

**INFLUENCE OF HEADTEACHERS' MANAGEMENT OF FACILITIES  
ON PUPILS' PERFORMANCE IN KENYA CERTIFICATE OF PRIMARY  
EDUCATION IN NAIROBI COUNTY, KENYA**

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**A Thesis Submitted in Fulfilment of the Requirements for the Award of the  
Degree of Doctor of Philosophy in Educational Administration,**

**University of Nairobi**

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## **DECLARATION**

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

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## **DEDICATION**

To my wife, Grace Mbunde, and our children, Brian and Ian Mbunde.

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## ACRONYMS AND ABBREVIATIONS

<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>ASAL</b>	Arid and Semi-Arid Lands
<b>BOM</b>	Board of Management
<b>HIV</b>	Human Immune Virus
<b>JKF</b>	Jomo Kenyatta Foundation
<b>KANU</b>	Kenya African National Union
<b>KENPRO</b>	Kenya Projects
<b>KICD</b>	Kenya Institute of Curriculum Development
<b>MoEST</b>	Ministry of Education Science and Technology
<b>NARC</b>	National Rainbow Coalition
<b>NEPAD</b>	New partnership for Africa's Development
<b>TSC</b>	Teachers Service Commission
<b>UN</b>	United Nations
<b>UNDP</b>	United Nations Development Programme
<b>SEPU</b>	School Equipment Production Unit
<b>SPSS</b>	Statistical Package for Social Sciences
<b>TSC</b>	Teachers Service Commission
<b>UNESCO</b>	United Nations Educational Scientific and Cultural Organization
<b>UNICEF</b>	United Nations International Children's Education Fund
<b>USAID</b>	United States of America International Development



## ABSTRACT

The purpose of this study was to investigate the influence of headteachers' management of facilities on pupils' performance in KCPE in Nairobi County, Kenya. The study was guided by the following objectives: to determine the extent to which the level of adequacy of school facilities headteachers manage and how it influences pupils' performance in KCPE, to assess the extent to which the level of competence of headteachers' management of facilities and how it influences pupils' performance in KCPE, to establish the extent to which the gender of headteachers in management of facilities influences pupils' performance in KCPE, to determine the extent of delegation of responsibilities to staff by headteachers in management of facilities and how it influences pupils' performance in KCPE and to determine the extent to which the level of documentation of facilities by headteachers in management of facilities influences pupils' performance in KCPE. The study was based on the Max Weber's Theory of Bureaucracy. The study employed descriptive survey design. The target population was 612 head teachers, senior teachers and accounts' clerks in Nairobi County. The sample size was 123. In the selection of districts to participate in the study, simple random sampling method was used while for the schools, headteachers, senior teachers and accounts' clerks, purposive sampling method was utilized. The research instruments used were the two sets of questionnaires, interview and documents analysis guides. Validation of the instruments was done by the supervisors from the Department of Educational Administration and Planning of the University of Nairobi who read through the instruments. The reliability coefficient of the research instruments was determined by split-half technique method, and was found to be 0.73 for the headteachers' 0.88 for the senior teachers' questionnaires. and 1 for the interview guide for the accounts' clerks. Descriptive statistics and distribution techniques were used to analyze the data using SPSS 20 version computer programme. Data was presented in tables. The main findings were: high level of adequacy of the school facilities, competence of headteachers, documentation of facilities, gender of the headteachers, very adequate delegation of responsibilities to staff in management of facilities had the best pupils' performance in KCPE. The study concluded that level of adequacy of the school facilities; level of competence of headteachers, gender of the headteachers, extent of delegation of responsibilities to staff and level of documentation of facilities influenced the strategies employed by headteachers to effectively manage school facilities and enhance 'pupils' performance in KCPE. Although the combined efforts of the respondents varied to a large extent, it was evident the sole contribution of the headteacher in management of facilities seemed to be more responsible for pupils' performance in KCPE. The study recommends **to** KEMI to organize in-service training programmes targeting headteachers' management of facilities, DQAS to carry out regular supervision of schools, headteachers to regularly review level of adequacy of school facilities, extent of delegation of responsibilities to staff and level of document of facilities to enhance pupils; performance in KCPE..



## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the study**

Among the options for the future success of education in Europe and Central Asia is effective management of facilities. This can be achieved by sharing common facilities across schools such as playgrounds, swimming pools, libraries and laboratories. Also, there should be use of incentives to reduce negligence of facilities to encourage and reward good school management of facilities (Heyneman, 1994). In the study on management of facilities in the United Kingdom, when games facilities are used they enable the less able children to stay on task and remain motivated for a longer period (Denyer, 1998). In an empirical study in Nigeria, the essential facilities such as equipment like radio, television, computer, chemicals, specimens, radio tape, stove, Bunsen burners, models and charts were not available in schools (Nwoji, 1999). In Kenya a maximum of six textbooks are approved from which a school chooses one textbook per subject (Republic of Kenya, 2006).

The decline in performance in schools is related to poor learning environment created by inadequacy of the schools facilities (Fabayo & Farombi, 1998). In Latin America, Africa and poor countries, the majority of the teachers not only lack adequate hardware and software, but also reliable internet access (World Bank, 2006). The availability and adequacy of school facilities promote effective teaching and learning process (Mapaderun, 2002; Oni, 1995). Some schools have adequate laboratories, workshops, libraries, and other facilities

for effective teaching and learning, others have none, and where they exist they are poorly equipped. While some classes are held under trees and pupils are exposed to harsh weather conditions others are held in air conditioned classrooms. It is therefore, imperative that different levels of Government have to address the issue of development and implantation of minimum standards of school management of facilities (Asiabaka, 2008).

Former Assistant Minister of Education (Kenya), Dr. Kilemi Mweri, addressing a regional workshop for African teachers held on 24-28<sup>th</sup> September, 2007, Nairobi, on behalf of the Minister for Education, Professor George Saitoti declared that delivery of quality education was hampered by poorly trained teachers, lack of school facilities and lack of structured teacher development programmes which are also key in pupils' performance in KCPE (Ministry of Education, 2007). Some schools are over fifty years old and therefore, require modern facilities for teaching and learning process. Renovation of old and dilapidated buildings need to be carried out to ensure that facilities for teamers, planning areas, office space, clerical space, workrooms, professional development libraries, dining area, storage, space, pupils' conference areas, guidance services area for instruction for large group instruction, space for instructional media, library resource centre, science facilities, art and music studios, individual study area and physical education facilities are readily available (Asiabaka, 2008).

The Government has given serious consideration to changes to the 8-4-4 education structure, the introduction of technical and academic curriculum pathways, and the centrality of Information Communication Technology (ICT) to teaching and learning process. Sessional Paper No. 1 of 2005 on Policy Framework for Education, Training and Research spells out the education policy towards the realization of the national economic blueprint (Republic of Kenya, 2012). Every child has a right to education. The Children's Act which came into force on 1<sup>st</sup> March 2002 vests this responsibility on the Kenya Government and parents (Ministry of Education, 2010).

Education has been found to play a major role in social, political, economic and cultural aspects of a country (Mbeche & Nderitu, 2005). Education provides critical mass of skilled people needed to enhance the environment which is in line with the Millennium Development Goal No.1 (Ministry of Education, 2007). It has been noted that incidences of poverty fall and levels of private returns increase with increase in education level from primary to secondary (Republic of Kenya, 2005; UNESCO, 2005).

There has been criticism on the way the school facilities are managed in Kenya by headteachers (Musera, Achoki & Mugasia, 2012). The headteachers have to be equipped with relevant knowledge, skills and competences to perform management duties which include planning,

organising, staffing, directing, coordinating, reporting and budgeting (Ngaroga, 2001). However, the implementation of Free Primary Education in Kenya found head teachers had not been adequately prepared for the change and therefore, found it challenging (Republic of Kenya, 2005).

Despite the heavy investment in education, management capacity remains ineffectively developed (Maranga, 1992). Just as societal and school demographics have changed in recent decades, so has the type of leadership needed to successfully head the rapidly changing school of this century (Meleod, 2008). It is undisputed that the headteacher is the most significant factor in enhancing school performance (Dinham, 2004; Kearney, 2005; Janerrete & Sherrete, 2007; Gentilucci & Muto, 2007). Successful and dynamic schools can quickly slide backwards with the departure of a successful head teacher (Hargreaves & Fink, 2004). Head teachers are critical in ensuring that school management efforts are successful (Rutledge, 2009).

Primary education ushers pupils to secondary schools. The Kenya Certificate of Primary Education (KCPE) taken at the end of eight years of primary education is used to select those to join secondary school. The kind of secondary school one will join depends on the total marks obtained at KCPE. Those who score the highest go to the national schools, second best go to provincial schools and the third join the district schools. All these schools are different in terms of school facilities. The national schools have the best, followed by provincial and district schools.

The year 2003 saw the reintroduction of Free Primary Education across the co.

On 6<sup>th</sup> January 2003, the ruling party, National Rainbow Coalition, Government of Kenya, reintroduced the Free Primary Education programme with the aim of providing more opportunities to the disadvantaged school age children (age 3-16 years. However, anybody who wished to go to primary school was eligible to do so). The main aim of Free Primary Education in Kenya was an overall policy goal for primary education to act as a transition to achieving Universal Primary Education by the year 2005 and Education For All by the year 2015 (Republic of Kenya, 2003).

The programme created a positive outcome because it resulted in significant increase in enrolment in a majority of the schools (Otach, 2008). Pupils' enrolment at primary school level had improved from 892,000 in 1963 to about 9.4 million in 2010 (Republic of Kenya, 2012). The current enrolment is about 8,784,550 in 2014 (Ministry Of Education, 2014). This was a proof that the costs of schooling in the form of direct fees and indirect charges serve as a deterrent to Universal Primary Education can be found in the huge spurts of enrolment (Tomasevski, 2006 ; UN Millennium Project, 2005). Kenya, Uganda and Tanzania have eliminated fees and cut costs of schooling with positive results for enrolment. However, the cost of uniforms, supplementary reading books and some stationery often add a more significant cost than tuition fee (Subrahmanian, 2007). The Free Primary

Education policy posed a serious hindrance to children wanting to access education in schools (Okwach & George, 1997). The policy has been described as laudable because of its effect on Gross Enrolment Rate which increased from 92% in 2002 to 104% in 2003 of the school age children population (Otach, 2008), resulting in more than 1.5 million children who were previously out-of-school joining primary schools (UNESCO, 2005).

However, serious challenges have faced the implementation of the Free Primary Education policy (UNICEF & World Bank, 2009). They include delays in funds disbursement, congested classes (teacher to pupil ratio of 1:70 from 1:40) in some schools, shortage of supplementary reading books and school facilities (textbook to pupil ratio of 1:5) has affected pupils' accessibility to books while at home (Kwacha & George, 1997). Parents cite KCPE Performance of a school as their main reason for transferring their children from one school to another (UNICEF & World Bank, 2009). Although priorities vary significantly from school to school, the majority of the schools have overcrowded classrooms and inadequate water and sanitary facilities and a huge deficit of furniture. The requirement for additional investment in primary school facilities is particularly acute in urban slums and the poorest areas in Kenya. In some of these ASAL areas primary school enrolment remains low and inadequate school facilities is one of the barriers to children influencing the education system (Ministry of Education, 2013).



The significance KCPE is to: serve as a feedback to the education planners, Kenya National Examinations Council, teachers, pupils, parents and other stakeholders; planners can use it to modify, introduce or drop a topic or subject; screening/selection, for further studies, training; research work and certification (Ayot & Patel, 2000; Ministry of Education, 2009). The pupils' performance in KCPE (Years 2008 to 2012) in Nairobi County and nationally is shown in Table 1.1.

**Table 1.1: Pupils' performance in KCPE (Years 2008 to 2012) in Nairobi County and Nationally**

Year	2008	2009	2010	2011	2012
Nairobi County's KCPE mean (%)	45.94	46.00	46.78	46.66	47.72
National's KCPE mean (%)	51.23	53.84	54.12	41.31	53.02

Source: The year 2012 KCPE examination report (Kenya National Examinations Council, 2013)

The data in Table 1.1 indicates fluctuation of pupils' performance in KCPE in Nairobi County and nationally in the same period (Year 2011). In addition, the pupils' performances in KCPE mean scores for the County were below average (less than 50.0 percent) compared with the national performance in the same period.

Acquisition of literacy and numeracy skills are conditions for a better life. Better life is attributed to awareness to good life and access to basic needs,

change for income generating and good health. Literacy and numeracy are important for human development index (UNDP, 2006). These are key skills that primary education is supposed to achieve as indicated in the primary education objectives. The national goals of education in Kenya and the primary education level objectives reflect the importance of primary education. In particular, the objectives of primary education are carried out in producing Kenyans who have knowledge and skills that enables them to fit in the society. This is reflected in many key Government documents. Key among them is the National Development Plan of 2002-2008 in which the Government has identified education as key to the attainment of the Millennium Development Goals and Education For All (Republic of Kenya, 2002).. They acknowledge that a weak educational foundation will seriously impair a nation's development progress. Effective primary education is a rock-bottom necessity for development. The effects of primary education in development are largely a result of the cognitive skills: literacy, numeracy and problem solving.

Poor primary schools compromise the entire system for human capital development. They provide graduates who are poorly prepared for secondary and tertiary education and ill-equipped for life-long learning. The consequence is an insufficient number of truly educated managers, workers and parents who can effectively contribute to development. The most effective sign of ineffective primary education systems are inadequate enrolments, low primary completion and low pupil achievement (World Bank, 1995).

The mass media analyze, and publish KCPE results and have to rank and highlight the schools which have performed well (Abagi & Odipo, 1997). The quality of education in Kenya is examination oriented. The quality of education is seen in terms of pupils passing national examinations (Eshiwani, 1993). Therefore, there was the need for the study on the influence of headteachers' management of facilities on pupils' performance in KCPE in Nairobi County, Kenya.

## **1.2 Statement of the problem**

The impetus to carry out this study was the management of facilities and its influence on pupils' performance in KCPE. The increases in enrolment due to the success of Free Primary Education has put pressure on existing school facilities which has in many ways differed from lack of investment over a number of years with tangible influence at KCPE level. Although priorities vary significantly from school to school, the majority of the schools have overcrowded classrooms and inadequate water and sanitary facilities and a huge deficit of furniture. The requirement for additional investment in primary school facilities is particularly acute in urban slums and the poorest areas in Kenya. In some of these ASAL areas primary school enrolment remains low and inadequate school facilities is one of the barriers to pupils' learning process (Ministry of Education, 2013). The Government of Kenya has to uphold the overall policy for quality improvement of education and training to reduce the cost of education to the households through the provision of

teachers, school facilities, grants to schools to cover operational and maintenance expenses under the Free Primary Education policy. Needs-based capitation grants have to be allocated to primary schools (Republic of Kenya, 2007).

Many educationists believe that pupils' perception about classroom conditions has consistent relationship between the nature of classroom conditions and pupils' academic performance. Further evidence indicates that pupils achieve better if they like classroom conditions (Goh & Fraser, 2000; McRobbie, Roth & Lucus, 1997). The current study filled the identified gaps. It is on this basis the study investigated the influence of headteachers' management of facilities on pupils' performance in KCPE in Nairobi County, Kenya.

### **1.3 Purpose of the study**

The purpose of this study was to investigate the influence of headteachers' management of facilities on pupils' performance in KCPE in Nairobi County, Kenya.

### **1.4 Objectives of the study**

The study addressed the following objectives:

- i. To determine the extent to which the level of adequacy of school facilities headteachers manage and how it influences pupils' performance in KCPE.
- ii. To assess the extent to which the level of competence of headteachers in management of facilities and how it influences pupils' performance in KCPE.

- iii. To establish the extent to which the gender of headteachers' in management of facilities influences pupils' performance in KCPE.
- iv. To determine the extent of delegation of responsibilities to staff by headteachers in management of facilities and how it influences pupils' performance in KCPE.
- v. To assess the extent to which the level of documentation of facilities by headteachers in management of facilities and how it influences pupils' performance in KCPE.

### **1.5 Research questions**

The study was guided by the following research questions:

- i. To what extent does the level of adequacy of the school facilities headteachers manage influences pupils' performance in KCPE?
- ii. To what extent does the level of competence of headteachers in management of facilities influences pupils' performance in KCPE?
- iii. To what extent does the gender of headteachers in management of facilities influences pupils' performance in KCPE?
- iv. What is the extent of delegation of responsibilities to staff by headteachers in management of facilities and how does it influences pupils' performance in KCPE?
- v. To what extent does the level of documentation of facilities by headteachers in management of facilities influences pupils' performance in KCPE?

## **1.6 Significance of the study**

It is anticipated that the findings of the study could provide data upon which informed decisions are made by the Ministry of Education, Science and Technology's Policy and Planning. Directorate of Quality Assurance and Standards may find information from this study which could be used to give guidelines to streamline the supervision of management of facilities in schools. The study is expected to be useful to the headteachers and teachers, in particular, as it provides information on management of facilities. They would be in a position to identify some common challenges and interventions to management of facilities effectiveness. The study would form a basis for further in-service training for the headteachers in management of facilities by Kenya Education Management Institute. Teachers may use the findings to create awareness for the maintenance culture, practice hygiene and guide pupils to do so in the classrooms and elsewhere in the school compound and make reports to the headteacher as appropriate.

The pupils may benefit from the findings by improved management of facilities by headteachers and Board of Management (BOM). As the Government assesses its commitment to international agreements, the policy makers may have a basis for seeking more funds from donors to streamline effective management of facilities in schools. To the Non Governmental Organizations (NGOs) that are education development based, the study forms a basis for more concerted effort in financing and provision of school facilities. The local authorities may use the findings of the study to improve

management of facilities at their level. The study is a source of information for future researchers in a similar field and in addition widens the understanding in the influence of public headteachers' management of facilities on pupils' performance in KCPE.

### **1.7 Justification of the location of the study**

The study was carried out in the public primary schools in Nairobi County because it is the capital city of Kenya, headquarter of Government ministries and well endowed with school facilities for example playgrounds and National library Services The issue of mismanagement of school facilities has been blamed on the dismal pupils' performance in KCPE in some public primary schools of Kenya. Therefore, the other remaining forty six counties in the country faced with similar challenges could use it as a reference point.

### **1.8 Limitations of the study**

Limitations are those conditions beyond the control of the researcher that may place restrictions on the conclusions of the study and their applications to the other situations (Best & Khan, 2000). Some respondents may not have been honest However; the researcher solved this problem by carrying out interviews with the accounts' clerks, document analysis guide for verification purposes. In addition, the researcher assured the respondents that he was bound by the ethical considerations and as such their responses would be used for the study only and their identities would be treated with strict confidence.

### **1.9 Delimitations of the study**

Delimitations are parameters or boundaries placed in the study by the researcher (Mugenda & Mugenda, 1999). The study was restricted to the 204 public primary schools' headteachers, 204 senior teachers and 204 accounts' clerks in Nairobi County in Kenya. The study focussed on investigating the influence of headteachers' management of facilities on pupils' performance in KCPE.

### **1.10 Basic assumptions of the study**

During the study it was assumed that:

- i. Participants would give honest opinions that could be used to draw general information for improving headteachers' management of facilities and enhance pupils' performance in KCPE.
- ii. It was assumed that the: schools had facilities (furniture, buildings, equipment, stationery and playgrounds) and could be easily identified, accessed, and verified.

### **1.11 Definitions of key terms**

**Facilities** refer to the furniture, buildings, equipment, stationery and playgrounds provided for the staff and pupils to optimize their productivity in the teaching and learning process.

**Influence** refers to an attempt to motivate and convince staff, pupils, community and Teachers Service Commission to work as well as do what otherwise they could not do on their own volition in management of facilities.



**Kenya Certificate of Primary Education** refers to the summative evaluation done at the end of class eight.

**Management** refers to progression by working effectively and efficiently with and through people to accomplish school goals.

