera East Sub- County Mandera County,*" ending 12th October, 2017

Kindly be informed.

A handwritten signature in black ink, appearing to be 'F. M. Shisia'.

F. M. SHISIA
COUNTY COMMISSIONER
MANDERA COUNTY

CC:
Deputy County Commissioner
Mandera East

APPENDIX XI

**LETTER OF AUTHORIZATION FROM COUNTY DIRECTOR OF
EDUCATION**

MINISTRY OF EDUCATION
STATE DEPARTMENT OF BASIC EDUCATION

Telephone: Mandera 2018/2239
When replying please quote

REF: EDM/MCT/2.01/VOL I (115)



COUNTY DIRECTOR OF EDUCATION,
MANDERA,
P.O. BOX 30-70300,
MANDERA.

DATE: 18TH October, 2016.

TO WHOM IT MAY CONCERN

RE: ADOW ISSACK ADAN
NACOSTI/P/16/66822/14096

This is to introduce to you the above named who hails from University of Nairobi and National Commission for Science, Technology and Innovation (NACOSTI) and intending to carry out research on "*institutional factors influencing pupils academic performance at Kenya Certificate of Primary Education (KCPE) in public day Schools in Mandera East Sub-County, Kenya*" and have been authorised to undertake the same in Mandera County for the period ending 12th October, 2017.

Please accord Mr. Adow assistance and co-operation to conduct the research accordingly.

Thank you.

A handwritten signature in blue ink, appearing to read 'I. Abdi', written over a horizontal line.

IBRAHIM ABDULLAHI ABDI
FOR: COUNTY DIRECTOR OF EDUCATION
MANDERA.