INFLUENCE OF INSTITUTIONAL FACTORS ON PUPILS’ PERFORMANCE IN KENYA CERTIFICATE OF PRIMARY EDUCATION IN PUBLIC PRIMARY SCHOOLS IN KANGUNDO DIVISION, MACHAKOS COUNTY, KENYA

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A Research Project Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Education in Educational Administration

University of Nairobi

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DECLARATION

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

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DEDICATION

I dedicate this work to my wife Tabitha Musyoka, my children Dickson Kioko, Elizabeth Syokau, Solomon Ngete, my sister in-law Ruth Munyiva and my parents Samuel Nthumo and Naom Nthumo, for their patience, support and inspiration.
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To Kikalul and Syanamu Primary Schools’ staff, I thank them for their understanding and support.

To all my friends, colleagues and relatives, thanks so much for the encouragement and moral support you accorded me during the entire study.

May God bless you all.
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<tr>
<td>DEB</td>
<td>District Education Board</td>
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<tr>
<td>DEO</td>
<td>District Education Officer</td>
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<tr>
<td>EFA</td>
<td>Education For All</td>
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<tr>
<td>FPE</td>
<td>Free Primary Education</td>
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<tr>
<td>KCPE</td>
<td>Kenya Certificate Primary of Education</td>
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<td>KCSE</td>
<td>Kenya Certificate of Secondary Education</td>
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<tr>
<td>KEMI</td>
<td>Kenya Educational Management Institute</td>
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<tr>
<td>KICD</td>
<td>Kenya Institute of Curriculum Development</td>
</tr>
<tr>
<td>NACOSTI</td>
<td>National Commission for Science, Technology and Innovation</td>
</tr>
<tr>
<td>NARC</td>
<td>National Alliance for Rainbow Coalition</td>
</tr>
<tr>
<td>SCDE</td>
<td>Sub-County Director of Education</td>
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<tr>
<td>STD</td>
<td>Standard</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and cultural organization</td>
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<tr>
<td>UNICEF</td>
<td>United Nations International Children Education Fund</td>
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ABSTRACT

The purpose of the study was to investigate the influence of institutional factors on the pupils’ performance in Kenya Certificate of Primary Education in public primary schools in Kangundo division, Machakos County. To achieve this, four research objectives were formulated which included: to assess the influence of instructional supervision by the headteachers on the pupils’ performance in KCPE; to establish the influence of time management by the teachers on pupils’ performance in KCPE; to determine the influence of availability of teaching and learning resources on the pupils’ performance in KCPE and to examine the influence of the availability of physical facilities on the pupils’ performance in KCPE. The study adopted and used the descriptive survey design and involved 30 headteachers, 60 teachers and 180 standard 7 pupils of all public primary schools in Kangundo division, Machakos County. The researcher relied on 3 categories of questionnaire and an observation checklist. Questionnaire was used to solicit information from headteacher, teachers and pupils while the checklist was filled by the researcher from observations and questions made. The study revealed that there was influence of institutional factors on pupils’ performance in KCPE in Kangundo division. Headteachers professional support was not adequate. The study also established that teachers had the lowest professional qualification. Thus the quality of professionals influenced the pupils’ performance in KCPE. Most schools in the division were understaffed, this contributed to high pupils teacher ratio which increased teacher’s work load leaving very little time for individual pupil’s attention. It was also found that libraries were not available as was reported by 70 percent of the headteachers. Lack of libraries affected the pupils’ performance. Findings on teaching and learning resources revealed that there were inadequate pupils’ books. Time management had an effect on pupils’ performance since some teachers came to class late. In view of the findings, it was recommended that headteachers carry out their professional role in curriculum supervision through checking teachers professional documents regularly and supervising teachers as they carry out their teaching duties, that the MOEST provide opportunities for capacity building and furthering education for both headteachers and teachers, that the government provide adequate teaching and learning resources, that headteachers improve their tactics in instructional supervision and that there was need that all the required physical facilities are made available in all public primary schools. In view of the delimitation of the study, it was suggested that further study be conducted covering the entire Machakos County. Similar research should also be conducted to establish the challenges facing primary school headteachers in instructional supervision.
CHAPTER ONE
INTRODUCTION

1.1 Background to the study
Education is an element in stimulation of social economic development as advanced by several governments’ policy documents and various scholars (Republic of Kenya 2007; World Bank, 2005; Selina, 2012). Todaro (2004) argues that a country which is unable to invest in education to develop knowledge and skills of her people and utilize them effectively in national economy will be unable to develop anything else. Basic education strengthens individuals’ capacity, families and communities to access health, higher education, economic and cultural opportunities and services (UNESCO, 2007).