**Performance** refers to the possession of the abilities to do well in KCPE.

### **1.12 Organization of the study**

The study was organized in the following five chapters:

Chapter one consists of the introduction which entails background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, justification of the location of the study, limitations of the study, delimitations of the study, basic assumptions of the study, definitions of key terms and organization of the study. Chapter two covers reviewed related literature with the following subheadings: management of school facilities, level of adequacy of the school facilities, level of competence of headteachers in management of facilities gender of headteachers in management of facilities, extent of delegation of responsibilities to staff by headteachers in management of facilities, level of documentation of facilities by headteachers in management of facilities, summary and identification of gaps of reviewed related literature, theoretical framework and conceptual framework. Chapter three deals with research methodology. It has the following subheadings: research design, target population, sample size and sampling procedures, research instruments, validity of instruments, reliability of instruments, data collection procedure, data analysis techniques and ethical

considerations. Chapter four comprises of data analysis, interpretation and discussion. It covers the following subheadings introduction, response rate, demographic data of the headteachers, demographic data of the senior teachers, demographic data of the accounts' clerks, gender of pupils, number of the support staff, background of the schools, headteachers' role in facilitating school facilities that influenced pupils' pupils' performance in KCPE, extent to which the level of adequacy of the school facilities headteachers managed influenced pupils' performance in KCPE , extent to which the level of competence of headteachers in management of facilities influenced pupils' performance in KCPE, extent to which the gender of headteachers in management of facilities influenced pupils' performance in KCPE, extent of delegation of responsibilities to staff by headteachers in management of facilities influenced pupils' performance in KCPE, extent to which the level of documentation of facilities by headteachers in management of facilities influenced pupils' performance in KCPE. Chapter five presents the summary of the study, summary of findings of the study, conclusions, recommendations and suggestions for further research.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 Introduction**

This chapter covers introduction and description of management of school facilities, level of adequacy of the school facilities, level of competence of headteachers in management of facilities, gender of headteachers in management of facilities, extent of delegation of responsibilities to staff, level of documentation of facilities, summary and identification of gaps of reviewed related literature, theoretical framework and conceptual framework.

#### **2.2 Management of school facilities**

The management of school facilities such as equipment, furniture, playgrounds, stationery and buildings enhances performance in the teaching and learning process. Teachers and pupils need facilities to search, read, write, confer, interact, view, listen, think, experiment and record. Teachers need office space, staffrooms for team planning, rooms for diagnosis for pupils' needs, and preparing instructional presentation (Asiabaka, 2008). The availability and adequacy of the school facilities promote effective teaching and learning process in schools while their inadequacy affects the academic performance negatively (Mapaderun, 2002; Oni, 1995). School facilities can only be utilized when they are available, and that there has to be investment in this wisely in educational institutions (Akano, 2005; Eze, 2002). Management of facilities by headteachers ensures that buildings, equipment, furniture, stationery and playgrounds support the operations of a school. The physical

needs of the pupils are met through provision of physical facilities. The emotional needs are met by creating pleasant surroundings, a child-friendly stimulating atmosphere and an inspiring environment (Fenker, 2004).

The management of school facilities involves provision of adequate funds to procure new facilities; repair, maintenance and improvement of facilities to enhance academic performance. This can be achieved by formulating policies and communicating them to the BOM and staff. The headteachers are to allocate duties to staff in accordance with expertise and abilities, influence and stimulate staff and provision of an enabling school climate for academic performance. The headteachers' skills direct school structure and its staff towards a deliberate integration of both the school and personal goals (Okumbe, 1998)

The headteacher tries to maximize the potential from both the staff and BOM in management of facilities. Head teachers integrate the schools and the activities of the society through the BOM. This has been known to strengthen school communities positively in the management of school facilities (Leithwood, Leonard & Sharath, 1998). Headteachers evaluate the management of school facilities and receive feedback which collectively indicates how successful the school is in enhancing academic performance (Everand, Morris & Wilson, 2004).

### **2. 3 Level of adequacy of school facilities**

Before the advent of European missionaries and colonialists, the Kenyan communities practised traditional education. This education was managed by different communities in different ways depending on the level of the learner and the needs of the community (Otiende, Wamuhii & Karugu, 1992). Before independence in 1963, Kenyans had limited access to education because the colonial administration perceived high level of schooling as a threat to the status quo and national stability. However, in the wake of independence the Government of Kenya recognized the need for an educated work-force, which was required to speed up socio-economic and political development (Njeru & Orodho, 2003)

The Government of Kenya has to uphold the overall policy for quality improvement of education and training to reduce the cost of education to the households through the provision of teachers, school facilities, grants to schools to cover operational and maintenance expenses under the Free Primary Education policy. Needs-based capitation grants have to be allocated to primary (Republic of Kenya, 2007). Curriculum design is void of practical meaning without facilities such as textbooks, visual aids, paper and chalk. Facilities for a given school have, first of all, to be up-to-date and in line with the current syllabi. It is therefore, the responsibility of the headteacher to make sure that none of the classes suffers the disadvantage of using out-of-date facilities. The facilities have to be adequate and available on time. The

teachers cannot be expected to teach well, no matter how qualified they are without adequate school facilities (Mbiti, 2003).

Teachers have positive attitude towards improvisation of school facilities. This implies that they are highly interested in production and improvisation of school facilities (Olangunju, 2000 & 2003). Both genders of teachers produce the school facilities equitably for teaching and learning process (Olangunju, 2000 & 2003, Egbegbedia, 1997; Sobulo, 1998). Institutional constrains may make the successful implementation of proven pupil-centred strategies difficult even when teachers acknowledge the advantages of these approaches. The constrains include physical conditions such as the number of pupils in a class, fixed seating arrangements and the amount of time available for instruction. They also include the systematic factors such as the relationship of the classrooms to the other courses (USAID, 2005). Lack of materials for models construction is one of the greatest setbacks to improve performance in three dimensions in mathematics (Origa, 2000)

#### **2.4 Level of competence of headteachers in management of facilities**

A competent headteacher has to develop strategies through the use of school curriculum, staff personnel, pupils' personnel, and school plant and school community for effective management of school management of facilities (Okumbe, 1999; Obiero, 2006). A headteacher should have core competence. Core competences are those capabilities that are critical to a school achieving competitive advantages (Prahalad & Hamel, 1990).

In 1990's competent headteachers were expected to bring the visionary leadership in the school in relation to school management of facilities. The headteachers will find their schools a testing ground of their competence. They must ensure that sound spiritual direction and moral training is taking place, influencing their pupils to reject the bad examples which are all too prevalent among the adults in the outside world. They must establish a steady routine and a harmonious, rhythmic, well regulated, programme as the foundation of a good way of the school life- striving always to create a happy atmosphere which will lower stress and buttress pupils' morale in the face of severe academic pressure. They have to ensure that staff performs to the full the delegated responsibilities for which they receive the salaries. They must try to offset any effects of poor parental training (Leithwood, 1992; 1994). It follows that no woman or man should accept headship unless there is a genuine vocation for such work and a willingness to give time and talent without stint. A competent headteacher must lead the way, be constantly available, her/ his competence and integrity must be plain to all (Griffin, 1994).

Management of facilities by competent headteachers is a process that ensures that school facilities and other technical systems support the operations of a school. The stages in management of facilities by a competent headteacher are as follows: Analysis stage involves assembling all relevant facts about the schools objectives, needs, and policies, review of school facilities, together with their attributes in terms of space, Solution stage entails assembling

criteria for judging options, evaluating these against the objectives of the school and develops the management of facilities strategy. Implementation stage completes the strategy development process through the establishment of an implementable plan that incorporates the procurement, training and communication (Brooks & Atkin, 2003). The competent headteacher is continuously experimenting and taking risks to improve teaching and learning process, and to provide strong instructional leadership for effective school (Leithwood & Jantis, 1999). Schools are constantly changing in an attempt to become market driven and net work oriented. They therefore, require competent headteacher to manage them (Prokopenko, 1998 ; Daft, 2008). The road to true learning is thinking. Yet, pupils do not have spare time to engage in this necessary practice, known for creation of knowledge, development of social skills and cognitive growth (UNESCO, 2005). This happens in schools where the headteacher is not competent in management of facilities that influence academic performance.

Competent headteachers evaluate school activities and receive feedback which indicates collectively how successful the schools are in achieving their objectives (Everard, Morris & Wilson, 2004). Competent headteachers' behaviour has a direct effect on pupils' academic performance, on the work performance of teachers and counsellors, on relationship with parents, sponsors and community relationships with individuals and institutions in the school environment (Rossenblast & Somech, 1997). There is a relationship between the school academic achievement and the competence of the



headteacher (Grift, 1990). The characteristics of headteachers such as role model, competent and demonstrating high performance expectations have an impact in the lives of teachers and pupils (Leithwood & Jantzi, 1999), competent headteachers practice kindness and compassion while handling teachers and pupils (Uchiyana & Wolf, 2002 ; Heller, 2002),

Competent headteachers, school culture, structure, policies and community have a great influence in in-school variables that impact on school learning outcomes (Leithwood, Leonard & Sharath, 1998). Competent headteachers have an impact in schools. Their participation has a positive contribution to learning outcomes. The examples include weekly planning, meetings, frequent problem solving sessions, staff development and team teaching across departments (Hallinger & Heck, 1998).

Poor headteachers' competence is one of the causes of poor implementation of environmental education (Kinyua, 2001 & Mbwesa, 1996), Influence theories look into influence processes between the leader and the followers. The competent headteacher influences staff to change by providing an inspiring vision of the future by shaping the culture of school management of facilities and the values needed to attain it (Daft, 2008).

The level of competence of the headteachers is vital. The difference between innovation of school management of facilities adoption and implementation is fundamental. Headteachers often adopt innovations but fail to implement them

successfully. Innovation implementation depends upon targeted end-user. However, the adoption of school management of facilities innovations by headteachers does not always ensure implementation (Dylan, 2007). Many educational projects fail during implementation phase, and before the effectiveness of the programme can be tested (Paine, 1990). Some fail to be implemented either because they are complex, or because they do not find value in them (Blumefeld, Fisherman, Krajack, Maxx & Soloway, 2000).

Other school management of facilities innovations may be adopted by the headteachers in ways that undercut the principle of the curricula (Brown & Adam, 2001). Also, they may not provide pupils with sufficient exposure to the activities that produce learning gains (Lipsey & Condray, 2000). When headteachers adopt school management of facilities innovation they do so with high expectations anticipating improvement in schools productivity and performance. (Klein, Conn & Sorra, 2001). Innovation is the creation of better Or more effective products, processes, services, technologies or ideas that are accepted by markets, Governments and societies. In Africa innovations generate a cycle of rising expectations and unfulfilled promises. A lot of time, effort and resources are invested to put the innovation into practice. These innovations seem to fade away at different stages and for various reasons (Ndoye, 2005; Mulkeen, 2010). The record of successful implementation of educational programmes and projects in Su-Sahara Africa is not good (Verspoor, 1992).

In Africa change issues are not documented and more so the actual implementation and more so the actual implementation of pedagogical knowledge and skills acquired by teachers during in-service training (Mulkeen, 2010). The Dakar Framework of Action 2000 recognized the need for innovation and development in the existing curricula. The need for curriculum transformation to give pupils, youth and adult the type of quality education that promotes the appreciation of diversity, richness and dynamism of our cultures, with a goal to liberate us from psychological, economic and technological dependence (World Education Forum, 2000). Research has shown that there are headteachers who do not use innovation for months or years after a school adopts it. Everyone does not adopt innovation at the same time. Some are quick to try the new way, whereas others deliberate and delay (Hall, 2010; Roger, 2003).

### **2.5 Gender of headteachers in management of facilities**

Educated women may enter the labour market as headteachers. This enables them to carry out management of facilities that influences pupils' performance in KCPE (Ministry of Education, 2007). The Government of Kenya recognises the role of gender in development and has a programme to eliminate regional and gender disparities in primary, secondary and in all level of education by 2015. In the sphere of gender, teaching and learning materials have been made gender sensitive while a gender desk has been established to coordinate mainstreaming gender activities in education (Ministry of Education, 2010).

Most of the differences women are perceived at work are due to stereotyping (assuming that particular groups of people have particular sets of characteristics, which are unchangeable) and past precedents in work types and patterns. The stereotyping of women that they are only suited to certain, specific, types of work and roles have been a fact of working life (Cole, 2005). According to feminism theory women and environment occupy a disadvantaged position by associating female and nature. Since the male dominating human culture has continued to oppose both, one could expect women headteachers to be more concerned more about the environment hence, positively fostering positive attitudes among pupils (Waswa, 2007).

A careful consideration of the statistics of gender in Nigeria reveals that contribution of women in the improvisation of instructional materials for effective teaching is significantly low. Evidence abounds in every science and technology based organization to this effect (Asiabaka, 2008). Some studies have found gender disparity achievement in favour of males (Awoniyi, 1999). There was no difference (Madu, 2004; Ibe, 2004; Anaeke, 1997), It has been found that female headteachers are more democratic or participate in their leadership styles while male are autocratic/directive (Eagly & Johnson, 1990).

## **2.6 Extent of delegation of responsibilities to staff**

Delegation of responsibilities means entrusting another capable person a job all together with the authority to do it. Delegation does not mean abdication or

total relinquish of power to someone. A headteacher should know the scope of her/his responsibilities and should utilize her/his deputy/other responsible staff members. The headteachers have a lot of work therefore; they are given an opportunity to delegate some of the responsibilities to any competent staff who could do it effectively (Owiro, 1997). The collaboration of headteachers, teachers and BOM builds leadership density in schools and provides the conditions which facilitate the development of teachers as leaders in the areas of curriculum, learning and teaching (King, 2002).

The success in delegation of responsibilities positions staff to make decisions in many areas that were once reserved to the headteacher. These include choosing textbooks and instructional materials, shaping the curriculum, setting standards for the pupils' behaviour, designing professional development and in-service programmes and deciding school budgets (Barth, 2001). The headteacher is sensitive to with delegating responsibilities to staff (Baskett & Miklos, 1992). Teacher records were checked by Heads of Department whom the headteachers delegated the responsibilities to (Wafula, 2007)).

The teacher shall performs delegated responsibilities such as teaching, administrative and supervisory services to promote education and learning services, She/he shall perform the delegated responsibilities unless she/he has to be absent from such activities given in accordance with the Code of Regulations for teachers (Ministry of Education, 2009).

Management of facilities requires staff in different areas. This demands that the headteachers have to possess the necessary human relation and delegation of responsibilities skills to assemble and utilize the relevant staff within and outside the school for efficient management of facilities for pupils (Asiabaka, 2008), Headteachers delegate responsibilities to staff to maximize their potentials (Leithwood, Leonard & Sharath, 1998). A teacher spends time in the child centred activities. These activities are the delegated responsibilities in relation to management of facilities (Ouya & Mweseli, 2008),

A successful teacher is one who is prepared to devote most of his time to his pupils as delegated by the headteacher (Okinda & Owour, 1995), Headteachers delegate responsibilities to the teachers and support staff (Crosbie-Burnett & Lewis, 1993). In order to achieve the goals of a school different staff must be delegated responsibilities according to their skills by the headteacher. Their delegated responsibilities must be therefore, be related to each other and integrated, if unity of effort has to be achieved. This calls for adequate definition of delegated responsibilities which are duly communicated to all staff concerned (Mbiti, 2003). The headteachers who show transformational leadership focus on advancing staff growth which improve strategy formulation for improvement based on the analysis of the performance in delegated responsibilities in management of facilities (DuFour, 2002).

Involving staff in planning and give them freedom of choice in decision-making goals cannot be achieved without team work. Exemplary headteachers do not feel vulnerable by giving away power but understand the importance of doing so. By empowering staff, headteachers are able to enable the staff to use information in producing outstanding results (Kouzes & Poaner, 1995). Encouraging staff to do a job is not good enough. They must also feel that they are able to act and put their own ideas into place with the support of the headteacher (Knaab, 2009).

### **2.7 Level of documentation of facilities**

Documents are useful for accountability and transparency in particular, during supervision and auditing by the Directorate of Quality Assurance and Standards and auditors respectively from the MoEST (Republic of Kenya, 2012). Documents are often useful very early in the research for providing background of what is known and helping in the development of hypotheses. But they can also be a source of data, either on their own or in addition to surveys, observations, and/or informant interviews (Peil, 1995). At school level documents help in reference, auditing, accountability and transparency in management of facilities. The following documents can be utilized in schools:

**Attendance notice board** provides a quick way of knowing the situation in the school as far as attendance is concerned on any particular day.

An illustration is shown in Table 2.1.

**Table2.1: Attendance notice board**

**Date.....**

Class	Number enrolled			Present			Absent		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1									
2									
3									
4									
5									
6									
7									
8									
<b>Total</b>									

**Admissions register** is a permanent record book in which every child's name is written on the first day she/he becomes a pupil of that school. The admissions register becomes useful when some of the old pupils write back to the school for letters of recommendations for certain appointments. An illustration of arbitrarily pupils is shown in Table 2.2.



**Table 2.2: Admissions register**

Admission Number.	Pupil's Name	Gender	Date of birth	Date of admission	Home Address	Date of Leaving
0001	Joy Kaa	Female	7/8/2008	15/1/2012	34 Voi	
0002	Peter Li	Male	2/9/2008	15/1/2012	13 Meru	

**Invoice** contains the quantities and description of the facilities supplied and their prices. **Consumable inventory** are the types of facilities which lose their shape, function or form in the process of use like stationery. These stores ledgers are constantly used therefore; we can have more than one in a year. It is however, important to keep the school records up- to- date even if more record books will be needed.

**General ledger** is a group of accounts. It shows the various accounts in management of facilities for the MoEST auditors. **Delivery note** accompanies the school facilities delivered. The headteacher checks the school facilities delivered and the contents of the delivery note against the original order to ensure that supplies are according to order; invoice contains the quantities and description of the facilities supplied and their prices and receipts are issued to the headteachers when they pay cash for school facilities supplied (Mbiti, 2003). No person should collect school levies without issuing an official receipt. (Republic of Kenya, 2013).

## **2.8 Summary and identification of gaps in the reviewed related literature**

The review of related literature highlights the management of facilities and its influence on academic performance. Also, variables that influence the headteachers to effectively manage school facilities and enhance pupils' performance in KCPE. These variables include level of adequacy of school facilities, level of competence of headteachers, gender of headteacher, extent of delegation and level of documentation of facilities.

.A study by Fabayo and Farombi (1998), established that the decline in performance in schools may be connected to poor learning environment created by inadequacy of the schools facilities. Hence, it was vital to determine the extent to which the level of adequacy of school facilities managed by headteachers influenced learning. A study by Rossenblast and Somech (1997), found out that competent headteachers have a direct effect on pupils' academic performance. It was therefore, necessary to find out if the level of competence of the headteachers in management of facilities influenced learning.

In the United Kingdom, a study by Cole (2005), found out that there was stereotyping of women that they are only suited to certain, specific, types of work and roles have been a fact of working life. It was thus, vital to find out if the gender of headteachers influences learning.

In a study by Barth (2001), indicated that success of delegation of responsibilities positions staff to make decisions in many areas that were once reserved to the headteacher. It was therefore, imperative to establish the extent of delegation of responsibilities to staff by headteachers influence learning.

A study by Peil (1995), found out that documents are often useful as a source of data. Hence, it was important to find out the extent to which the level of level of documentation of facilities by headteachers that influence s learning.

## **2.9 Theoretical framework**

This study was guided by the Max Weber's Theory of Bureaucracy. The theory was first used by Max Weber (Weber, 1947) and later advanced by Gouldner (Gouldner, 1955). Max Weber's Theory of Bureaucracy refers to the rational- legal authority. This authority is derived from the office (bureau) or position of the jobholder, as bounded by a set of rules and procedures of the organization. Weber identified many features of a bureaucratic organisation as a hierarchical arrangement of offices, division of labour, strict adherence to rules and regulations governing an organization, impersonality to inter-personal relations and appointment to office must be based on expertise and technical competence if work was to be performed effectively and efficiently. Max Weber was a strong believer in strict adherence to rules and procedures governing an organization.

### **2.9.1 Strengths of Max Weber's Theory of Bureaucracy**

The strengths of the theory are that it advocates strict adherence to rules and procedures governing an organization for example in the procurement of school facilities. This makes the theory rational and efficient in the management of school facilities; division of labour which enables headteachers to delegate responsibilities to staff in management of facilities; appointment to office must be based on expertise and technical competence if work was to be performed effectively and efficiently. For example, the level of competence of the headteachers is determined by their knowledge, skills and attitudes in management of school facilities which they obtain through their education level, professional qualification and in-service training in management of facilities.

### **2.9.2 Weaknesses of Max Weber's Theory of Bureaucracy**

The weaknesses the theory are strict adherence to rules and procedures, reduction in output, reaction/conflict to rules and procedures. Bureaucracy affects acquisition of school facilities required for the academic performance. The theory is the crudest form of power which uses threats and punishment to achieve its ends. Examples include sanctions against suppliers of school facilities, if they do not conform to particular procurement rules and procedures, dismissal for non-conforming, staff and physical demonstrations such as mass walk-outs by staff.

### **2.9.3 Application of Max Weber's Theory of Bureaucracy to the study**

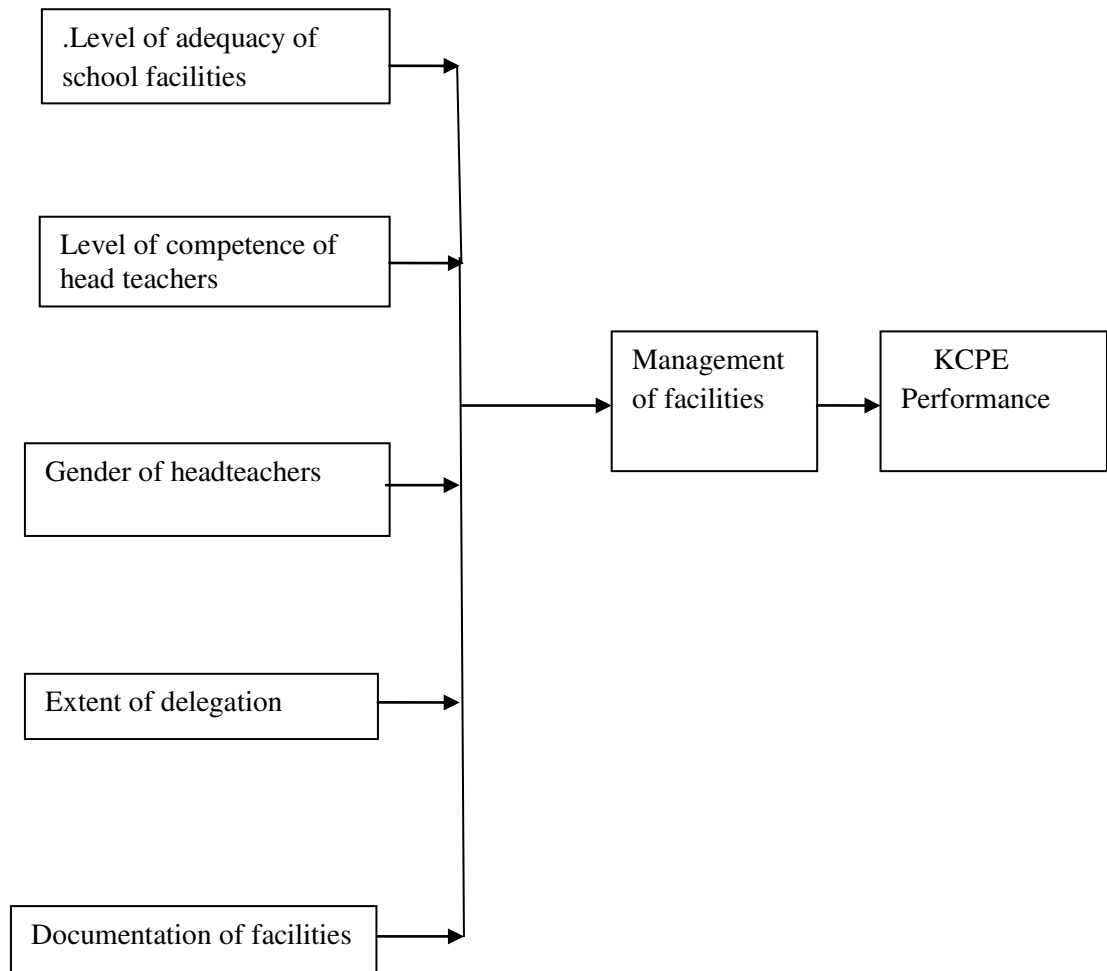
Despite the weaknesses of the theory, the researcher used it because it is rational and efficient due to the strict adherence of rules and procedure in

dealing with complex issues, in particular, in management of facilities. For example, the BOM were legally authorised to carry out the repairs and maintenance and acquisition of school facilities. Also, the headteachers have to regularly review the level of adequacy of school facilities, improve their level of competence by attending in-service courses, determine of delegation of responsibilities to staff in management of facilities and establish level of documentation of facilities.

## **2.10 Conceptual framework**

Conceptual framework refers to particular pattern whereby the independent variables interaction is linked to the objectives (Jeffles, 2008). The conceptual framework is a concise description of the phenomenon under study accompanied with a graphic depiction of the major variables of the study (Mugenda, 2008). It is the perspective or the set of lenses through which the researcher views the problem. In this study, the conceptual framework study shows the inter-relationships between the independent variables-input (level of adequacy of school facilities, level of competence of headteachers, gender of headteachers, extent of delegation and level of documentation of facilities) that influence headteachers' management of facilities and dependent variable

KCPE performance. This is diagrammatically shown in Figure 2.1.



**Figure 2.1: The relationship between Independent variables, management of facilities and KCPE performance**

The headteachers influence the availability of finances used to improve the level of adequacy of school facilities that enhance KCPE performance. The headteachers have influence over the staff that they delegate responsibilities to in management of facilities to promote KCPE performance based on Max Weber’s Theory of Bureaucracy that advocates division of labour. The school facilities are made available, repaired, maintained and improved by the wise counsel of the gender of headteachers and level of competence of the

headteachers. This is because Max Weber's Theory of Bureaucracy indicates states that appointment to office must be based on expertise and technical competence if work was to be performed effectively and efficiently, in particular, management of school facilities that influence KCPE performance. The level of documentation of facilities by the headteachers would be based on the strict adherence to rules and procedures of official school recordkeeping and as indicated in the Max Weber's Theory of Bureaucracy.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the research methodology used to carry out the study. It presents introduction, research design, target population, sample size and sampling procedure, research instruments, validity of instruments, reliability of instruments, data collection procedure, data analysis techniques and ethical considerations.

#### **3.2 Research design**

Research design refers to the arrangement of conditions for collecting and analyzing data (Kothari, 2008). In educational research the most commonly used research design is survey (Cohen, Marion & Marion, 2004). Descriptive survey design allows the researcher to describe characteristics of a particular individual or group (Kothari, 2004). The study used descriptive survey design. Descriptive survey design was deemed an appropriate strategy because it allows collection of descriptive data regarding the characteristics of a population,, current practices, conditions and experiences in a way to given systematically factual information for decision-making. The descriptive data elicited could easily be generalized and made adaptable to mixed quantitative and qualitative approaches of statistical data analysis methods.



### 3.3 Target population

A population refers to a group to which the results of a study can be generalized (Glass, 1996). The target population is all members of a real or hypothetical set of subjects or people or events for which a researcher wishes to generalize the results of the study (Borg & Gall, 2003). According to the list obtained from the County Director of Education's office (2013), The schools were merely the sampling units from where the population resided. The population within the targeted schools was 204 headteachers, 204 senior teachers and 204 accounts' clerks, yielding a target population N=612.

### 3.4 Sample size and sampling procedures

A sample is a small proportion selected for observation and analysis (Best & Khan, 2000). A sample must be representative of the population from which it is drawn (Fowler, 2002). The sample size (n) is shown in Table 3.1.

**Table 3.1: Sample size (n)**

<b>Population</b>	<b>Target Population</b>	<b>Sample</b>	<b>Percentage (%)</b>
Headteachers	2 04	41	20
Senior teachers	204	41	20
Accounts' clerks	204	41	20
<b>Total</b>	<b>612</b>	<b>123</b>	<b>20</b>

The data in Table 3.1 indicates that the sample size (n) is 123. The sample size is justified since the study used mixed quantitative and qualitative approaches.

### **3.4.1 Districts**

In simple random sampling every member of the population has an equal chance and independent chance of being selected which is not influenced by the selection of the other members of the population from which the sample is being drawn (Babie, 2005, Cresswell, 2005 ;Fraenkel & Wallen, 2006). Due to these advantages, the researcher opted to use simple random sampling for this study. Simple random sampling was therefore likely to yield a representative sample. To pick the districts to participation in the study, simple random technique was used. The researcher used lottery method to pick the districts to participate in the study. The names of each of the nine districts in Nairobi County were written on pieces of paper which were folded, put in a container, shaken, and one picked at a time. The researcher used three districts for the study after considering the sample size being large enough to represent the population.

### **3.4.2 Schools**

For descriptive survey design a guide of 10-20 percent of the population is used to select a sample for a study (Babbie, 2005; Gay & Airasian, 2003).

Twenty percent of the sample size could represent the total population (Mugenda & Mugenda, 2003). The researcher opted to use a sample size of 20 percent of the 204 public primary schools since the study mixed quantitative and qualitative approaches.

### **3.4.3 Headteachers, senior teachers and accounts' clerks.**

The researcher used purposive sampling method to select the headteachers, senior teachers and accounts' clerks who participated in the study.

The sample size is shown in Table 3.2.

**Table 3.2: Sample size**

<b>Population</b>	<b>Target Population</b>	<b>Sample</b>
Headteachers	204	41
Senior teachers	204	41
Accounts' clerks	204	41
<b>Total</b>	<b>612</b>	<b>123</b>

The data in Table 3.2 indicates that the sample size was 41 headteachers, 41 senior teachers and 41 accounts' clerks who participated in the study.

### **3.5 Research instruments**

A researcher can choose to use questionnaires, interviews or documentary analysis as methods of collecting data (Brewerton & Millward, 2001). These instruments could be used individually or collectively depending on the study objectives (Wisker, 2001). The instruments used to collect the data for the study were questionnaires, interview and documents analysis guides.

#### **3.5.1 Questionnaires**

Questionnaires give factual information such as gender and education level (Kerllinger & Lee, 2000). Questionnaires were suitable for the study because they are free from bias from the interviewer, respondents had adequate time to give well thought out answers and respondents who are not easily approachable could be reached conveniently. Therefore they were dependable and reliable elicit the anticipated information for the study.

### **Headteachers' questionnaire** (*Appendix 3*):

The questionnaire had the following sections: A-Demographic information of headteacher, B-background of schools- Extent to which level of adequacy of school facilities managed by headteachers influences pupils' performance in KCPE, D-pupils' performance in KCPE and E-Extent of delegation of responsibilities to staff by the headteachers in management of facilities and how it influence pupils' performance in KCPE.

### **Senior teachers' questionnaire** (*Appendix4*):

The senior teachers' questionnaire had the following parts: Part I- Demographic information of senior teacher, Part II- Extent to which level of competence of headteacher's management of facilities influences pupils' performance in KCPE, Part III- Extent of delegation of responsibilities to staff in management of facilities and how it influences pupils' performance in KCPE and Part Iv Extent to which level of documentation of facilities by headteacher's management of facilities influences pupils' performance in KCPE.

### **3.5.2 Interview guide** (*Appendix 5*)

The purpose of interviewing is to find out what is on the respondents' minds, what they think or how they feel about the area of study (Patton, 2008). Interview guides provide in-depth information about cases of interest to the researcher. They allow the researcher to gain a detailed understanding of the topic under study and are useful for studying useful sensitive topics (Kombo & Tromp, 2006). Standard interview adheres strictly to planned questions for consistency across the respondents (Burg, 2004). Standard interview questions

were used to collect data from the 41 sampled schools. This was chosen to ensure that the researcher on a common body of information responsive to influence of public primary headteachers' management of facilities on pupils' performance in KCPE. This also enabled the searcher to take advantage of active listening responsiveness and the dynamics of the interview. Therefore, the interview guide was applicable to this study because the researcher was able to probe the accounts' clerks and facilitated collection of more in-depth information on the extent of delegation of responsibilities, facilities' documentation, and source of funding in schools' management of facilities.

The interview guide had the following parts: : Part I- Demographic information of accounts' clerks and Part II- headteachers' role in facilitating school facilities, that influence pupils' performance in KCPE delegated responsibilities and types and functions of facilities' documents **3.5.5**

### **3.5.3 Document analysis guide** (*Appendix 6*)

Documents are written or printed materials that have been produced in some form or another (Fraenkel & Wallen, 2008). Document analysis guide is a method in which documentary materials such as books, news papers, or contents of other verbal materials which are printed can be analyzed (Kothari, 2008). Document analysis guide can be used qualitatively and quantitatively when one wants to gain insights in the context of the study (Mboroki, 2007). Document analysis guide was suitable for this study when the researcher was carrying out verification on how well the documents were kept. Document analysis guide was used to elicit information on the types and functions of documentation of facilities that influence pupils' performance in KCPE.

### **3.6 Validity of instruments**

Validity of instruments refers to the quality of the research gathering instrument or procedure that enables it to measure what it is supposed to measure (Sounders, Lewis & Thornhill, 2007).: Validity in research determines whether the accounts provided by the researcher and the participants are accurate, can be trusted and credible to the population (Cresswell & Plato, 2007).

#### **Pre-testing the instruments**

There is a general agreement among researchers that however careful a researcher is in constructing a research instrument for data collection, they cannot be perfect. Hence, the need to test them before administering to the study respondents (Babbie, 2005, Bryman, 2003, Cohen, Marion & Marion, 2004; Gorard, 2001; Williams, 2003; Vaus, 2001). Once the instruments have been constructed, they should be tried out in the field (Orodho, 2003). Piloting aims at testing the clarity of test items, suitability of language used and the feasibility of the study (Kothari, 2008). To determine validity of the instruments used purposive sampling in selecting four pilot public primary schools in a district, in Nairobi County. Individuals chosen for the pilot study should be “thoughtful and critical”, and be encouraged to make comments on the instruments administered to them (Gorard, 2001). In this study the participants were the 4 headteachers, 4 senior teachers and 4 accounts’ clerks. of the four piloted schools. These were among the top managers of the schools’ facilities and were anticipated to be “thoughtful and critical”. In

addition they were encouraged to make comments on the instruments administered to them. The piloted schools were excluded in the final research because they were not part of the sample for the study.

The researcher also incorporated the comments of the supervisors and the staff from the Department of Educational Administration and Planning who read through the instruments. This showed questions that were ambiguous, difficult terms and phrases and consequently needed appropriate amendment done. Revision of the instruments was then undertaken. This attested the research questionnaires to be appropriate, meaningful, and correct to gather the data for the study.

### **3.7 Reliability of instruments**

A research instrument is reliable to an extent that it measures whatever it is measuring consistently. Research instruments that have high reliability coefficient have minimal errors of measurement (Best & Khan, 2009).

Pilot tested instruments were subjected to split-half technique for the close ended questions which involved a single administration of the instruments, then splitting items into two halves, odd and even numbered method. The two sets were scored separately and correlated for reliability coefficient ( $r$ ) using the Pearson's Product Moment Formula which was estimated as reliability ( $r =$  Correlation Coefficient). The Spearman-Brown Prophecy formula was applied to adjust the (Correlation Coefficient ( $r$ ) obtained between the two halves to obtain ( $R_e =$  Reliability Coefficient).

The formula was as follows:

$$Re = 2r/1+r$$

Where:

Re = Reliability of the original test

r = Reliability coefficient obtained by correlating the scores of odd and even numbered questions (Best, 1989). The calculation was

done by the use of the SPSS Version 20 computer programme.

Reliability coefficients values of 0.73 of headteachers' questionnaire. 0.88 senior teachers' questionnaire and 1 of accounts clerk interview guide were above 0.6 indicated that the instruments were reliable to use. The closer the reliability is to one the more reliable it is. Spearman-Brown Prophecy formula ensures that the complete instrument would have a higher reliability than either half which is shorter (Mugenda, 2008).

### **3.8 Data collection procedure**

Detailed account could give an "audit trail" for anybody wishing to know how the study was carried out, transfer or generalize the results (Miles & Huberman, 1994). This section discusses a detailed account of the procedure followed in collecting data in this study. The research clearance permits (*Appendix 6*) and letter of research authorization (*Appendix 7*) to allow the researcher to carry out the study were obtained from the National Council for Science Technology and Innovation (NCSTI). The copies of the same were forwarded to the County Commissioner and County Director of Education,



Nairobi County in Kenya. Then, the researcher issued the letters of introduction (*Appendix 1*) and consent of respondents (*Appendix 2*) to the headteachers, senior teachers and accounts clerks. Then, created a rapport with them during the visit before the commencement of the study. Thereafter, an appointment was booked when to administer the instruments. On the agreed dates, the questionnaires were self administered and collected. Also, the interview for the accounts' clerks and document analysis guides were carried out by the researcher.

### **3.9 Data analysis techniques**

Data analysis entails making sense of the massive amount of data, reduces the volume of information, and identifies significant patterns and constructing a framework for communicating the evidence of what the data revealed (Best & Khan, 2004). The researcher carried out editing to check the logic of the answers, consistency and relevance of the responses to the items in both questionnaires. Thereafter, coded, entered and processed the data using Statistical Package for Social Sciences (SPSS) version 20 computer software. Descriptive statistics (measures of central tendency -mode, mean and median) and distributions (frequencies and percentages) techniques were used to analyze the data. The data was presented in tables.

### **3.10 Ethical considerations**

The letter of consent was issued to all the respondents who made an agreement: to participate in the study. The researcher informed the

respondents to read the letter carefully before agreeing to participate in this research. Their participation in this research was completely voluntary, and could withdraw from the study at any time without penalty. They could withdraw by informing the researcher that they no longer wished to participate (no questions would be asked). They let the researcher know that: purpose and nature of this research had been sufficiently explained to them. They were explained that they were to answer the headteachers'/ senior teachers' questionnaires/ an interview as by the position they held in the school.

There were no financial benefits for them from this study. The researcher hoped that the results of this would help to inform policy and practice to make improvements in management of facilities leading to an improved academic performance. Their participation in this research remained confidential. Their names were not recorded anywhere. The results of this research would be shared with organizations that work on education worldwide.

## **CHAPTER FOUR**

### **DATA ANALYSIS, INTERPRETATION AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents data analysis, interpretation and discussion of the study findings. The study investigated the influence of public primary headteachers' management of facilities on pupils' performance in KCPE in Nairobi County in Kenya. Discussion of the findings related to the influence of headteachers' management of facilities on pupils' performance in KCPE within the thematic areas including response rate, demographic data of headteachers, demographic data of senior teachers, demographic data of accounts' clerks, gender of pupils, number of the support staff, background of schools, headteachers' role in facilitating school facilities that influenced pupils' performance in KCPE, extent to which the level of adequacy of the school facilities headteachers managed influenced pupils' performance in KCPE, extent to which the level of competence of headteachers in management of facilities influenced pupils' performance in KCPE, extent to which the gender of headteachers in management of facilities influenced pupils' performance in KCPE, extent of delegation of responsibilities to staff by headteachers in management of facilities influenced pupils' performance in KCPE, extent to which the level of documentation of facilities by headteachers in management of facilities influenced pupils' performance in KCPE.

## 4.2 Response rate

Response rate refers to the percentage of headteachers and senior teachers who responded to the questionnaires. This was to establish the instruments return rate which is shown in Table 4.1.

**Table 4.1: Response rate**

Category of respondents	Frequency	Percentage (%)
Headteachers	41	100.0
Senior teachers	41	100.0
Accounts' clerks	41	100.0
<b>Total</b>	<b>123</b>	<b>100.0</b>

The findings on Table 4.1 indicate that all the self administered instruments from the 41 sampled schools were returned. Therefore, this gave the response rate of 100.0 percent. A response rate should be more than 70.0 percent for meaningful generalization (Mugenda & Mugenda, 2003).