Developed countries like USA and Japan have a large pool of highly skilled human resources. This has enabled them to not only exploit local natural resources but also to identify and negotiate for other countries resources. Basic education is fundamental ingredient of creating economic development In the United States it has been more important than increased capital in accounting for work productivity and US economic growth (Smith, 2003).

It is imperative that schools which are used as the basis for imparting education be distributed evenly such that they are accessible to all the children of the school going age. It is unfortunate that globally in most of the third
world countries (Kenya being among them) the institutions are not accessible. The limitation to accessibility may be due to lack of equity in the placement of the schools, insecurity, poor weather conditions or even ignorance in some of the communities (Battle & Lewis, 2002).

Offering education in Kenyan Primary Schools is interfered by institutional factors which influence the learners’ performance in Kenya Certificate of Primary Education (KCPE) examinations. This factors may include instructional supervision by the headteacher, time management by the teachers, teaching and learning resources and the physical facilities found in the institution. Kyungu (1999) identifies the institutional factors that may influence pupils’ performance as instructional supervision by the headteacher, teacher time management, resource allocation and the physical facilities available. Khaemba (2009) observed that the level of material input allocated to schools per pupil and the level of efficiency with which fixed amount of material input are organized and managed does rise student achievement. He also noted that the quality of instructional process experienced by each learner determines the school performance in Kenya Certificate of Primary Education examination.

The teachers’ time management, use of the teaching/ learning resources, interwoven use of the available physical facilities and institutional factors therefore play a central role in contributing to pupils’ performance in KCPE examination, Kenya Education Management Institute (K.E.M.I) 2011.
Time management is the thread running through almost all aspects of teaching. It includes organizing the day, organizing the classroom, deciding on how long and how often to teach various subjects, recording student progress or keeping time consuming behavior problems to a minimum. Retting (2013) has identified over giving to family, friends, work volunteering or activism as prime obstacles to one’s time management.

A study in India which sampled 59 schools found out that, only 49 schools had buildings and of these 25 had toilets, 20 had electricity, 10 had school library and the 4 had television. Schools which were well equipped performed better than schools which had insufficient physical facilities. It was concluded that the quality of learning environment is strongly correlated with pupils’ achievement (Canon & Chan, 1996). They also noted that neither a good number of teachers in China, Guinea, India and Mexico mastered the subject matter they taught or the pedagogical skills required for good presentation of the subject content, which highly affected the pupils’ performance.

The availability and the use of teaching and learning materials affect the effectiveness of a teaching lesson. Mirera (2012) in his research on institutional factors influencing student’s performance in K.C.S.E noted that the provision of teaching and learning resources had significant influence on the student’s performance. Textbooks enable the pupils to follow the teachers’ sequence of presentation and aids in understanding lesson (Obogn, 2004).
Studies have found that there is a relationship between teacher effectiveness and teachers’ years of experience (Basset, 2002). He states that a new teacher with 0-5 years of experience and aged 20-29 years may have positive personal attributes like enthusiasm, creativity, energy and optimism while a mid-career teacher 6-20 years of experience and aged 30-39 years, may possess personal attributes like experience, confidence and loyalty.

Bennel (2007) notes that achieving the education related millennium development goal (MDG) basic education for all by the year 2015, would be a major challenge for national governments, especially as concern is growing as teachers are becoming increasingly demotivated, which raises a concern that there is a motivation crisis among teachers in sub-Saharan Africa and Asia. If so can teachers be adequately motivated? Bennel (2007) notes that if MDG is to be reached an adequate number of teachers need to be competent and committed to the delivering high quality basic education for all children. Primary teachers now face enormous pressure, to provide a high standard of education, but this will not be possible due to current poor salary levels, poor working and living conditions (Oyugi, 2014). There is a growing concern that teachers are becoming increasingly demotivated, leading to declining teacher performance and poor learning outcome.

Marks and Printy (2003) notes that supervision is the act of ensuring that workers maintain or improve work output and dedication ensuring that everything is done correctly and safely. In the current world schools are taken
to be part and parcel of the society’s systems because they transmit culture, norms, values, skills and knowledge to the learners. The effective functioning of any social-system-school included is assumed to be dependent of the quality of the supervision. All schools like other organizations require effective leadership if they are to remain relevant in their teaching and learning processes, Okumbe (1999) considers supervision as an administrative strategy aimed at stimulating teachers towards greater pedagogic effectiveness and productivity. The stimulation role of the supervisor enhances important roles aimed at excellence in examinations which reduces teacher burnout.