## 4.3 Demographic data of the headteachers

The demographic data of the headteachers discussed in this section include gender of the headteachers, age of the headteachers, education level of the headteachers, professional qualification of the headteachers, work experience as headteacher and participation in in-service training.

### 4.3.1 Gender of the headteachers

Gender of the headteachers was included in the study to establish how it influences pupils' performance in KCPE. The headteachers were asked to state their gender and the results are shown in Table 4.2.

**Table.4.2: Distribution of the headteachers by gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Female	26	63.0
Male	15	37.0
<b>Total</b>	<b>41</b>	<b>100.0</b>

It is observed from Table 4.2 results that majority, 63.0 percent of the headteachers who participated in the survey were females representing more than a half of the headteachers who participated while male headteachers were 37.0 percent. This may have been caused by the Government policy which allows wives to join their spouses in their working stations. There are inequitable gender disparities. More pronounced disparities exist in arid, semi-arid and deprived areas in urban conglomeration (Republic of Kenya, 2012).

Although the Kenyan constitution and even the education legislative enactment give evidence of the Government's commitment to gender balance at all levels of education, there are still great disparities between men's and women's' participation in education (Davidson, 1993). The high sounding policies, laws and enactments have not translated into gender equity in education at all levels (Abagi, Olweya & Otieno, 2000).

### 4.3.2 Age of the headteachers

Age is an important factor in school administration as it influences the authority and experiences of the headteacher (Mbiti, 2007). Age is a factor that distinguishes people. Age is the number of years someone has lived or existed. Age of the headteachers was to establish the age bracket of the headteachers. The headteachers were asked to indicate their age bracket and the results are shown in Table 4.3.

**Table 4.3: Distribution of the headteachers by age**

Age bracket (Years)	Frequency	Percentage (%)
41-45	3	7.0
46-50	15	37.0
51 and above	23	56.0
<b>Total</b>	<b>41</b>	<b>100.0</b>

The data on Table 4.3 indicates that majority of the headteachers, 56.0 percent were in the age bracket 51 and above and only 7.0 percent were in the age bracket 41-45. The responses show that the headteachers involved in the study were distributed across all the age groups. This could therefore, provide desired responses to the research questions especially on management of facilities. Thus, the findings do not have any age backed. As the population of headteachers, in particular, manifested a population of older headteachers, it is likely that the schools would continue being managed by older rather than younger headteachers. Turnover is likely to decrease, as the older headteachers become settled in their jobs and locality. The older headteachers seem to be motivated in their work up to the time of retirement (Cole, 2005).

An individual's age determines the precision and vigour with which a person performs tasks hence, influences the headteachers' dealing with school management of facilities. Older headteachers are less ambitious and have no interest in recognition. Also, they are less motivated to take action on pupils (Ouru, 2008). Age of headteachers has an effect on their attitudes and could influence their preferred choice of action on school issues (Mukiru, 2003; Musuro, 2004, Getrude, 2006; Ouru, 2008).

#### **4.3.3 Education level of the headteachers**

The education level was to determine the highest education attainment of the headteachers. The headteachers were asked to state their education level and the results are shown in Table 4.4.

**Table 4.4: Distribution of the headteacher by education level**

<b>Education level</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Teachers Training College	8	20.0
University	33	80.0
<b>Total</b>	<b>41</b>	<b>100.0</b>

It is observed from Table 4.4 results that majority, 80.0 percent of the headteachers attained university education level while 20.0 percent had Teachers Training College education level. Higher levels of education correlate with levels of productivity. The empirical study points to the greater capacity of educated employees to learn on the job and continue to improve on their productivity (Oxaal, 1997).

Education opens the mind of an individual to strategic thinking, better problem solving approaches and planning with a view of reducing cases of indiscipline among pupils (Cheloti, 2009). The headteachers involved in the study had attained adequate education level to enable them carry out management of facilities.

#### **4.3.4 Professional qualification of the headteachers**

Headteachers require continued professional growth and development in order to be competent to handle management of facilities. The headteachers were asked to indicate their professional qualification and the results are shown in Table 4.5.

**Table 4.5: Distribution of the headteacher by professional qualification**

<b>Professional qualification</b>	<b>Frequency</b>	<b>Percentage (%)</b>
P2	3	7.3
P1	5	12.2
Diploma	10	24.4
B.Ed/BA	16	39.0
Masters	7	17.1
<b>Total</b>	<b>41</b>	<b>100.0</b>

The findings on Table 4.5 indicate that the highest proportion of the headteachers, 39.0 percent were holders of B. Ed/B.A and lowest, 7.3 percent holders of P2. The findings show that the headteachers in public primary schools in Nairobi County were competent to handle the management of facilities by virtue of their professional qualification.



Education enhances proficiency, operational and conceptualization skills of an individual (Sisungu, 2011). The professional qualification of headteachers is major for effective curriculum implementation. This is also in extension significant in management of facilities by the headteachers that influences pupils' performance in KCPE (Ministry of Education, 2007). Continuous upgrading of skills for teaching beyond those acquired during pre-service basic training has lagged behind. The literature available indicates that there is a strong relationship between the pupil's examination outcome and headteachers' professional qualification (National Centre for Educational Statistics, 2000; Rowan, Correnti & Millet, 2002).

Qualification and experience enhance the headteachers expert power, credibility, confidence and decisiveness in managerial practice (Okumbe, 1999). These are necessary especially in management of facilities. Teacher education is largely a matter of developing teachers' capacities for situational understanding as a basis for wise judgement and intelligent decisions in completely ambiguous and dynamic educational situations (Lam & Fung, 2001). This is relevant when professional education imparts knowledge, skills and competences to the headteachers in the management of facilities.

#### **4.3. 5 Work experience as headteacher**

Work experience is the knowledge, skill and/or attitude someone gains from doing a job or activity over a period of time. Knowledge needs to be applied and skills practiced over a period of time. The headteachers were asked to

indicate their work experience as headteachers and the results are shown in Table 4.6.

**Table 4.6: Distribution of the headteachers by work experience as headteacher**

<b>Work experience (Years)</b>	<b>Frequency</b>	<b>Percentage (%)</b>
1-5 years	7	17.0
6-10 years	15	37.0
11-15 years	9	22.0
16 and above years	10	24.0
<b>Total</b>	<b>41</b>	<b>100.0</b>

The data shown in Table 4.6 indicates that the highest proportion, 37.0 percent of the headteachers who participated in the survey had worked for a period between 6-10 years, and lowest 17.0 percent 1-5 years. The headteacher's years of service enhances the experience and understanding of school management of facilities. Management of facilities may easily be done by experienced headteachers. The years the headteacher has been in leadership position could influence decision making and may increase awareness in effective and efficient management of facilities. Work experience could improve decision- making, effectiveness and efficiency (Okoth, 2008).

Headteachers' administration and experience play a pivotal role in determining their attitudes and approaches as well as their problem solving techniques in their schools (Ouru, 2008). This is useful especially when

dealing with issues related to management of facilities. Secondary schools headteachers require knowledge and experience in managerial skills (Sisungu, Buhere & Sany, 2011). Also, this is applicable in public primary schools, in particular, in management of facilities.

The headteachers with few years experience, as headteacher, usually less than three years, are less effective compared with those with more years of experience. However, beyond five years of experience the influence decreases. This may suggest that those with five years headship experience may not have significant difference in performance compared with those with ten years experience (Darling-Hammond, 2000). Long headship experience is linked to settled families and minds hence ability to concentrate on school matters (Mwende, 1995). The school matters could entail among others headteachers' management of facilities. Headteachers with many years of experience in handling pupils have better understanding of their pupils and roles as headteachers (Ouru, 2008 ; Oside, 2003). The same experience could be extended by the headteachers to management of facilities.

Schools that have long serving and experienced headteachers have less disciplined problems (Mutisya, 2000; Eshiwani, 1993). Such schools may not vandalise school facilities. Headteachers who have served for a long period of time in the same school administratively do better than those who spend a few years. The study reported that long-serving headteachers have time to interact and understand the needs of their teachers and are able to initiate changes for

teacher growth for academic performance (Vanderhaar, Marioz & Rodosiey, 2006)

#### **4.3.6 Participation in in-service training**

Regardless of the adequacy of one's pre-service or university preparation, no one in the teaching profession-from Kindergarten teachers to graduate faculty in university would be adequately prepared at the entry level to remain current for an entire career. In fact, pre-service training, regardless its length or intensity, may not even have been adequately prepared the headteachers successfully without in-service training.

The main purpose for in-service training projects and headteachers development programmes is to enhance human potential so that every headteacher could achieve higher standards of attainment, success, or excellence than otherwise be possible. This could be anticipated to enhance headteachers' management of facilities and performance in KCPE. In-service programmes are courses done while working in a job. The training given to the headteachers in the past was not adequate. To meet the challenges of the rapidly changing responsibilities of headteachers, in-service programmes have been put in place by the MoEST.

In-service training is an activity that is based on identified need that is collaboratively planned and designed. Participation in in-service training was to establish the number of in-service training per year by the headteachers. The headteachers were asked to indicate their participation in in-service

training of headteachers that involved management of facilities and the results are shown in Table 4.7.

**Table 4.7: The headteachers’ participation in in-service training**

<b>Number of in-service training per year</b>	<b>Frequency</b>	<b>Percentage (%)</b>
No in-service	4	9.8
Once	9	22.0
Twice	15	36.5
Thrice	13	31.7
<b>Total</b>	<b>41</b>	<b>100.0</b>

The findings on Table 4.7 indicate that the highest proportion, 37.0 percent of the headteachers who participated in the survey had participation in in-service training twice and lowest 10.0 percent had no in-service training. In-service training is designed to extend, add, or improve immediate job oriented skills or knowledge. Participation in in-service training makes headteachers be rated higher in relationship oriented leadership as they are perceived as being friendlier, listened more to teachers and avoided being impatient which are characteristics of warm working environment (Okoth, 2000),

The development of headteachers skills and competence through in-service training to undertake the desired duties and raising their confidence about their capacity to deal with pupils’ issues and investing in their capacities is an important step in involving the social curriculum (Commonwealth Secretariat,

2005). There is need to have a forum where ideas can be shared among the members of the school or schools (Checkly, 2004).

Female teachers' perception of utilization of resources is significantly lower than their male counterparts. Therefore, there is need to train and retrain teachers on improvisation and utilization of material –resources for effective teaching (Olagunju, 2003; Awoniyi, 1999).

#### **4.4 Demographic information of senior teachers**

##### **4.4.1 Gender of senior teachers**

The gender of senior teachers was to establish the gender of senior teachers whom the headteachers delegated responsibilities to in management of facilities that influence pupils performance in KCPE. The senior teachers were asked to indicate their gender and the results are shown in Table 4.8.

**Table.4.8: Distribution of senior teachers by gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Females	29	70.7
Males	12	29.3
<b>Total</b>	<b>41</b>	<b>100.0</b>

The data in Table 4.8 indicate that majority, 70.7 percent of the senior teachers who participated in the survey were females representing more than a half of the senior teachers who participated while male senior teachers were 29.3 percent.

#### 4.4.2 Age of the senior teachers

Age is an important factor in school administration as it influences the authority and experiences of the senior teacher (Mbiti, 2007). Age is a factor that distinguishes people. Age is the number of years someone has lived or existed. Age of the senior teachers was to establish the age bracket of the senior teachers. The senior teachers were asked to indicate their age bracket and the results are shown in Table 4.9.

**Table 4.9: Distribution of the senior teachers by age**

<b>Age bracket (Years)</b>	<b>Frequency</b>	<b>Percentage (%)</b>
41-45	4	7.8
46-50	21	51.2
51 and above	16	39.0
<b>Total</b>	<b>41</b>	<b>100.0</b>

The findings on Table 4.9 indicate that majority of the senior teachers, 51.2 percent were in the age bracket 46-50 and only 7.0 percent were in the age bracket 41-45. The responses show that senior teachers involved in the study were distributed across all the age groups. This could therefore, provide desired responses to the research questions especially on management of facilities. An individual's age determines the precision and vigour with which a person performs tasks hence, influences the headteachers' dealing with school management of facilities. Older headteachers are less ambitious and have no interest in recognition. Also, they are less motivated to take action on pupils (Ouru, 2008).

#### 4.4.3 Education level of the senior teachers

The education level was to determine the highest education attainment of the headteachers. The senior teachers were asked to state their education level and the results are shown in Table 4.10.

**Table 4.10: Distribution of the senior teacher by education level**

<b>Education level</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Teachers Training College	17	41.5
University	24	58.5
<b>Total</b>	<b>41</b>	<b>100.0</b>

It is observed from Table 4.10 results that majority, 58.5 percent of the senior teachers attained university education level while 41.5 percent had Teachers Training College education level. Higher levels of education correlate with levels of productivity. The empirical study points to the greater capacity of educated employees to learn on the job and continue to improve on their productivity (Oxaal, 1997).

#### 4.4.4 Professional qualification of the senior teachers

Senior teachers require continued professional growth and development in order to be competent to handle management of facilities. The senior teachers were asked to indicate their professional qualification and the results are shown in Table 4.11.



**Table 4.11: Distribution of the senior teacher by professional qualification**

<b>Professional qualification</b>	<b>Frequency</b>	<b>Percentage (%)</b>
P2	2	4.9
P1	7	17.1
Diploma	9	21.9
B.Ed/BA	15	36.6
Masters	8	19.5
<b>Total</b>	<b>41</b>	<b>100.0</b>

The findings on Table 4.11 indicate that the highest proportion of the senior teachers, 36.6 percent were holders of B. Ed/B.A and lowest, 4.9 percent holders of P2.

#### **4.4.5 Work experience as senior teacher**

Work experience is the knowledge, skill and/or attitude someone gains from doing a job or activity over a period of time. Knowledge needs to be applied and skills practiced over a period of time. The senior teachers were asked to indicate their work experience as senior teachers and the results are shown in Table 4.12.

**Table 4.12: Distribution of the senior teachers by work experience as senior teacher**

<b>Work experience (Years)</b>	<b>Frequency</b>	<b>Percentage (%)</b>
1-5 years	9	22.0
6-10 years	17	41.5
11-15 years	11	26.7
16 and above years	4	9.8
<b>Total</b>	<b>41</b>	<b>100.0</b>

The data shown in Table 4.12 indicates that the highest proportion, 41.5 percent of the senior teachers who participated in the survey had worked for a period between 6-10 years, and lowest 9.8 percent 16 and above years. Work experience could improve decision- making, effectiveness and efficiency (Okoth, 2008).

#### **4.5: Demographic information of accounts' clerks**

##### **4.5.1 Gender of accounts' clerks**

This gender of accounts' clerks' was to establish the gender of accounts' clerks whom the headteachers delegated responsibilities to in management of facilities that influence pupil's performance in KCPE. The accounts' clerks were asked to indicate their gender and the results are shown in Table 4.13.

**Table.4.13: Distribution of accounts' clerks by gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Females	24	58.5
Males	17	41.5
<b>Total</b>	<b>41</b>	<b>100.0</b>

The results on Table 4.12 show that majority, 58.5 percent of the accounts' clerks who participated in the survey were females representing more than a half of the accounts' clerks who participated while male accounts' clerks were 41.5 percent. This may have been in agreement to the Government policy where wives are allowed to join their spouses in their working stations.

#### **4.5.2 Age of the accounts clerks**

Age is a factor that distinguishes people. Age is the number of years someone has lived or existed. Age of the accounts' clerks was to establish the age bracket of the accounts' clerks. The accounts clerks were asked to indicate their age bracket and the results are shown in Table 4.14.

**Table 4.14: Distribution of the accounts clerks by age**

<b>Age bracket (Years)</b>	<b>Frequency</b>	<b>Percentage (%)</b>
41-45	6	14.6
46-50	18	43.9
51 and above	11	26.8
<b>Total</b>	<b>41</b>	<b>100.0</b>

The findings on Table 4.14 indicate that the highest proportion of the accounts' clerks, 43.9 percent were in the age bracket 46-50 and only 14.6

percent were in the age bracket 41-45. The findings show that accounts' clerks involved in the study were distributed across all the age groups. This could therefore, provide desired responses to the research questions especially on management of facilities.

#### **4.5.3 Education level of the accounts' clerks**

The education level was to determine the highest education attainment of the accounts' clerks. The accounts' clerks were asked to state their education level and the results are shown in Table 4.15.

**Table 4.15: Distribution of the accounts' clerks by education level**

<b>Education level</b>	<b>Frequency</b>	<b>Percentage (%)</b>
College	33	80.5
Polytechnic	8	19.5
<b>Total</b>	<b>41</b>	<b>100.0</b>

It is observed from Table 4.15 results that majority, 80.5 percent of the accounts' clerks college education level while 19.5 percent had polytechnic Training education level. Higher levels of education correlate with levels of productivity. The empirical study points to the greater capacity of educated employees to learn on the job and continue to improve on their productivity (Oxaal, 1997). Education opens the mind of an individual to strategic thinking, better problem solving approaches and planning with a view of reducing cases of indiscipline among pupils (Cheloti, 2009). The headteachers involved in the study had attained adequate education level to enable them carry out management of facilities.

#### 4.5.4 Professional qualification of the accounts clerks

Accounts' clerks require continued professional growth and development in order to be competent to handle management of facilities. The accounts clerks were asked to indicate their professional qualification and the results are shown in Table 4.16.

**Table 4.16: Distribution of the accounts' clerks by professional qualification**

<b>Professional qualification</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Copy typist	23	56.1
Book-keeping	15	36.6
KATC	3	7.3
<b>Total</b>	<b>41</b>	<b>100.0</b>

The findings on Table 4.16 indicate that the majority of the accounts' clerks, 56.1 percent were holders of copy typist grade professional qualification and lowest, 7.3 percent holders of KATC. The findings show that the accounts' clerks in public primary schools in Nairobi County were competent to handle the management of facilities by virtue of their professional qualification. Professional qualification enhances the expert power, credibility, confidence and decisiveness in managerial practice (Okumbe, 1999). These are necessary especially in management of facilities.

#### 4.5. 5 Work experience of accounts' clerks

Work experience is the knowledge, skill and/or attitude someone gains from doing a job or activity over a period of time. Knowledge needs to be applied and skills practiced over a period of time. The accounts' clerks were asked to indicate their work experience as accounts' clerks and the results are shown in Table 4.17.

**Table 4.17: Distribution of the accounts' clerks by work experience as accounts' clerks**

<b>Work experience (Years)</b>	<b>Frequency</b>	<b>Percentage (%)</b>
1-5 years	7	17.1
6-10 years	11	28.2
11-15 years	10	24.4
16 and above years	13	31.7
<b>Total</b>	<b>41</b>	<b>100.0</b>

The data shown in Table 4.17 indicates that the highest proportion, 31.7 percent of the accounts' clerks who participated in the survey had worked for a period between 16 and above years, and lowest 17.1 percent 1-5 years. The accounts' clerks' years of service enhances the experience and understanding of school management of facilities. Work experience could improve decision-making, effectiveness and efficiency (Okoth, 2008).

#### **4.6 Gender of pupils**

In Western Nigeria the birth of a boy is more valuable than that of a girl or that it is more important for boys to do well at school (Bakare-Yusufu, 2003). Men become the custodians of education and societal values (Raphael, 1995). With the Kenyan Government's intervention and public awakening parents are now sending their girls to school (Mareng, 2010). Considering that 413,390 girls compared to 426369 boys took 2013 KCPE examination, the gender parity now stands at 49.2 percent girls and 50.8 percent which is the closest we have been towards achieving gender parity in KCPE examination. In 2012, 396,310 girls had sat for KCPE compared to 413,350 girls in 2013 representing an increase of 17,080 girls while boys increased from 415,620 in 2012 to 426369 in 2013 an increase of 10,749 boys (Kenya National Examination Council, 2013).

Kenya had 892, 000 pupils in 1963 and 8,784,550 pupils in 2014 in public primary schools (Ministry of Education, 2014). The patriarchal practices encouraged preference to be given to the education of a boy rather than that of a girl (Kitetu, 1998). Gender disparity exists in education generally and there is need to identify and eliminate all policies that hinder girls' full participation in education (Republic of Kenya, 2007). The imbalance in boys and girls participation in schooling has therefore been linked to the age-long belief to male superhot and female subordinate (Ministry of Education, 2007). However, with the Government intervention and public awakening parents are now sending their girls to school (Mareng, 2010).

Improving access to education has been accorded a high priority in the policies of most third world countries, which clearly reflects the global recognition of the contribution that only education makes to development. Education is the major single factor that can narrow social and gender imbalance in all areas of development.

Although the number of educated children in the world has grown in the past 10 years, boys have proportionately fared much better than girls. In the year 2000, 105 million children worldwide were not enrolled in primary school. This number had declined to 72 million by 2007 and about 39 million of these were girls. This can be attributed to factors such as lack of adequate school facilities, lack of funds and gender inequalities in society at large (UNESCO, 2010).

The 'gender of pupils was to establish enrolment of the boys and girls in public primary schools. The headteachers were asked to indicate the gender of pupils and the results are shown in Table 4.18.

**Table 4.18: Distribution of the pupils by gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Females	11086	52.0
Males	10234	48.0
<b>Total</b>	<b>21320</b>	<b>100.0</b>



The findings on Table 4.18 indicate that slightly over half, 52.0 percent of the pupils were females while 48.0 percent were males. Therefore, there were slightly more females (52.0 percent) than males (48.0 percent). Worldwide, 57 percent of all children out of school were girls down from 59 percent in 1999. On average a child whose mother has no education is twice as likely to be out of school as a child whose mother has some education (UNESCO, 2007).

Changes in the economy with greater incentives for women to work combined with evidence from many societies that daughters are often more likely to care for elderly parents than sons, have started to change this situation and gives the impetus to female education. Evidence of this comes from South-East Asia; where ideologies of female docility and caring are beginning to change with the opening up of new economic opportunities have subsequent delays in the age of marriage and child bearing (McNavy, 2003).

There are some countries where they favour girls. In Latin America, the Caribbean and Europe these disparities are usually small and almost all should be eliminated by 2015 (Hertz & Sperling, 2004), In Chile, pass rates in examinations are higher for girls in primary education and dropout rates are lower (UNESCO, 2003).

#### **4.7 Number of the support staff**

The number of support was to determine the number of the support staff employed working in the school whom the headteachers had to delegate

responsibilities to in management of facilities that influence on pupils' performance in KCPE. The headteachers were asked to indicate the number of support staff they had in the school and the results are shown in Table 4.19.

**Table 4.19: Number of the support staff**

<b>Number of support staff</b>	<b>Frequency</b>	<b>percentage (%)</b>
One	1	2.0
Two	5	12.0
Three	5	12.0
Four	14	34.0
Five	6	15.0
Six and above	9	22.0
<b>Total</b>	<b>41</b>	<b>100.0</b>

The results on Table 4.19 show that the highest proportion, 34.0 percent of the schools had four support staff and lowest 2.0 percent one. The effectiveness and efficiency in the management of facilities of each of the delegated responsibilities to every staff, could contribute to the overall headteachers' management of facilities and pupils' performance in KCPE. It shall be the duty of the CS to provide human resource including adequate teaching and support staff according to the preserved staffing norms. This is in line with the Government's policy to employ the support staff through the BOM in public primary schools who carry out repairs and maintenance of school facilities, cleanliness, security, school transport, clerical work and school feeding

programme in the schools. The BOM may upon such terms and conditions of service as the CEB may determine, employ such staff or hire the services of such consultant or expert as may be necessary for the proper performance of its function (Republic of Kenya, 2013).

#### **4.8 Background of the schools**

This section covers category of schools, average number of streams per class in the schools, average number of pupils per class in the schools and establishment of schools.

##### **4.8.1 Category of the schools**

The category of the schools means the type of gender of the pupils, day and/or boarding. The headteachers were asked to indicate the category of the schools. Category of schools denotes whether the schools are boarding or day meaning some pupils reside at school while other pupils go back home after school. The findings indicated that all the 41 sampled schools were Mixed Day schools.

The Government's aim in having Mixed Dayschools may have been to overcome the challenge of access and increase the Net Enrolment Rate for both boys and girls.

School category has an impact on pupils' discipline and performance (Eshiwani, 1993). Pupils in day schools are more prone to external influence than their counterparts in boarding schools (Kaguthi, 2004). The single sex schools may be more attractive to parents and educationist as a way of minimizing distractions for both the girls and boys, especially as they grow up

(Subrahmanian, 2007). Single sex schools attendance was found to benefit girls in mathematics in Nigeria, eliminating the stereotypical view that girls cannot succeed in mathematics (Kaabwe, 2000).

Research from Uganda suggests that girls only schools and schools where girls form a significant majority of the pupils' body are perceived to be more suitable for the development of female leaders than co-educational schools. The same is true of boys' leadership skills in boys' only schools. When girls are elected to pupils' bodies in co-educational schools, they struggle to prove their capacity and their actions are subjected to intense scrutiny (Male, 2000). Research from Pakistan and Sub-Saharan Africa has shown that single sex education has a positive impact on enrolment and achievement (Kane, 2004). More day secondary schools would promote access and equity to education. (Ministry of Education, 2007; Republic of Kenya, 2005). Therefore, this is also expected in the public primary schools.

The Amman Mid-Decade Review of Education For All reaffirmed the commitment to the Jomtien resolutions. It observed that the provision of basic education, especially for girls, has remained elusive in many less industrialized countries. This was said to be particularly so in Africa, where ethnic tensions and conflicts have displaced many households, thus, denying children opportunities of going to school.

The Dakar Conference of 2000 reviewed developments in achieving Universal Primary Education in the African continent. It set as one of the Education For All goals eliminating gender equality in disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015. This was further endorsed by the so-called MDGs. Among others was a rapid move towards Education For All (ACTIONAID-Kenya, 2004).

By 2015, children everywhere, boys and girls alike, would be able to complete a full course of primary schooling. The achievement of independence heightened pressure to increase the schools' population (UNICEF & World Bank, 2009), A study on single gender education found out that in most cases, females confidence increased in a single gender setting (American Association of African Women, 1998).

#### **4.8.2 Average number of streams per class**

Stream refers to dividing many children into classes (may be 40 each) on the basis of academic performance or randomly from the admission numbers list while average number of streams per class refers to the number of the groups of the streams per class. The average number of streams per class was used because of the great variations in schools and classes. The average number of streams per class was to establish the number of classrooms and school population who used the school facilities. The headteachers were asked to indicate the average number of streams per class and the results are shown in Table 4.20.

**Table 4.20: Average number of streams per class**

<b>Average number of streams</b>	<b>Frequency</b>	<b>Percentage (%)</b>
One	7	17.0
Two	13	32.0
Three	14	34.0
Four	4	10.0
Five	3	7.0
<b>Total</b>	<b>41</b>	<b>100.0</b>

The findings on Table 4.20 show that the highest proportion, 34.0 percent of the average number of streams per class were three and lowest one stream at 7.0 percent. This suggests that the Ministry of Education, Science and Technology strategy to increase access and equity by expanding relatively small, one to three streamed schools has been taken seriously (ACTIONAID-Kenya, 2004).

Primary schools are expected to enrol all children of school age without discrimination. Schools have to be all in-inclusive and cater for children from all socio-economic backgrounds, including street children and children with special needs. Street children who have been exposed to drugs or have emotional stress would need to be rehabilitated so as to fit into formal/ regular schools. This would be done in collaboration with the Children Department. Over-age children who show up at schools should be enabled to attend by establishing one class to serve over-age children of a particular area or cluster

of schools where necessary in the spirit of inclusion (Ministry of Education, 2007). Congested classes (teacher to pupil ratio of 1:70 from 1:40) in some schools determined the number of streams per class (Republic of Kenya, 2012).

#### **4.8.3 Average number of the pupils per class**

The average number of pupils per class in the schools was used because of the great variations in schools and classes. The headteachers were asked to indicate the average number of pupils per class and the results are shown in Table 4.21.

**Table 4.21: Average number of the pupils per class**

<b>Average number of pupil per class</b>	<b>Frequency</b>	<b>Percentage (%)</b>
10-20	1	2.4
21-30	1	2.4
31-40	3	7.3
41-50	9	21.1
51-60	5	12.2
61-70	11	26.8
71-80	7	17.1
81-90	2	4.9
91-100	1	2.4
101 and above	1	2.4
<b>Total</b>	<b>41</b>	<b>100.0</b>

The results on Table 4.21 show that the highest proportion, 26.84 percent of the average number of pupils per class was between 60-70 and lowest were 2.4 percent 10-20. The average number of pupils per class may have depended on the school facilities. The congested classes in some schools where the teacher pupil ratio is as high as 1: 100 or more; while the others had teacher to pupil

ratio of 1:70 from 1:40, delays in funds disbursement by the Government, shortage of supplementary reading books, teaching and learning facilities (textbook to pupil ratio of 1:5) had affected pupils' accessibility to books while at home), and pupils' mobility from public to private and within public schools. The parents cited quality of school as their main reason for transferring their children from one to another (KENPRO, 2010). Pupils' enrolment at primary school level had improved from 892,000 in 1963 to about 9.4 million in 2010. The current public primary schools enrolment is 8,784,550 (Ministry of Education, 2013). Improving access to education has been accorded a high priority in the policies of most third world countries, which clearly reflects the global recognition of the contribution that only education makes to development (UNESCO, 2010).

The small schools could be an indicator of poverty or poor attitudes to education (Ministry of Education, 2007). These have influence in management of facilities by headteacher's and pupils' performance in KCPE. The school facilities could be inadequate hence, hindering pupils' performance in KCPE. The school size has been reported to have an effect on pupils' performance. Larger schools perform better than smaller ones. This could be due to the fact that larger schools attract better headteachers with better school management skills, which could enhance better pupils' performance. Larger schools receive equipment and textbooks promptly and effectively. Studies have shown that pupils' enrolment and size of the school were found to correlate negatively with pupils' achievement (Dimziu, 1989).



#### 4.8.4 Year of establishment of schools

The year of establishment of the schools was to determine how long the schools have existed. The school plant is the main school facility; therefore, its year of establishment may influence its management in terms of repairs, maintenance and improvement. This may influence the pupils' performance in KCPE. The headteachers were asked to indicate the establishment of the schools and the results are shown in Table 4.22.

**Table 4.22: Year of establishment of the schools**

<b>Establishment (Years)</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Before-1950	2	4.9
1951-1960	20	48.8
1961-1970	7	17.1
1971-1980	3	7.3
1981-1990	6	14.6
1991-2000	2	4.9
2001-date	1	2.4
<b>Total</b>	<b>41</b>	<b>100.0</b>

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The data in Table 4.22 indicates that almost half of the schools, 48.80 percent were established between the years 1951 -1960 and latest 2.44 percent 2001 - date. At independence, Kenya inherited an education system that was characterised by racial segregation and different types of curricula for various races, namely: Europeans, Asians, Arabs and Africans (UNESCO, 2005).

The colonial schools had a different curriculum from that of African independent and the 65 missionary schools. Before 1960, free and universal primary education had not been attended to African children in any of the British colonies racial discrimination in primary education was still intact (Otach, 2005). The expansion of primary education remained crucial in the colonial era. The situation did not radically change with achievement of independence in 1963. The achievement of independence heightened the pressure to increase the school population and a rapid move toward Universal Primary Education (UNICEF & World Bank, 2009).

#### **4.9 Headteachers' role in facilitating school facilities that influenced pupils' performance in KCPE**

Quality and availability of facilities affect the implementation of a curriculum. School facilities help pupils to learn and master principles which could otherwise be complex or not readily understood. The availability of School facilities may help pupils to learn and master principles which could otherwise be complex or not readily understood. The availability depends on the provision by the headteacher of a school (Okumbe, 1998).

School facilities play pivotal roles in the actualisation of the educational goals and objectives by satisfying the physical and emotional needs of the staff and pupils of the school. The physical needs are met through provision of school facilities. The emotional needs are met by creating pleasant surroundings, a child- friendly atmosphere and an inspiring environment. Management of

facilities is a process that ensures that academic and non-academic facilities support the operation of a school (Fenker, 2004). The accounts' clerks were asked to rate the extent to which the hewadtecher facilitates the acquisition of school facilities using the scale as: very adequate, adequate, fairly adequate or inadequate and the results are shown in Table 4.23.

**Table 4.23: Accounts' clerks response on headtewachers facilitating school facilities**

School facilities	Fairly adequate		nadequate		Total	
	f	%	f	%	f	%
Exercise books	41	100			41	100
Buildings	41	100			41	100
Furniture	41	100			41	100
Textbooks			41	100	41	100
Radios			41	100	41	100
Equipment			41	100	41	100
Computers			41	100	41	100
Displays			41	100	41	100
Charts			41	100	41	100
Playgrounds			41	100	41	100

The findings on Table 4.23 indicate that all the 41 sampled schools had fairly adequate exercise books, buildings, and furniture and inadequate textbooks, radios, equipment, computers, displays, charts and playgrounds. Inadequate textbooks, radios, equipment, computers, displays, charts and playgrounds, concurs with an empirical study in Nigeria which established that the essential facilities such as equipment like radio, television, computer, chemicals, specimens, radios, tape- recorders, stove, Bunsen burners, models and charts were not available in schools (Nwoji, 1999).

Most school facilities are inadequate is in agreement with early findings (Ministry of Education, 2007; Mbwesa, 1996; Omondi, 1998; Kenyua, 2001). Inadequate school facilities could be due to poverty or wrong priorities set by the school head (Omondi, 1992). Headteachers need to make provision for funds to purchase, new, repair, maintain and improve school facilities to enhance pupils' academic performance (Silinis, Mulford & Zarins, 2002). The inadequate school facilities put the pupils' academic performance in jeopardy

**Learning materials** are key ingredients for the learning teaching and process. They include the equipment library facilities and pupils' writing materials. They organize the presentation of the information, provide children with opportunities to use what they have learnt and in case of tests The **rulers** were used to draw lines and to point or show pupils key points on the blackboard; **chalks** were used to write on the blackboard; dusters were used to rub the blackboard and quizzes they help the teachers to assess pupils' learning (Fordham, 2002).

**Textbooks** were used to do class work, assignments and as supplementary readers. Text books are a basic requirement of the MoEST and are one of the common facilities in school (Otiende, Ezaza & Boisvert, 1997). A study on the importance of textbooks in learning economics found that nothing has so far replaced written materials as the key element in education process as a consequence of which textbooks are necessary to learning at all levels of schooling. Textbooks are critical in maintain the standards of quality

and direction in the curriculum (Barbra, 1989). In Kenya, the Textbook- Pupil Ratio (TPR) for lower primary had improved from one textbook for more than 10 pupils before 2003 to 1:3 by 2007, reading 1:2 in 2008 and 2009. For upper primary TPR had improved from 1:2 in 2007 to almost 1:1 in 2008 and 2009 for the majority of the schools. However, these have weakened sharply since 2009, and small schools with low enrolment do not benefit from economies of scale, and had ratios far higher than the national average. This may have enabled pupils to get access to text books to do their assignments at home and the teachers may have increased the assignments given to the pupils which may enhance pupils' performance in KCPE (Republic of Kenya, 2012).

**Exercise books** were used by the teachers to prepare schemes of work, lesson plans, lesson notes, record of work, record pupils' marks, write reports, minute book by BOM, and occurrence book for teachers on duty. **Radios** could be used for school broadcast programmes. Radio is an audio technology which can reach many pupils. Mass media such as radios reach a wider audience and would be quite effective (Otiende, Ezaza & Boisvert, 1997). Radio may be used to reach the youth in the rural areas (UNESCO, 1980). Delivery of distance education depends on communication technology, namely: print correspondence, telephone, audio-conferencing and radio, audio-tapes, video and computer based technology (Willis, 2003).

**Computers** were used for the teaching and learning process, typing letters and tenders. Computers are increasingly becoming important equipments in schools. They are audio-visual aids which could be used as reference and also provide pictures that may give pupils long lasting experience. In addition they allow collaboration with other institutions and researchers. The MoEST is striving to make schools ICT compliant. However, apart from the capital needed for installation, some schools lack electricity supply (Republic of Kenya, 2005).

Computers help in constructing knowledge, developing thinking skills, building learners' ability to reflect and generating strategies for defining a problem and working out solutions rather than working on answers that a teacher wants (Sultan & Wood, 2009, Muyinda, Lubega & Lyndi, 2009). A teacher in using a computer as a technology tool acts more as a facilitator instead of dissemination of knowledge thus giving the purpose to learning experiences (O'Kennedy, 1995). People irrespective of their age or tenure are willing to be trained in e-learning. Also, he found out that teachers have a positive attitude towards adoption of ICT in teaching (Gakuu, 2007).

In a case study of computer integration in mathematics in United Kingdom, noted that, it was a result of individualised textbook learning schemes conducted to be the cause rather than the cure of pupils' misconceptions in mathematics (Sunderland, Oliver & Weeden, 2004). Therefore the acquisition of computers in schools may enhance teaching and learning process in schools

hence, may enhance pupils' performance in KCPE. Information Communication Technology has helped in building effective human capital in many nations by strengthening human capital in economic, social, political and other sectors in many nations (Mason, 2003). Online learning allows pupils to make more choices and become more flexible as they gain opportunities to learn new and important communication (Mathews & Curry, 2004).

**Charts** were used to draw diagrams and illustrations. Charts could give long lasting experience among pupils **Displays and exhibits** enable pupils to see details of the environmental problems (Otiende, Ezaza & Boisvert, 1997). Thus, there may be need for the teachers to make use of their local environment for the teaching and learning process since it could be free, accessible and convenient to enhance pupils' performance in KCPE. The quality of education that pupils receive bears a direct relevance to the availability or lack thereof of school facilities and the overall atmosphere where learning takes place (Stoner, Freeman & Gilbert, 1996).

The use of **school materials from the immediate environment** enables naturally to develop operative cognitive on account of their familiarity and concomitant interaction with their environment. Ideas and concepts that emerge from the new experiences flowing from the teacher's improvisation effort (Tsuma, 1998). **Improvisation of school facilities** enhances pupils' performance in KCPE (Nyagah, 1997). The environment provides raw

materials for industries that determine the economic development of a country (Otiende, Ezaza & Boisvert, 1997). Therefore, teachers may use materials from the environment teaching and learning process to enhance pupils' performance in KCPE. Majority of the teachers do improvise teaching and learning materials from available materials from the environment and they did believe that things from around can be used (Ezendu, 1997).

A **supposer** is software that provides visual representations) was used to investigate visual obstacles in the learning of three dimensional geometry. It was reported that students who used the supper understood diagrams and their limitations better than students from traditional classrooms. The supposer seems to be flexible and allows for students explorations of diagrams (Yerushalmy & Chazan, 1990). The study focused on three-dimensional geometry and incorporated its application to real life situations. Activities rich in models and other manipulative materials provide learners with opportunities to construct their own knowledge and understanding at the same time making sense of the problems they pose or are given to solve (Grant & Searl, 1997).

**Classrooms** provided space for teaching and learning process. School environment and classroom climate are major valuables influencing the effectiveness of education (Kabiru, 2009). The appearance of the **school plant** as well as the school compound are very important as a source of inspiration and motivation to members of the community and stakeholders (Okumbe, 1998). Many educators believe that schools play an important role



to pupils' effective cognitive development. They have shown that pupils' perception about the classroom conditions has consistent between the nature of the classroom conditions and pupils' achievement. Further evidence indicates pupils achieve better if they have the classroom conditions (Goh & Fraser, 2000; McRobbie, Roth & Lucas, 1997).

**Offices** were used for school administration, strategically positioned for easy school supervision and they included those of the headteachers, deputy headteachers, clerks and senior teachers. Water supply was stored in large **plastic tanks** to ensure continued supply for school use in drinking, cleaning the school facilities, cooking and teaching.