In 2003, the then president of Kenya Honorable Mwai Kibaki with his NARC administration implemented the popular programme of Free Primary Education (FPE) with aim of offering primary school education to all the young school going pupils and even those of overage and were who willing to join (Otach, 2008). This programme received very positive support and the primary schools were flocked by very many pupils who joined at any level (Std 1-8) depending on where one had dropped out. This policy abolished all forms of primary school levies which had hindered the learners from accessing the education (Okwach & Goerge, 1997). The public of Kenya observed the need to ensure majority of FPE beneficiaries, join secondary school level and therefore free secondary education was introduced in 2008. This also met a lot of positiveness and was a great improvement in access to basic education.
The implementation of the Free Primary Education (F.P.E) 2003 and Free Day Secondary School Education (F.D.S.S.E) 2008 policies brought a lot of emerging issues (UNICEF & World Bank, 2009). The issues were overcrowded classrooms, limited physical facilities, shortage of qualified teachers and a lot of interest in the schools from the external community. The quality of education deteriorated, in-discipline was on the rise and teachers were fatigued (Okwach & George, 1997). The Kenyan society has grown to assess the effectiveness of an education system by the academic performance at the national examination level. Kellaghan and Greaney (1995) asserted that Kenya Certificate of Primary Education (KCPE) examination not only determines access to secondary school level and subsequent higher education but also reflects how the society will internalize its effectiveness.

According to the records held at the Kangundo sub county director of education office it is evident that Kangundo Division has been ranking behind other divisions in Kenya Certificate of Primary Education (KCPE) performance and attention needs to be focused in this region. This therefore necessitated the need to carry out a study on the institutional factors influencing pupils’ performance in public primary schools in the Division. The official performance for the last five years (existing at the sub County’s Director of Education office) is reflected in the Table 1.1. Showing KCPE performance in public primary schools in the three Divisions of Kangundo Sub-County.
Table 1.1

KCPE mean scores for the three Divisions for the Kangundo Sub County
2010 to 2014.

<table>
<thead>
<tr>
<th>Year</th>
<th>Kakuyuni</th>
<th>Kivaani</th>
<th>Kangundo</th>
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<tr>
<td>2010</td>
<td>266.3</td>
<td>245.41</td>
<td>241.32</td>
</tr>
<tr>
<td>2011</td>
<td>255.40</td>
<td>245.68</td>
<td>242.20</td>
</tr>
<tr>
<td>2012</td>
<td>260.81</td>
<td>243.67</td>
<td>240.63</td>
</tr>
<tr>
<td>2013</td>
<td>257.00</td>
<td>243.91</td>
<td>241.18</td>
</tr>
<tr>
<td>2014</td>
<td>255.02</td>
<td>250.02</td>
<td>239.15</td>
</tr>
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Sources: SCDE’s (DEO’s) office Kangundo (2015)

Table 1.1 demonstrates the Kangundo sub county’s performance in KCPE in Public primary schools. This means the pupils of Kangundo Division end up joining district secondary schools and others miss places due to very low marks compared to those of the other two divisions. This therefore endangers the pupils’ opportunities for future placement, their chances for meaningful participation in national community development and determination of the institutional factors that may influence the performance positively in future.

1.2  Statement of the problem
The Government of Kenya has been spending millions of shillings annually since 2003 on Free Primary Education. The purpose is to improve access and boost basic education in both primary and secondary school. The results in Kangundo Division do not match the government’s effort. Stakeholders are
worried about the scenario based on the records at the sub county Director of Education office, where Kangundo Division performance in Kenya Certificate of Primary Education (KCPE) has been worsening compared to the other two divisions. This study will seek to investigate institutional factors that influence pupils’ performance in Kenya Certificate of Primary Education (KCPE) examinations in public primary schools in Kangundo Division. The pupils’ performance in the public primary schools has been poor over the last five years.

1.3 Purpose of the study

The purpose of the study was to investigate the influence of the institutional factors on pupils’ performance in KCPE in public primary schools in Kangundo Division, Kangundo Sub-County, Machakos County, Kenya.

1.4 Objectives of the study

The study was guided by the following objectives:

i) To assess the extent to which instructional supervision by the head teachers influences pupils’ performance in KCPE.

ii. To establish the extent to which time management by the teachers influences pupils’ performance in KCPE.

iii. To determine the extent to which availability of teaching and learning resources influences pupils’ performance in KCPE.

iv). To examine the extent to which availability of physical facilities influences pupils’ performance in KCPE.
1.5 Research questions

The study was guided by the following research questions:

i. To what extent did instructional supervision by the headteachers influenced pupils’ performance in KCPE?

ii. To what extent did the time management by teachers influenced pupils’ performance in KCPE?

iii. To what extent did the availability of teaching and learning resources influenced pupils’ performance in KCPE?

iv. To what extent did the availability of physical facilities influenced pupils’ performance in KCPE?