**Book storage** ensured safety and security of exercise books and textbooks before they are issued out to the teachers. **Gates and fences** provided security to the school. **Sanitary facilities** like toilets and water taps were used as washrooms and maintenance of good health (Ministry of Education, 2009).

**Pupils' desks, lockers and chairs** were used in the classrooms for the pupils to sit to learn; tables were used to write, eat, for teaches to teach, plan and mark pupils work, and visitors use; cupboards were used to store examinations, exercise books, textbooks, rulers, geometric sets, pencils, pens, chalks and specimens The **rulers** were used to draw lines and to point or show pupils key points on the blackboard; **chalks** were used to write on the blackboard; dusters were used to rub the blackboard.

The headteachers' **notice board** was used to display the funds disbursed to the school, list of teachers, list of support staff, list of class teachers, school routine, school enrolment, KCPE results analysis, list of BOM and their contacts, duty roster, calendar of events, calendar, food menu, school vision, mission, core values and motto, circulars/letters and tenders.

Availability of **water** and sufficient **toilets** for pupils is an important support mechanism in sustaining school attendance. Girls in particular, face significant problems where toilets are not available particularly in their adolescence years. The availability of good clean water is essential for ensuring the health of pupils. Privacy is also very important in toilet facilities for girls (Lloyd, Mete & Sathat, 2002). A recent report by Rockefeller Foundation stresses that lack of suitable toilets and water for washing and drinking is a major factor in low attendance rate (Republic of Kenya, 2002). Provision of separate **lavatory** and toilet facilities for boys and girls has been observed to have inadequate sanitary facilities (Inter-Agency Commission, 1990).

**Playgrounds** were used for games like football, physical education, parades, Prize Giving Day and pastoral meetings. Some may have been hired out for weddings, fund raisings and national elections. The grounds and sports facilities help the pupils to reduce the academic pressure hence, enhancing academic performance. In the study on management of facilities in the United Kingdom, when games facilities are used they enable the less able children to

stay on task and remain motivated for a longer period (Denyer, 1998). The grounds and sports create a happy atmosphere which will lower stress and buttress pupil morale in the face of severe academic pressure (Griffin, 1994).

**Obsolete facilities** were recycled as a means of cost saving activity. However, these types of school facilities varied in quality and quantity from one school to another. The school facilities enhanced the teaching and learning process hence may have influenced the pupils' performance in KCPE (Wango, 2009).

**Paper punches, staplers envelops and strings** were used to handle examinations; candles were used as a source of heat and light to teach science subject; trays and tins The basins were used to carry and plant specimen.;

**Specimens** were used for experiments and demonstrations; **rugs** were used for cleaning; **surgical blades** were used for dissections and cutting tiny specimen.

**Weighing balances** were used for measuring chemicals and determining weights; **cleaning materials** such as buckets, brushes, detergents, hose pipes, and brooms were used for hygiene.

**Electrical materials** like bulbs, inflorescence tubes, wires, meter box and cables and batteries were used for the provision of electricity; **containers** like jerricans, sufurias, cups, plates and cutlery were for cooking and eating. The **globes** were used to teach subjects like History and Geography.

**Clocks** were used to manage the school timetable; **First-Aid Kits** were used to treat minor injuries; **foot balls, and nets** were used to play during games

and Physical Education; **goal posts** were used to play football, **flag posts** were used to hoist the national flags; **work shop tools** were used for repair and maintain the school facilities and **type writers** were used to type letters, newsletters and tenders.

The **geometric sets** were used to do mathematics; pencils and pens were used for writing. Staff room notice boards were used to post master and examinations timetables, list of boys and girls, school routine ,calendar of events, job advertisement from TSC, calendar, KCPE results analysis, circulars, list of staff, charts, posters, pictures memos, list of teachers on duty, school rules and regulations.

### **Answering the research questions**

This section deals with the findings of the study based on the research questions. It covers extent to which level of adequacy of the school facilities headteachers managed influenced pupils' performance in KCPE, extent to which the level of competence of headteachers in management of facilities influenced pupils' performance in KCPE, extent to which the gender of the headteachers' in management of facilities influenced pupils' performance in KCPE, extent of delegation of responsibilities to staff by headteachers in management of facilities and how it influenced pupils' performance in KCPE and extent to which level of documentation of facilities by headteachers influenced pupils' performance in KCPE

**4.10 Extent to which level of adequacy of the school facilities headteachers managed influenced pupils’ performance in KCPE**

Adequacy is the sufficiency of the facilities managed by the headteachers. The level of adequacy of school facilities was to determine the sufficiency of the facilities the headteachers managed that influenced the pupils’ performance in KCPE. The senior teachers were asked to rate the extent to which level of adequacy of the school facilities headteachers managed influenced pupils’ performance in KCPE and the results are shown in Table 4.24

**Table 4.24: Extent to which level of adequacy of school facilities headteachers managed influenced pupils’ performance in KCPE**

<b>Extent of adequacy</b>	<b>f</b>	<b>%</b>	<b>KCPE results mean (%)</b>
Very adequate	4	10.0	58.8
Adequate	10	24.0	47.4
Fairly adequate	25	61.0	40.3
Inadequate	2	5.0	36.9
<b>Total</b>	<b>41</b>	<b>100.0</b>	

The results on Table 4.24 indicate that the schools with very adequate facilities had KCPE results mean grade of 58.8 percent while those with inadequate facilities had 36.0 percent. Therefore, the level of adequacy of the school facilities the headteachers managed influenced the pupils’ performance in KCPE. The availability and adequacy of the school facilities promote effective teaching and learning process in schools while their inadequacy affects the academic performance negatively (Mapaderun, 2002; Oni, 1995).

Headteachers have to make provision of funds to buy school facilities (Silins, Mulford & Zarins, 2002). Inadequacy of textbooks has been cited as major hindrance to implementation of the education curriculum (Kinyua, 2001). In an empirical study in Nigeria, the essential facilities such as equipment like radio, television, computer, chemicals, specimens, radio tape, stove, Bunsen burners, models and charts were not available in schools (Nwoji, 1999).

School facilities should be provided in quantity and quality in the schools for effective management and pupils' achievement (Umeoduago, 2000), Inadequacy of textbooks has been cited as major hindrance to implementation of the education curriculum (Kinyua, 2001).

Both teachers and pupils need places to research, read, write, confer, interact, view, listen, think, experiment and record. Pupils need places to transact their affairs or to gather for social purposes. Teachers need office space, conference rooms for team planning, facilities for diagnosis of pupils needs, and facilitates for preparing instructional presentation. School facilities are the material resources provided for staff and pupils to optimize their productivity in the teaching and learning process. The realization that the transfer of knowledge does not only take place in four walls of the classroom from the teacher to the pupils but rather that learning takes place through discovery, exploration, interaction with the internal and external environment has necessitated the creative and innovative development of teaching and learning facilities that reflect these changes (Asiabaka, 2008).

The proper up-keep of any institution required continuous maintenance. All members of the community have to understand that they are expected to be watchful over the fabric of buildings and report anything that seemed wrong (Griffin, 1996). There is an issue associated with the teaching-learning materials as a major challenge facing the education sector. Under the Free Primary Education programme, every pupil is entitled to free writing materials for example pencils, pens and exercise books. It emerged that textbooks are being shared in the ratio of one textbook to five pupils. Sharing of textbooks affects their accessibility while at home and many have to do their homework early in the morning the next day when in school. This said something about the amount of work the teachers has to give to the pupils.

Some schools do not have adequate classrooms to accommodate the large number of pupils enrolled under the Free Primary Education programmes. For instance, classrooms appeared to be generally congested and there was hardly any space for free movement during lessons. Also, a number of classroom conditions were poor, for instance, lighting depended on the sunlight which is sometimes inadequate. Further, in some schools had introduced school mats for the children to sit on since there were no sufficient desks. But majority of the teachers felt that the sitting on the mat affected the children's writing skills and general physical development (Okwach & George, 1997).

The Government is to construct/renovate physical facilities/equipment in public institutions in disadvantaged areas, particularly in ASALs and urban slums. However, although the country is on track toward attaining the access targets at national level, there are regional inequalities which would constrain the country from attaining Education For All, Millennium Development Goals and the Kenya Vision 2030 goals (KENPRO, 2010).

Some teachers lacked enthusiasm as water cut offs are not attended (Omondi, 1998). Technologies can play an important role in enabling students gain skills and motivation in the process of acquiring knowledge (Grabe & Grabe, 2007). To conserve development resources, expansion of schools will be based on existing single and double streams to at least triple streams classrooms before establishing new ones. Overstretched school facilities, teaching materials, shortage of teachers and overcrowding in schools, high pupil-teacher ratio (70:1 instead of 40:1) due to Free Primary Education which started in 2003, recommended efficient utilization of resources for effective management of public primary schools (Republic of Kenya, 1997).

The provision of materials for learning environmental education is not enough (Kinyua, 2001; Mbwesa, 1996). Those camps for Internally Displaced Persons (IDPs) can offer services and opportunities for schools, For example, in the camps set up as a result of the conflicts in the Darfur region of Sudan many girls have gained access to education for the first time (Save the Children, 2006).



Public opinion and legislation are increasingly expecting that the headteachers will expose “green” values and environment protection (Everard, Morris & Wilson, 2004), Improving school facilities and environment play a crucial role in enhancing attendance, performance and welfare of pupils. It will be the schools’ responsibility to invest grants/monies wisely or investments which will have the biggest impact in improvement of both boys and girls (Ministry of Education, 2013).

Expanding the availability of school facilities is clearly a first step towards Universal Primary Education. India’s rapid progress toward universal access to primary education has been aided by expansion in the number of schools. Between 1950 and 2002, the number of primary schools in India increased threefold as the number of upper primary schools by 15 times. This has created a significant expansion of elementary education facilities, with a positive impact on school attendance among the eligible age group (Subrahmanian, 2007).

Poverty that spans generations is seen as both a characteristic and cause of chronic poverty of school facilities (Moore, 2001). Kenya had 892, 000 pupils in 1963 and 8,784,550 pupils in 2014 in public primary school (Ministry of Education, 2014). The education sector has faced the challenges of overstretched school facilities over the last 50 years due to the overwhelmingly large pupils’ enrolment due to Free Primary Education

(Ministry of Education , 2013),. This may have an influence on pupils' performance in KCPE.

The Ministry of Education is striving to make schools ICT compliant. However apart from the capital needed for installation, some schools lack electricity supply (Republic of Kenya, 2005). The quantity and quality of school facilities affect the implementation of a curriculum. Teaching facilities help pupils to learn and master principles which would otherwise be complex or not really understood. The availability depends on the provision by the headteacher of the school who is also the secretary to the BOM (Okumbe, 1998).

Less loss of teaching and learning facilities due to security issues may make facilities readily available for teaching and learning process. The BOM carries out the repairs, maintenance, improvement and purchase of new school facilities depending on the urgency, availability of funds and in accordance with the procurement procedures set up in the Procurement Act and school infrastructural Handbook They may source the funds from the Government, parents, communities and donors and other stakeholders (Ministry of education, 2007). Studies in the economic analysis in class size showed that there is a significant relationship between class size and learning achievement (Hanushech, 1989; Jorgenson & Frauneni, 1989). Increase in the class tends to reduce educational achievement (Finn & Achilles, 1990). Large class sizes tend to have negative impact in learning achievement (Correa,

1993). Therefore, level of adequacy of class size the headteachers managed influences the pupils' performance in KCPE.

There is evidence that most science teachers in Kenya do not follow the recommended teaching methods and teaching approaches. Majority of the teachers do not encourage learner-centered approaches. Teachers dominate in the class activities with little pupil participation (Ndirangu, 2006). Science teachers often have intense in implementing learner-centred interactions but often concern about how to put it in practice (McGilly, 1995: Cuban, 2009). This could be due to the level of adequacy of the school facilities. There is a positive relationship between the degree of implementation and pupils' achievement scores (Hargreaves, Early, Moore & Manning, 2001). This implies that pupils' KCPE results could improve if the level of adequacy of school facilities is increased appropriately in the schools.

Students faced difficulties not only in naming solids but also in identifying the number of edges, vertices and faces of the solids. The solids used in the study were cubes, cuboids, cylinders, square based pyramids, triangular prisms and tetrahedrons. The prisms were named as rectangular based pyramids and the tetrahedrons as triangles (Triadafillidis, 1992). This may have been caused by lack or inadequacy of these facilities in the schools. The headteacher should set up and follow proper management and administration so that all school facilities in the possession of the school can be utilized properly maintained

regularly and disposed lawfully (Republic of Kenya, 2002). This could make the school facility always adequate for school use.

The implementation of school facilities has been partly hampered by lack of school facilities. The Minister for Education, Professor George Saitoti, mentioned that the situation is made worse by the parent apathy of communities and parents who believe that due to the implementation of Free Primary Education the Government should provide these school facilities (Ministry of Education, Science and Technology, 2003).

In the Master Plan Education and Training (1997-2010), it has noted that physical facilities have the quality of education. The Minister for education acknowledged in a report that classrooms are some of these inadequate facilities in schools. He said that with increased enrolments of 1.3 million we require 32,500 extra classrooms for them. This is in addition to the sanitation facilities that are required. Recently, inspection report informed that most of the existing physical facilities are in very poor condition and need rehabilitation. More space and furniture are necessary if enrolments are raised. Moreover a certain minimum class space per a pupil and other requirements such as furniture, toilet facilities and recreational grounds are a pre-requisite for quality education (Republic of Kenya, 1999).

Although textbooks are provided under the Government's policy of Free Primary Education the ratio of 1: in the lower primary and 1:2 in upper

primary the provision is currently inadequate. Teachers' guides and other teaching materials are provided but supplementary reading materials are not provided under the Free Primary Education (Republic of Kenya, 2003).

Instructional materials cannot be effective unless they reach the classroom: they cannot promote equitable learning unless they reach all the classrooms (Inter-Agency Commission, 1990).

Education systems are more resistant to innovations than industrial and business enterprises. Teachers are more difficult to change than farmers or physicians. Permanent system whether people, groups or organizations find it difficult to change themselves. They tend to carry out routine operations and maintain the existing relationships with the systems. Any change will automatically will reduce production and at least unfit new habits patterns are formed (Dean, 1995). Improvisation of inadequate school facilities is mostly affected due to teachers' difficult to change to new innovations.

Inadequate school facilities lead to other shortcomings, the major one being failure, class repletion rates, leading to drop outs for girls (Kwesiga, 2000). Learning takes place in enclosed classrooms under the instruction and supervision of trained teachers with rigid routines (UNESCO, 2010). In Azerhajian and Tajiskstan an ability to contribute wood for school heating winter kept a number of IDPs out of classroom (UN, 2010).

#### **4.11 Extent to which the level of competence of headteachers in management of facilities influenced pupils' performance in KCPE**

Competence is a combination of attributes underlying some aspect of successful performance such as industrious, flexibility, self confidence and thoroughness. The level of competence of the headteachers was included in the study to assess how it influenced pupils' performance in KCPE. The senior teachers were asked to rate the extent to which the level of competence of the headteachers in management of facilities influenced pupils' performance in KCPE and the results are shown in Table 4.25.

**Table 4.25: Extent to which level of competence of headteachers in management of facilities influences pupils' performance in KCPE**

<b>Extent of competence</b>	<b>f</b>	<b>%</b>	<b>KCPE results mean (%)</b>
Very high competence	29	70.7	46.3
High competence	12	29.3	44.2
<b>Total</b>	<b>41</b>	<b>100.0</b>	

The findings on Table 4.25 show that the schools managed by headteachers with very high competence in management of facilities had better KCPE results mean grade (46.3 percent) than those with high competence (44.2 percent). Globalization and communication technologies have increased the pressure on all businesses to perform. Recent research has shown that it is not primarily or technical competence that determines your professional effectiveness. The biggest impact on headteachers' professional

success is how well they manage themselves and their working relationship with staff to which they delegate responsibilities in management of facilities that influence pupils' performance in KCPE (Seymour & Sherrington, 2001).

A competent headteacher implements school systems and procedures in a school, takes care of pupils' welfare and provides a friendly environment for teaching and learning process (Mullins, 2005). A competent headteacher spells out the aims and objectives to be achieved in the school and strategies to direct individual effort (Kombo, 1998).

Competent headteachers increase their effectiveness by identifying and developing their critical emotional intelligence skills they need. There are two types of emotional intelligence that determine performance as a competent headteacher. The first is ability to handle management of facilities that influence pupils' performance in KCPE. Top performers use their emotions as a guide in improving management of facilities that influence pupils' performance in KCPE. The second is the competent headteachers' ability to be sensitive to staff and know how to make a difference to the pupils' performance in KCPE. The school headteachers' level of competence is reflected in their speeches and behaviour, staff recruitment, pupils performance, expectations of staff and pupils, and allocation of school facilities for academic achievement (Mbiti, 2003).

Competent headteachers are aware that the personal traits such as industrious, flexibility, self confidence and thoroughness contribute to successful academic

achievement. The headteachers' offices, staffrooms, playgrounds, gates and toilets are strategically positioned therefore, enhancing effective and efficient supervision of the school activities. Competent headteachers have knowledge and understanding which would underpin effective performance in management of facilities (Prokopenko, 1998).

The school culture as the way things are done in the school. Competent headteachers set the pace by creating a culture that is disciplined and accommodative through organizational socialization. A strong culture tends to have sets of values and norms that bind staff and foster commitment (Barth, 2002). This could help to achieve effective and efficient management of facilities which may enhance pupils' performance in KCPE. The school climate refers to a set of internal characteristics that distinguish one school from another.

The behaviour of school is influenced by the school climate created by a competent headteacher. Positive climate that is warm and child-friendly encourages learning. The main competencies for an effective headteacher include: contextual awareness that is demonstrated awareness of current educational issues, political environment, and knowledge of the local community and of other's needs, awareness of issues related to ethnicity, gender and knowledge of school policies (Mullins, 2007). This may enhance management of facilities that influence pupils' performance in KCPE.



Headteachers should try to create the climate in the school to be an atmosphere of reconciliation, understanding, cooperation and good-will and the rest of the school will follow suit. In a school managed by a competent headteacher, planning is mainly done during staff meetings and daily briefings to enhance team work in management of facilities that influence pupils' performance in KCPE (Okinda & Owour, 1995). Schools' management of facilities required intermixture of experts in different areas. This demands that the headteachers have to possess the necessary competence in human relation skills to assemble and utilize the relevant staff within and outside the school for efficient management of facilities. The headteachers' competence in coordinating school activities plays a significant role to enhance management of facilities that influence pupils' performance in KCPE (Asiabaka, 2008).

Competent headteachers have conceptualisation of school management of facilities, its environment as well as functions, historical development and the theories of management; understand the closely related concepts of leadership, authority and power followed by a treatise on discipline. In addition, they need to be well equipped with the experience, knowledge, skills and positive attitude towards work. They closely relate managerial functions of communication, decision making, and supervision, financial and human resource as management lubricants to be well articulated to the letter in management of facilities that influence pupils' performance in KCPE (Mbiti, 2003).

Management of schools by competent headteachers is a prerequisite of efficient and effective utilization of school facilities and staff in an effort to establish and maintain quality (Republic of Kenya, 1997). That when teachers feel that a competent headteacher values them in delegation of responsibilities they are more likely to increase their level of delegated responsibilities in management of facilities ratification and performance (Dean, 2001). Transformational leadership is the basis of modern learning organizations in both business and schools (Daft & Marcie, 2006; Northouse, 1997). Transformational leaders can be participative in facilities management. A competent headteacher practices transformational leadership (Bass & Avolio, 1993),

By promoting a forum for professional discourse, headteachers as instructional leaders, construct a school culture through which teachers can redefine curriculum, teaching and learning, translating it into new classroom practices as they build the relationships characterised by mutual trust, risk taking and experimentation, all in a supportive and professionally challenging environment in facilities management (Checkley, 2000). This could be possible in schools managed by competent headteachers. Competent headteachers show transformational leadership focus on advancing staff and pupils' growth which improves strategy formulation for improvement based on the analysis of use the management of facilities on pupils' performance in

KCPE. They have the ability to collect and use data from a variety of sources (DuFour, 2002).

The presence of the headteacher in school is significant. The headteachers need to be seen in school. This may be practical for headteachers who are competent (.Mbiti, 2007). The competent headteachers have to ensure that there is environmental and social protection like negative impacts such as noise and dust pollution, liquid, gas and solid waste disposal, excreta disposal, work related accidents, vandalism, graffiti, traffic accidents, land conflict, security, ecological problems, communicable diseases and sexual harassment (Leithwood & Jantzi, 1999). Many scholars have acknowledged that the role of a competent headteacher is the most significant in enhancing school performance and pupils' achievements (Halluger & Heck, 1998 & Cotton, 2003). Researchers have identified the headteachers as the key factor in determining an efficient school (Chrispeel, 2002). The headteacher is the flag bearer in the school management of facilities that influence pupils' performance in KCPE

The quality of education depends on the motivation and competence of the headteacher. In addition, to the attitudes of the teachers towards the leadership systems adopted by the headteachers could contribute to the morale of the teachers and this would affect the learners and other stakeholders in case they are not involved in the school programmes (Kibe, 1996).

An effective headteacher is knowledgeable about the principles of management and will provide good management if she/he is competent in school development, planning, management of the curriculum, staff, school facilities and trainer of trainees' skills. The competence developed towards job performance is a critical factor in management tasks (Ministry of Education, 1999).

The competence of a headteacher matters when it comes to pupils' performance in education and management. The way the headteacher structures, manages the school, relationship with subsystems, teaches and pupils has a strong effect on pupils' performance (Olembo, 1994). A competent headteacher ensures at the beginning of the term that the buildings, stores and equipment are in good condition (Bennaars, Otiende & Boisvert, 1994). This makes the school facilities readily available for school use hence, enhances pupils' performance in KCPE.

#### **4.12 Extent to which the gender of the headteachers in management of facilities influenced pupils' performance in KCPE**

The gender of headteachers in management of facilities was included in the study to establish how it influenced pupils' performance in KCPE. The headteachers were asked to indicate their pupils' performance in KCPE and the results are shown in Table 4.26.

**Table 4.26: Extent to which the gender of headteachers in management of facilities influenced pupils' performance in KCPE**

Gender of headteachers	f	Year	2008	2009	2010	2011	2012
Females' KCPE mean (%)	26		49.1	50.6	48.0	50.1	46.7
Males' KCPE mean (%)	15		45.6	45.1	45.0	31.7	43.4

The data on Table 4.26 show that the pupils' performance in KCPE in the schools managed by female headteachers had better mean grades than those of their male counterparts. Female managers are rated higher by subordinates on interpersonal skills as well as factors such as task, behaviour, communication and ability to motivate others. Male teachers tend to be competitive and individualistic (Daft, 2008). These attributes of the headteachers have an influence in management of facilities and pupils' performance in KCPE. Women motivate young girls to go to school and perceive themselves as agents of change (Subrahmanian, 2007). This may enable them to enhance their management of facilities that influences pupils' performance in KCP.E.

Investing in adult women is one of the interventions that can have a significant and meaningful impact on female education. For example, those women who are employed as headteachers may enhance management of facilities that influence pupils' performance in KCPE. Headteachers serve as key factors in the academic achievement of the schools and success of its pupils (Cotton, 2003; Heck, 1992).

Female headteachers are more autocratic than their male counterparts (Kariuki, 1998; Njuguna, 1998). In contrast, the overall situation in the education sector in Kenya and Sub-Saharan Africa as a whole, reveals that females are disadvantaged at all levels of education in terms of access, participation and performance (FAWE, 2007; Ministry of Education, 2007). Gender disparity at all levels of education continues to be the greatest challenge to the Government (Ministry of Education, 2001). An individual's sex seems to make very little difference to job performance, except perhaps where brute strength was involved. Studies have shown consistently that there are few differences between men and women in such key areas such as problem-solving ability, analytical skills, learning ability and motivation.

The one feature of working life where differences are likely is in respect of absenteeism, where women consistently have higher rates than men, due mainly to their primary role in caring for the children of the family (Cole, 2005). The empowerment of women through supportive opportunity structures encourage and enable them to realise their full potential (Alsop & Heinsohn, 2005).

There is need to expand in the women's ability to make strategic life choices in a context where the ability was previously denied to them. This will make them more useful especially as headteachers (Kabeer, 2001). Experiences from India indicate that women's collective action can have a positive impact in the development of women's capabilities as well as contribute to changes in

the intergenerational reproduction of values and norms relating to gender equality (Jain, 2004). This implies that the headteachers' gender in management of facilities may influence pupils' performance in KCPE.

Gender influences people's attitudes social roles and responses to situations. Females are understanding, kind, soft but firm in nature. Their male counterparts are more often aggressive, gender of decisive and quick in decision-making (Garba & Garba, 2000). Therefore, the gender of head teachers in management of facilities may influence pupils' performance in KCPE.

Some studies indicate that there is no significant difference in the manner in which men and women lead (Bass, 1990; Carless, 1998). In the study on the analysis of the relationship between leadership and gender in schools revealed men as more directive and bureaucratic while women are more collaborative and rational (Limerick & Anderson, 1999). Thus, gender of headteachers in management of facilities may influence pupils' performance in KCPE. Research has shown contradicting findings on the gender differences leadership characteristics. Some studies indicate that there is no significant difference in the manner in which men and women lead (Bass, 1990; Carless, 1998).

No difference in transformational leadership characteristics between male and female headteachers. Gender does not have an effect on the perceptions of transformational leadership in regard to mandated school reform

(Reichanadter, 2005). This could also be possible in the headteachers' gender in management of facilities that influences pupils' performance in KCPE

#### **4.13 Extent of delegation of responsibilities to staff by headteachers in management of facilities and how it influenced pupils' performance in KCPE**

Delegating is assigning to staff certain responsibility. The extent of delegation of responsibilities to staff by the headteachers in management of facilities was included in the study to determine how it influenced pupils' performance in KCPE. The senior teachers were asked to rate the extent of delegation of responsibilities to staff by the headteachers in management of facilities and the results are shown in Table 4.27.

**Table 4.27: Extent of delegation of responsibilities to staff and how it influenced pupils' performance in KCPE**

<b>Extent of delegation</b>	<b>f</b>	<b>%</b>	<b>KCPE results mean (%)</b>
Very adequate	36	87.8	46.1
Adequate	5	12.2	43.2
<b>Total</b>	<b>41</b>	<b>100.0</b>	

The results on Table 4.27 show that the schools with very adequate delegation of responsibilities to staff by the headteachers in management of facilities had KCPE results mean grade of 46.1 percent while those with inadequate delegation had 43.2 percent. The headteacher may delegate some of her/his responsibilities to the teachers and support staff but this will not absolve



her/him of her/his responsibilities for the school facilities (Ministry of Education, 2009).The headteachers cannot do everything, it is necessary for them to delegate certain duties to their staff. The concept of delegation does not mean surrender of power or control but that the staff performing the particular duty does it on behalf of the authority from the headteacher. If anything went wrong, the final responsibility or accountability lies with the headteacher (Mbiti, 2003).

The delegated responsibilities to staff by the headteachers were as follows: Deputy headteachers' delegated responsibilities were as follows: deputizing the headteacher; in-charge of discipline in the school, supervising school activities including cleanliness, general repair and maintenance of school facilities; requisition and maintenance of stores records, supervision of teaching and support staff and secretary to staff meetings. A headteacher is likely to get information regarding teaching aids and methods of teaching in lessons but in reality fewer headteachers actually check, schemes of work, lesson plans, records of work and pupils' notes instead some deputy headteachers are delegated to perform some of these functions (Wafula, 2007).

Senior teachers' delegated responsibilities were: maintenance of school records on enrolment, teaching and learning school facilities and evaluation records and teacher preparation records, organizing and coordinating school-based in-service training programmes and zonal subject panels including these related to management of facilities. Teachers' on duty's delegated

responsibilities entailed maintenance of order in school, prevent vandalism of school facilities, sorting out any emerging issues, ensuring that school routine is strictly adhered to, assisting pupils to manage their time well, record daily occurrences in the occurrence book, receive, welcome and guide visitors and supervising school activities like cleaning and return to class especially after the breaks.

Teachers perform both teaching and administrative roles in the school organization. Teachers provide other staff with official direction in the management of facilities in the absence of the headteacher or deputy headteacher (Okumbe, 2001). Computer teachers' delegated responsibilities were: in-charge of the computer laboratory, developing a school ICT policy, seamless incorporation of ICT to support and enhance the attainment of curriculum objectives, to enhance the appropriate competencies including skills, knowledge, attitudes and values to manage education effectively and efficiently at all level. Involve the staff and pupils in ICT implementation process, plan a training programme for teachers and bench marking other schools. Acquisition of computers could expose pupils to a variety of models in order to increase their confidence .The use of e-learning or online instructions in educational institutions is gaining momentum in Kenya and other developing countries.

In a case of computers integrated in mathematics in United Kingdom, found out that it was as extension of individualised textbook learning schemes

conducted by passing the teacher who was considered to be the cause rather than the cure of pupils' misconception in mathematics (Sunderland, Oliver & Weeden, 2004). Guidance and counselling teachers' delegated responsibilities included: to promote pupils' self esteem, self confidence, self drive and self acceptance, to help pupils to acquire skills to face and overcome challenges in their daily lives, protect vulnerable pupils from any form of abuse and give professional advice on how to cope with any abuse, to enhance and promote personal, family and societal values, help pupils have vivid visions about their future and academic lives and assist them how to realize their visions through, explain and assist pupils on how to make effective decisions and the consequences of choices, create awareness on emerging issues like HIV/AIDS, sexuality and adolescence crisis, enhance good communication skills and etiquette in pupils' relationship with others, help individuals to cope with emerging social issues such as death, divorce, separation ill-health and domestic violence and to help an individual to grow up morally upright, God fearing and with proper emotional intelligence.

There is need to demystify the counselling process and equip all teachers with basic counselling skills in order to make counselling services accessible to the pupils. The study emphasised the need for teachers to have positive attitude when counselling pupils (Mungai, 2007; Ouru, 2008).

Government policy requires that guidance and counselling departments should be established in all schools with headteachers being in charge (Republic of Kenya, 2008).

Through counselling and mentoring pupils are taught the dangers of drug and substance abuse and how to overcome the pressure to smoke and drink (Botvin, 2000). Headteachers and teachers are involved in prevention, control and mitigation of drug and substance abuse through formal and non formal curriculum. The study also emphasised role modelling where pupils learn responsible behaviour from their teachers (Republic of Kenya, 2008). The teachers' code of ethics and conduct prohibits teachers smoking and drinking in the presence of pupils (Republic of Kenya, 2005).

In many schools guidance and counselling programmes are crises oriented (Ouru, 2008). Time allocation for guidance and counselling gave an opportunity to the pupils to have their problems related to the emerging issue sorted out and career talks. Also, standards of discipline may be promoted which may enhance good pupils' performance in KCPE. Guidance and counselling equips the staff and pupils with the knowledge and skills that help them make useful decisions. The world Drug Report (2011) indicates that guidance and counselling has been used world over as first line intervention to drug and substance abuse among the youth ((UNODC, 2011). Guidance and counselling services are known to improve learning and school climate (Afulo, 2005).

Guidance and counselling has been instrumental in the fight against drug and substance abuse (Chand, 2008; Mungai, 2007). There is urgent need to introduce and strengthen guidance and counselling services in learning institutions so as to meet the varied needs of pupils, administration and the whole educational system (Mutie & Ndambuki, 1999).

The inquiry carried out by the National Assembly select committee into pupils unrest found out that some of the strikes and riots experienced in Kenyan schools in the year 2008 where school property was destroyed and pupils' lives lost were caused by drug and substance abuse among pupils (Republic of Kenya, 2009). Drug abuse is on the increase and the most affected schools are those in big towns. Nairobi is the most hit (Kaguthi, 2004).

Pupils access drugs during school outings as they are left to interact freely with those from other schools and members of the public (NACADA, 2006). The abuse of drugs causes academic and discipline problems and is one of the greatest challenges for the headteachers. Also, drug abuse causes thrombosis, heart diseases, liver cirrhosis, impotence, barrenness, cancer and ultimate death (Hansen, 1992).

Guidance and counselling is not effective in curbing drug and substance abuse. Headteachers prefer more deterrent measures such as suspension and

expulsion since drug and substance abuse is considered a very serious offence and contravention of school rules (Kabiru, 2009).

Pastoral teachers' delegated responsibilities included the following: nurturing the pupils with the word of God, encourage and upholding moral principles and ethics accepted in the society, training character and Godly values to all individuals, developing awareness and appreciation for other world religions and beliefs and developing an all round individual empowered to cope with life challenges.

Science teachers' delegated responsibilities entailed management, acquisition and improvisation of the science materials and equipment for the teaching and learning process. The acquisition of science laboratories could reinforce the teaching and learning process in practical and theory subjects create access to inquiry, may reduce teaching man power enable learners concentrate for a longer span of time and expose learners to research at an early age. This may enhance pupils' performance in KCPE.

Maintaining laboratories may make material resources for example chemicals and equipment readily available for teaching and learning process. Some expensive and poisonous teaching aids are preserved for long. The acquisition of chemicals and equipment make material resources readily available for teaching and learning process. For instance, some chemicals could be used to preserve some specimen and carry out tests. Equipment could be used to store

and carry out tests or experiments. This may enhance pupils' performance in KCPE.

Teachers and support staff in-charge of library's delegated responsibilities included management and acquisition of library materials and textbooks. Acquisition of library could provide supplementary reading and reference materials for the teachers and pupils. Also, as a resource centre it could be useful for research, remedial work, preparation, revision and book reviews. Acquisition of the textbooks in the library could provide materials for reference and class readers.

Time allocation for use of library could provide an opportunity to the teachers and pupils to have access to supplementary reading books and reference materials, research, remedial work, preparation, revision and book review. This enables the teachers to cover the syllabi on time and effectively and the pupils could adequately prepared for KCPE examinations.

Libraries can be used to encourage and enhance information library by making it convenient and easy to find and use it. The study further found out that when libraries are properly integrated with relevant technology pupils can access reserve materials through course management system (Snaveley, 2008).

Class teachers' delegated responsibilities included: being in-charge of buildings, furniture, equipment, stationery, preparation and maintenance of class registers, mark books, class timetable, schemes of work, lesson plans,

records of work, inventory, class discipline, instilling good morals and values, guidance and counselling, development and organization of relevant teaching and learning materials, attending roll-call, assisting in coordinating and organizing co-curricular activities, pupils progress records/making report forms, supervise class assignments and inspect cleanliness, health and grooming of the pupils.

Sports/games teachers delegated responsibilities were provision of co-curricular activities both indoor and outdoor like Physical education and football. They were also in-charge of the sports/games. The sports/games helped the pupils to reduce the academic pressure. The power of sports is far more than symbolic and co-curricular activities such as drama clubs, debates, and public lectures and used to create drug and substance abuse awareness in schools (Matsigulu, 2006; Muraguri, 2004).

A variety of sports are available for Kenyan youth both at school and community levels. The Ministry of Education recommends that all pupils should participate in sports, clubs and societies for their well being and to reduce idleness that leads to drug and substance abuse (Republic of Kenya, 2006). Time spent in sports and other co-curricular activities provides additional opportunity for the development of relationship with advisors and coaches. This in turn provides a unique opportunity to engage in valuable drug and substance abuse prevention effort (Mutsingulu, 2006; Muraguri, 2004).



UN Secretary General, Kofi Annan stated that “sports can play a role in improving the lives of individuals and the whole community”. He encouraged the stakeholders to involve the youth in sports from an early age to enhance responsibility and professionalism (UNODC, 2011). In contrast studies have shown that sporting events usually turn out to be “drug markets” and hunting grounds for drug peddlers.

The study indicated that some of the pupils who were good in sports were users of drugs such as bhang and some after sports celebrations were marked with drug and substance abuse. In this case the headteachers’ objective to use sports to curb drug and substance abuse may become counter-productive and require more supervision (Ciakuthi, 1999).

Support staff provides services that ensure effective and efficient teaching and learning environment. They need to be well planned and integrative human resource management strategies which will enable them perform the supporting and integrative role in the overall school management of facilities strategy. Their potential need to be consciously detected developed and released (Okumbe, 1998).

Watchmen/women provide security hence, protecting life of the pupils, teachers and school facilities and ensured that the school has a secure fence and gate. Cooks were in-charge of the school feeding programme. Their delegated responsibilities included: meeting the physiological needs of the

pupils and staff, ensure that the school is fed on a balanced diet, ensure that the pupils are satisfied in the services rendered, ensure proper repair and maintenance of school kitchen facilities, ensure that high standards of cleanliness are maintained, encourage sense of responsibility, enhance teamwork and a friendly working atmosphere, ensure proper keeping of records in the kitchen and enhance time management.

Cleaners' delegated responsibilities were as follows: ensured that the school compound and facilities were clean and well maintained, and proper disposal of liquid, gas and solid waste disposal. Plumbers' delegated responsibilities were to ensure that there was sufficient water supply in the school and proper maintenance of the water supply in the school.

Electricians' delegated responsibilities were to ensure that there was sufficient electricity supply and prevented electricity faults in the school and proper maintenance of the electricity supply in the school. Carpenters' delegated responsibilities were to ensure that the facilities like buildings, furniture and playgrounds were fully operational to optimize their usability and prevent accidents.

Grounds support staff's delegated responsibilities included: ensured that the school grounds were safe for the pupils and teachers and free from rubbish, protected outside areas for informal teaching and for staff and pupils to sit, ensured proper maintenance of the flower beds, grass lawns, trees, foot paths

and trimming fences, ensured proper drainage especially if the school ever experienced flooding problems, ensured proper drainage if there was standing water for a long time after rain or other sources causing a breeding ground for mosquitoes and other insects.

Clerks' delegated responsibilities were: to apply principles, concepts and conventions of accounting in keeping financial records, to determine the costs of the school operations; to improve on internal and external communication to all stakeholders using typed letters, newsletters and cell phones and typed examinations.

Drivers' delegated responsibilities were: to offer reliable, efficient and safe transport to and from school on specified time; to facilitate outdoor activities such as trips, field work and excursions; to create an opportunity to meet with other stakeholders; to promote sense of responsibility for pupils; to create and enhance uniformity in transport thus erasing class stratification; to accord pupils an opportunity to interact and socialize; to enhance proper utilization of resources and to ensure smooth transport of goods.

Repair and Maintenance support staff's delegated responsibilities involved the repair and restoration of buildings and their surroundings to their original equivalent or same acceptable condition. The school environment provides the standards against which young people test behaviour and school staff serve

as highly influential role models by which adolescence and pre-adolescents judge themselves (Pillai, 2008).

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#### **4.14 Extent to which level of documentation of facilities managed by headteachers influenced pupils' performance in KCPE**

Documents refer to school records kept by the headteachers in facilities' management. The level of documentation of facilities by the headteachers was included in the study to examine how they influenced pupils' performance in KCPE. The senior teachers were asked to rate their headteachers' level of documentation of facilities in management of facilities that influenced pupils' performance in KCPE and the results are shown in Table 4.28.

**Table 4.28: Extent of to which level of documentation of facilities managed by headteachers influenced pupils' performance in KCPE**

<b>Extent of documentation of facilities</b>	<b>Very Adequate</b>		<b>Adequate</b>		<b>KCPE results mean %</b>
	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>	
Receipt books	31	75.6			45.8
Cash books	31	75.6			45.9
Payment vouchers	31	75.6			45.9
LPO	31	75.6			45.9
LSO	31	75.6			45.9
Vote book	31	75.6			45.9
Delivery note			10	24.4	43.2
Ledgers			10	24.4	43.2
Inventory			10	24.4	43.2
Repair & maintenance book			10	24.4	43.2
<b>Total</b>	<b>41</b>	<b>100.0</b>			

The data on Table 4.28 indicates that the schools with very good documentation of facilities by the headteachers in management of facilities had KCPE results mean grade of 45.9 percent while those with good facilities' documentation had 43.2 percent. Very good facilities' documentation was key evidence in supporting an effective system for planning, implementation and monitoring school activities.