1.6 Significance of the study

The research may be important for the following reasons. It may provide information to the Ministry of Education on how to eliminate those factors that contribute to low performance in public primary schools. The quality assurance department in the Ministry of Education Science and Technology may channel the solutions through in-service seminars, short courses and meetings at various levels of the Sub-county as well as provision of the necessary physical facilities.

Nationally, teacher training colleges, KEMI and KICD may use the findings from the study for in-service, teachers training courses and curriculum development in order to promote the performance in KCPE examination by pupils in public primary schools. Future researchers may as well use the findings for further study. The Kangundo Divisional Education stakeholders
may use the same research findings to establish the priority areas that need quick attention to arrest the situation.

1.7 Limitation of the study
The study was limited to the fact that the researcher did not control the attitudes of the respondents as they responded to the instruments and this may have led to biasness. The researcher assured them of the confidentiality of their identity. The study was limited to poor terrain in the region especially during the rainy period. The researcher carried out the study irrespective of the terrain.

1.8 Delimitations of the study
The study was restricted to public primary schools in Kangundo division. The study was confined to Kangundo division where most of the schools are rural in nature. The social cultural and economic conditions in Kangundo division could be different from those in other divisions in Kenya. The findings hence can only be generalized to other areas with caution. The respondents were headteachers, standard seven class teachers, the senior teacher and some standard seven learners were involved in the study.

1.9 Basic assumptions of the study
The study was based on the following assumptions:

i. The respondents gave honest and truthful responses that answered the questionnaire for the study.

ii. That all public primary schools in Kangundo were accessible.
1.10 Definition of the significant terms

The following were the significant terms as used in the study:

**Instructional supervision** refers to raising learner’s achievement and creating valuable educational opportunities for learners.

**Free and Compulsory basic education** refers to education provided for free by the government intended to give learners the basic survival skills.

**Performance** refers to the accomplishment of a given task measured against preset known standards of accuracy, completeness, cost and speed.

**Physical facilities** refer to raw materials resources that are needed to impact formal education. They may include furniture, classroom, administration block and libraries.

**Teaching and learning resources** refer to the material used by the teacher to deliver instructions, examples are charts, flash cards and chalk board.

**Time management** refers to organizing the period, day and almost all aspects of teaching and deciding how long and how often to teach various subjects recording pupils’ progress or keeping time consuming behavior problems to the minimum.

1.11 Organization of the study

The study is organized into five chapters. Chapter one is the introduction which consists of background to the study. Statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study and delimitations of the study, definition of significant terms and organization of the study. Chapter two contained the related literature reviewed. It included assessing the influence of instructional
supervision by the head teacher, time management by the teachers, teaching and learning resources impact and physical facilities influence.

Chapter three covered research methodology with subheadings: research design, target population, sample size and sampling techniques, research instruments, validity of the instruments, reliability of the instruments, data collections procedure, data analysis techniques and ethical considerations. Chapter four covered data analysis in the presentation and discussion. Chapter five provided the summary, conclusions, recommendations and suggestions for further research.
CHAPTER TWO
RELATED LITERATURE REVIEWED

2.1 Introduction
This section presented institutional factors on pupils performance in KCPE examination in public primary schools. The study dealt with the instructional supervision by the head teachers, the time management by the teachers, the availability of teaching and learning resources and the availability of the physical facilities, summary of related literature reviewed framework, the theoretical and conceptual frame.

2.2 Institutional factors and pupils’ performance
Academic performance is a measure of the degree of success in performing specific tasks in a subject or an area of study by pupils after teaching and learning experience (Chang, 2000). Pupils’ academic performance is hampered by absence of good instructional supervision, unplanned use of time, lack of sufficient and appropriate teaching learning resource and inadequate school physical facilities. Khaemba (2009), observed that the level of material input allocated to schools per pupil and level of efficiency with which fixed amount of material input are organized and managed does rise the pupils’ achievement.

2.3 Instructional supervision by the head teachers and pupils’ performance
Head teachers are charged by the Ministry of Education (MOE) and their employer T.S.C with the responsibility of treating teachers as professionals
through giving them autonomy to act upon their work. They are also supposed to create positive climate of high expectations for staff and pupils. Frequently monitor results and provide feedback to the teachers and pupils with learning problems. Nzuve (1997) asserts that management of human resource is a formal functional area of management. This involves, organizing, directing and controlling both the staff and pupils. The headteacher has to act skillfully in order to effectively control and guide the staff, parent, and learners to achieve the schools desired outcomes. The nature and quality of the leadership and management that the headteacher provides will determine the effectiveness of the school (Kyungu, 1999).