The documentation of facilities in management of facilities that influenced pupils' performance in KCPE found was as follows: **Receipt books** were used to show that payments are made for purchased facilities or services rendered to the school. For example, in the payment for the purchase of new facilities, pupils' KCPE registration and school feeding programme staff. Invoices were issued by the supplier to the school for facilities taken on credit. Payments were made later especially when the suppliers deliver their goods for the school feeding programme before the Government disburses finances to the schools. Invoices are vouchers issued by the seller to the school or facilities taken on credit. Payments are made later.

Delivery note showed the facilities delivered to the school. Facilities were purchased by use of the Local Purchase Order (LPO). A delivery note and an invoice accompanying the facilities delivered to the school by the supplier. Then a cheque was drawn by the school in favour of the supplier.

Ledgers were the record books for school property. All items of school tuition equipment are termed stores. The respective record books are therefore, called stores ledgers. Stores ledgers if properly kept formed the best way of ascertaining what the school possesses in the way of equipment. This is the only sure way for a headteacher to know what school facilities the school will need in the near future.

In addition, stores ledgers are the only sure way of proving how the school spent the money given to it in the form of grant every year. Stores ledgers are of three types: Permanent stores ledger was a special foolscap hardcover book in which all the school equipment of a permanent nature is recorded. Consumable stores ledgers were those types of equipment which lose their shape function or form in the process of use like stationery. Expendable stores ledgers did not fall in either of the other two categories. They are those items in which pieces remain after use like stationery.

Inventory was a record book which showed all the permanent or expendable equipment that were issued the class teacher from the stores ledger. Before a teacher proceeds on transfer, the headteacher must have the teacher hand over the stores under her/his responsibility to the incoming classroom teacher. A handing- over certificate must be signed by both teachers after the exercise. Handing over/taking over is an important exercise for both the teachers and headteachers.

Write-off authority is permission granted by the CEB to destroy school property which is out of use (old/worn out). The burning/complete destruction of such property is done under strict supervision and witnessed by an officer from the MoEST before signing the write-off certificate. Unless such permission is granted, no public property should be destroyed. Old pieces must be kept in store for annual checking until such a time as they will be written-off.

A cash book was used for all financial transactions with respect to receipts, payments and banking were recorded on daily basis or as they occur. organizer and signature. Vote book enabled the headteachers to verify the amount of money available in each vote-head. Local Service Order (LSO) form was a request to offer services. School payment vouchers were used to make payments. Repairs and maintenance book showed work due and done in relation to management of facilities. They were also used to review their performance.

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## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The chapter covers the introduction, summary of the study, conclusions, recommendations and suggestions for further research.

#### **5.2 Summary of the study**

The purpose of this study was to investigate the influence of headteachers' management of facilities on pupils' performance in KCPE in Nairobi County, Kenya. The study was guided by the following objectives: to determine the extent to which the level of adequacy of school facilities headteachers manage and how it influences pupils' performance in KCPE, to assess the extent to which the level of competence of headteachers' management of facilities and how it influences pupils' performance in KCPE, to establish the extent to which the gender of headteachers in management of facilities influences pupils' performance in KCPE, to determine the extent of delegation of responsibilities to staff by headteachers in management of facilities and how it influences pupils' performance in KCPE and to determine the extent to which the level of documentation of facilities by headteachers in management of facilities influences pupils' performance in KCPE. The study was based on the Max Weber's Theory of Bureaucracy.

The study employed descriptive survey design. The target population was 612 head teachers, senior teachers and accounts' clerks in Nairobi County. The sample size was 123 consisting of headteachers, senior teachers and accounts' clerks. In the selection of districts to participate in the study, simple random sampling method was used



while for the schools, headteachers, senior teachers and accounts' clerks, purposive sampling method was utilized. The research instruments used were the two sets of questionnaires, interview and documents analysis guides. Validation of the instruments was done by the supervisors and staff from the Department of Educational Administration and Planning of the University of Nairobi who read through the instruments. The reliability coefficient of the research instruments was determined by split-half technique, and was found to be 0.73 for the headteachers' 0.88 for the senior teachers' questionnaires and 1 for the interview guide for the accounts' clerks. Permission to collect data was sought from NCSTI... Descriptive statistics and distribution techniques were used to analyze the data using SPSS 20 version computer programme and data was presented in tables. Ethical issues such as use of the collected data for the purpose of the study only and the respondents' identities kept strictly confidential.

### **5.3 Summary of the findings of the study**

#### **5.3.1 Extent to which level of adequacy of the school facilities the headteachers manage influences pupils' performance in KCPE**

The study established that the schools with very adequate facilities had the best KCPE results mean grade. Therefore, the level of adequacy of the school facilities the headteachers managed influenced the pupils' performance in KCPE.

#### **5.3.2 Extent to which level of competence of the headteachers' management of facilities influences pupils' performance in KCPE**

The study established that the schools managed by headteachers with very high competence in management of facilities had the best KCPE results mean

grade. Hence, the level of competence of the headteachers influenced the pupils' performance in KCPE.

### **5.3.3 Extent to which gender of headteachers in management of facilities influences pupils' performance in KCPE**

The study established that the schools managed by female headteachers had better pupils' performance in KCPE mean grades than those of their male counterparts. The female headteachers tend to motivate staff whom they delegate the responsibilities to in management of facilities, and are autocratic while their male counterparts are regarded competitive and individualistic. Therefore, the gender of headteachers in management of facilities influenced pupils' performance in KCPE.

### **5.3.4 Extent of delegation of responsibilities to staff by the headteachers in management of facilities influences pupils' performance in KCPE**

The study established that the schools with very adequate delegation of responsibilities to staff by headteachers in management of facilities had the best KCPE results mean grade. Hence, very adequate delegation of responsibilities to staff by headteachers in management of facilities influenced pupils' performance in KCPE.

### **5.3.5 Extent to which level of documentation of facilities by the headteachers in management of facilities influences pupils' performance in KCPE**

The study established that the schools with very adequate documentation of facilities by the headteachers in management of facilities had the best KCPE results mean grade. Thus, very adequate documentation of facilities influenced pupils' performance in KCPE.

## **5.4 Conclusions**

Considering the findings of the study the following conclusions are drawn:

The study established that the schools with very adequate facilities had the best KCPE results mean grade. Therefore, the level of adequacy of the school facilities the headteachers managed influenced the pupils' performance in KCPE.

The study established that the schools managed by headteachers with very high competence in management of facilities had the best KCPE results mean grade. Hence, the level of competence of the headteachers influenced the pupils' performance in KCPE.

The study established that the schools managed by female headteachers had better pupils' performance in KCPE mean grades than those of their male counterparts. The female headteachers tend to motivate staff whom they delegate the responsibilities to in management of facilities, and are autocratic while their male counterparts are regarded competitive and individualistic. Therefore, the gender of headteachers in management of facilities influenced pupils' performance in KCPE.

The study established that the schools with very adequate delegation of responsibilities to staff by headteachers in management of facilities had the best KCPE results mean grade. Hence, very adequate delegation of responsibilities to

staff by headteachers in management of facilities influenced pupils' performance in KCPE.

The study established that the schools with very adequate documentation of facilities by the headteachers in management of facilities had the best KCPE results mean grade. Thus, very adequate documentation of facilities influenced pupils' performance in KCPE.

Although the combined efforts of the headteacher, senior teachers and accounts' clerks varied to a large extent, it was evident the sole contribution of the headteacher in management of facilities seemed to be more responsible for pupils' performance in KCPE.

## **5.5 Recommendations**

On the basis of the findings of the study the following recommendations are put forward:

### **Recommendation to Kenya Education Management Institute**

Kenya Education Management Institute should organize in-service training programmes targeting headteachers' management of facilities. The female headteachers could in-service their male counterparts to enhance pupils' performance in KCPE.

### **Recommendation to the Directorate of Quality Assurance and Standards**

The Directorate of Quality Assurance and Standards in collaboration with the headteachers, teachers, and BOM should carry out regular supervision of

schools, in particular, on management of facilities to influence pupils' performance in KCPE.

#### **Recommendation to the headteachers**

The headteachers should carry out regular review of the extent to which level of adequacy of school facilities, extent to which delegation of responsibilities to staff and level of documentation of facilities in management of facilities that influences pupils' performance in KCPE. This may enable them to put in place appropriate corrective measures.

#### **Recommendation to the teachers**

Teachers should carry out improvisation of school facilities like the instructional materials and use the immediate environment in management of facilities as it contains a lot of readily available school facilities to facilitate teaching and learning process thus, improve pupils' performance in KCPE.

put forward:

#### **Recommendation to the Ministry of Education, Science and Technology**

The Ministry of Education, Science and Technology should provide more funds to purchase new, repair, maintain and improve school facilities. In addition, they should review the policy in teachers training, in particular, in management of facilities to enhance academic performance.

#### **Recommendation to the Board of Management**

The Board of Management should regularly check the level of adequacy of school facilities so that they may provide more funds to purchase new, repair, maintain and improve school facilities

### **Recommendation to teachers training institutions (universities and Teachers Training Colleges}**

Teachers training institutions (Teachers Training Colleges and universities) should strengthen in their curriculum management of facilities. This will ensure that the trainees are competent in management of facilities. This may help the teachers to acquire appropriate skills in the field when they graduate.

### **5.6 Suggestions for further research**

The following are the suggestions for further research:

There may be other variables that could influence headteachers' management of facilities. It would be therefore, useful to explore the extent to which they may influence the pupils' performance in KCPE.

This study was carried out in Nairobi County. A similar study in the other remaining forty six Counties in Kenya would be useful for comparative purpose.

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## APPENDICES

### APPENDIX 1

#### LETTER OF INTRODUCTION

Mbunde John Makario

University of Nairobi

Department of Educational

Administration and Planning

P.O. Box 92, Kikuyu

27<sup>th</sup> April, 2013

The Headteacher

Dear Sir/Madam,

**RE: PARTICIPATION IN RESEARCH**

I am a PhD student in the Department of Educational Administration and Planning, University of Nairobi. I am carrying out a research on **“Influence of headteachers’ management of facilities on pupils’ performance in Kenya Certificate of Primary Education in Nairobi County, Kenya.”**

I would appreciate your co-operation by responding to all the questions as honestly as possible. Your identity will be treated with strict confidence and the data will be used for research purposes only.

Thank you.

Yours sincerely,

Mbunde John Makario

## APENDIX 2

### LETTER OF CONSENT OF RESPONDENTS

**Thesis title:** “Influence of headteachers’ management of facilities on pupils’ performance in Kenya Certificate of Primary Education in Nairobi County, Kenya”.

Please read this letter carefully before agreeing to participate in this research.

**Purpose of the research:** The researcher is investigating the influence of headteachers’ management of facilities on pupils’ performance in Kenya Certificate of Primary Education in Nairobi County, Kenya.

**What you will do in this research:** You will participate in answering the headteachers’/ senior teachers’ questionnaires/ an interview as by your position you hold in the school.

**Benefits:** There are no financial benefits for you from this study. The researcher hopes that the results of this will help to inform policy and practice to make improvements in management of facilities leading to an improved academic performance.

**Confidentiality:** Your participation in this research will remain confidential. Your name will not be recorded anywhere. The results of this research will be shared with organizations that work on education worldwide.

**Participation and withdrawal:** Your participation in this research is completely voluntary, and you may withdraw from the study at any time without penalty. You may withdraw by informing the researcher that you no longer wish to participate (no questions will be asked).

**Agreement:** Please if you agree let the researcher know that: purpose and nature of this research have been sufficiently explained to you. I agree to participate in this study and i understand that i am free to withdraw at any time without incurring any penalty.

### APPENDIX 3

#### HEADTEACHERS' QUESTIONNAIRE

I am carrying out a research on **“Influence of headteachers’ management of facilities on pupils’ performance in Kenya Certificate of Primary Education in Nairobi County, Kenya.”** The study is important because it will enable the education stakeholders to make improvements in management of facilities leading to an improved academic achievement. Your identity will be treated with utmost confidence and the data will be used for research purposes only. Kindly respond to the following questions honestly.

#### Section A: Demographic information of headteachers

1 Please indicate your gender.

Female  Male

2. Please indicate your age bracket.

26-30  31-35  36-40   
41-45  46-50  50 and above

3. Please indicate your highest education level.

Secondary  College   
University  Any other

4. Please indicate your professional qualification.

ATS IV (P2& 3)  ATS III (P1)  ATS II (Diploma)   
ATS I (B.Ed)  Masters  Any other

5. Please indicate your work experience as a headteacher in years.

Experience \_\_\_\_\_ Years

6. a) Please indicate if you have attended in-service course in management of facilities in the last five years.

Yes  No

**Section B: Background of the schools**

7. Please indicate the category of your school.

Girls Day  Boys Day  Mixed Day   
Mixed Day  Mixed Day and Boarding

8. Please indicate the average number of streams per class in the school.

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9. Please indicate the average number of pupils per class in your school.

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10. Please indicate the number of pupils in the school by gender.

Girls \_\_\_\_\_ Boys \_\_\_\_\_

13. Please indicate the number of support staff you have in the school.

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14. Please indicate the year the school was established.

Before 1950  1951-1960  1961-1970  1971-1980   
1981-1990  1991-2000  2001-2010  2011- date

**Section C: Extent to which level of adequacy of school facilities managed by the headteachers in management of facilities influences pupils' performance in KCPE**

15. Please rate the level of adequacy of the school facilities that influences pupils' performance in KCPE as: very adequate, adequate, fairly adequate, and inadequate.

Types of school facilities	Level of adequacy of school facilities			
	Very adequate	Adequate	Fairly adequate	Inadequate
Textbooks				
Exercise books				
Radios				
Computers				
Furniture				
Equipment				
Charts				
Playgrounds				
Buildings				
Displays and exhibits				

**Section D: Pupils' performance in KCPE**

Please indicate the pupils' performance in KCPE.

---

<b>Year</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
KCPE results (mean %)					

**Section E: Extent of delegation of responsibilities to staff by the headteachers in management of facilities and how it influences pupils' performance in KCPE**

16. List the delegated responsibilities to each of your staff in the management of facilities that influence pupils' performance in KCPE..

**THANK YOU**

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## APPENDIX 4

### SENIOR TEACHERS' QUESTIONNAIRE

I am carrying out a research on **“Influence of headteachers’ management of facilities on pupils’ performance in Kenya Certificate of Primary Education in Nairobi County, Kenya.”** The study is important because it will enable the education stakeholders to make improvements in management of facilities leading to an improved academic achievement. Your identity will be treated with strict confidence and the data will be used for research purposes only. Kindly respond to the following questions honestly.

#### Part I: Demographic information of senior teachers

1 Please indicate your gender.

Female  Male

2. Please indicate your age bracket.

26-30  31-35  36-40   
41-45  46-50  50 and above

3. Please indicate your highest education level.

Secondary  College   
University  Any other

4. Please indicate your professional qualification.

ATS IV (P2& 3)  ATS III (P1)  ATS II (Diploma)   
ATS I (B.Ed)  Masters  Any other

5. Please indicate your work experience as a senior teacher in years.

Experience \_\_\_\_\_ Years



**Part II Extent to which level of competence of headteachers' management of facilities influences pupils' performance in KCPE**

6. The following question concerns the level of competence in management of facilities. Please rate the headteacher's level of competence in management of facilities that influences pupils' performance in KCPE as: very high competence, high competence, fairly high competence, low competence, and very low competence.

Types of school facilities	Level of competence of the headteachers in management of facilities			
	Very high competence	high competence	Fairly high competence	Inadequate
Textbooks				
Exercise books				
Radios				
Computers				
Furniture				
Equipment				
Charts				
Playgrounds				
Buildings				
Displays and exhibits				

**Part III: Extent of delegation of responsibilities to staff by the headteacher in management of facilities that influences pupils' performance in KCPE**

7. This question is concerned with the extent of delegation of responsibilities to staff by the headteacher in management of facilities that influences pupils' performance in KCPE. Please rate the extent of delegation of responsibilities to staff by the headteacher in management of facilities that influences pupils' performance in KCPE as: very adequate, adequate, fairly adequate, and inadequate.

	staff	Extent of delegation of responsibilities to staff by headteachers in management of facilities			
		Very adequate	Adequate	Fairly adequate	Inadequate
i	Deputy headteacher				
ii	Senior teacher				
iii	Class teachers				
iv	Games teachers				
v	Clubs teachers				
vi	Teachers on duty				
vii	Clerks				
viii	Cooks				
ix	Repair & maintenance staff				
x	Cleaners				
xi	Watchmen				

**Part iV: Extent to which level of documentation of facilities by the headteachers in management of facilities influences pupils’ performance in KCPE**

8. Please rate the level of documentation of facilities by the headteacher in management of facilities that influences pupils’ performance in KCPE

This question entails level of documentation of facilities. Please rate the level of documentation of facilities by the headteacher in management of facilities that influences pupils’ performance in KCPE as adequate, adequate, fairly adequate and inadequate

Types of school facilities’ documents (year 2013)	Level of adequacy of documentation of facilities			
	Very adequate	Adequate	Fairly adequate	Inadequate
Receipt books				
Cash books				
Payment vouchers				
Repair and maintenance book				
Invoices				
Delivery notes				
Ledgers				
Inventories				
LPO				
Vote book				

THAK YOU.

## APPENDIX 5

### INTERVIEW GUIDE FOR ACCOUNTS' CLERKS

I am carrying out a research on **“Influence of headteachers’ management of facilities on pupils’ performance in Kenya Certificate of Primary Education in Nairobi County, Kenya.”** The study is important because it will enable the education stakeholders to make improvements in management of facilities leading to an improved academic achievement.. Your identity will be treated with strict confidence and the data will be used for research purposes only. Kindly respond to the following questions honestly.

#### Part I: Demographic information of accounts’ clerks

1 Please indicates your gender.

Female  Male

2. Please indicate your age bracket.

26-30  31-35  36-40   
41-45  46-50  50 and above

3. Please indicate your highest education level.

Secondary  College   
University  Any other

4. Please indicate your professional qualification.

Copy typist  Book-keeping   
KATC  CPA

5. Please indicate your work experience as an accounts’ clerk in years.

Experience\_\_\_\_\_Years

**Part II: Level of adequacy of school facilities, delegated responsibilities, types and functions of school facilities' documents kept.**

The following question addresses level of adequacy of school facilities.

6. Please rate the extent to which the headteacher facilitates these school facilities for teaching and learning process as: very adequate, adequate, fairly adequate or inadequate.

Types of school facilities	Level of adequacy of school facilities			
	Very adequate	Adequate	Fairly adequate	Inadequate
Textbooks				
Exercise books				
Radios				
Computers				
Furniture				
Equipment				
Charts				
Playgrounds				
Buildings				
Displays and exhibits				

7. What are your delegated responsibilities in management of facilities?

8. What are the types and functions of school facilities' documents you keep?

THANK YOU.

## APPENDIX 6

### DOCUMENT ANALYSIS GUIDE

The document analysis guide was used to identify the types and functions of documentation of facilities by headteachers ‘ management of facilities that influence pupils’ performance in KCPE.

<b>Tschool facilities</b>	<b>Available</b>	<b>Not available</b>	<b>Functions in the school management of facilities</b>
Receipt books			
Cash books			
Payment vouchers files			
Cheque books			
Invoices			
Consumable stores ledgers			
Permanent stores ledgers			
Minute books			
LPO/			
KCPE analysis files			
Payment vouchers			
Delivery notes			
Inventories			
Registers			
Repairs & maintenance book			

**APPENDIX 7**  
**LETTER OF RESEARCH AUTHORIZATION**

**APPENDIX 8**  
**RESEARCH CLEARANCE PERMIT**



**APPENDIX 9**  
**MAP OF KENYA COUNTIES**

**APPENDIX 10**  
**MAP OF NAIROBI COUNTY**