The study by Sushila (2004) on the role of headteacher influencing school performance in Kuria districts asserts that a good administrator should have adequate professional training and administrative experience. The headteachers being the first supervisor in the school must therefore ensure that teachers prepare and plan for their lessons at the right time. Lessons are structured with an interesting beginning and developed up to conclusion.

2.4 Time management by teachers and pupils’ performance

Time management is the act or process of planning and exercising conscious control over the amount of time spent on specific activities, especially to increase the effectiveness and efficiency on productivity. Retting (2013) has identified over- giving to family, friends work volunteering or activism, as prime obstacles to managing ones time. She recommends solutions including
being aware of one’s motives, being clear on your roles and responsibilities, thus if teachers establish healthy psychological boundaries in the service delivery, then the pupil will undoubtedly perform the KCPE examination exceptionally well.

Abagi (1997) further noted that there was a lot of wastage of pupils’ learning time in primary schools which led to inadequate syllabus coverage in preparation of national examination, leading to poor performance. It is therefore imperative that time is prudently managed, so as realize the set goals and objectives for the national examination KESI (2011). Since education is a result oriented discipline and the pupils are judged by their grades on the certificates, the headteacher must strive and enhance achievement of motivation among teachers (Okumbe, 1998). Teachers are very important facilitators of the teaching and learning process. They are responsible for arranging learning experience (Shiundu and Omulando 1992). Research from Berliner (1998) showed that the time a teacher has to take to correct misbehavior caused by poor classroom management skills result in lower rate of academic encouragement in the classroom thus the academic performance.

2.5. Teaching and learning resources and pupils’ performance

Teaching and learning resources are aids used to enhance the process of teaching and learning. They include textbooks, wall pictures, chalkboard, maps, resource persons, atlases, charts and geometrical instruments. They stimulate ideas, demand an active response from learners and provide enjoyment. The lesson becomes livelier and grouping and understanding the
major concepts becomes easier. Teachers use resources to enhance learners participation in class activities for effective learning (Klier, 2005). According to Agosiobo (2007) the use of teaching resources is important because they motivate learners to learn as they offer stimulus variation and assist in sustaining learners attention throughout the lesson.

The study by Lowe (2009) on effective teaching and learning resources in South Africa found that lack of relevant teaching material caused dismal pupils’ performance. Teaching and learning activities can be obtained through cultivating pupils’ creativity and motivation by a way of linking a classroom with natural and social environment. In the year 2002, the Ministry of Education science and technology in conjunction with UNICEF launched the Childs’ centered interactive approach to teaching and learning.

Mulwa (2004) in a study on factors influencing pupil academic performance in KCPE examination in Mutonguni division in Kitui Sub-County noted that lack of revision books in schools was a great disadvantage to the pupils, as inadequate revision by pupils would definitely result in poor performance in the KCPE examination. She noted that schools which had more resources performed better than those with fewer resources. There was a weak positive relationship between resource and performance.

2.6. Physical facilities and pupils’ performance
For efficient education management in school, physical facilities must be available. They determine the number of pupils to be accommodated, number
of staff members and the non-teaching personnel to be employed and the cost of determination for the efficient management of the school system (Sagie, 2001).

Olembo (1992) says that most programmes of instructions and pupil services need some physical facilities which include; grounds, buildings and equipments which may be used from time to time. Facilities below approved standards lead to reduction in quality of teaching and learning in schools resulting to poor pupils’ academic performance (Uwheeka, 2005)

Physical facilities such as desks, chalk, board, charts and cupboards are ingredients for effective teaching and learning. This is supported by the Nigeria Education Research Council, in 1998 which emphasized that for a good education policy or program to guarantee quality out puts it must be adequately supplied with necessary facilities and equipment. Kipkulei (1991), concluded by pointing out in his yearly permanent secretary’s report that the schools with adequate physical facilities perform better in National Examination than those that had inadequate facilities.

In the United States of America, research has revealed that pupils who attend well maintained schools with good classrooms have a higher achievement than those who attend poorly maintained schools with poor classrooms. Beynon (1997) was keen to observe that a sound physical environment reflected in school amenities, decorate and immediate surroundings have a
positive advantage to learners progress and performance. The school with adequate facilities stands better chance of having better results in KCPE.

2.7 Summary of the related literature reviewed
This section has revealed the relevant literature on the influence of institutional factors on pupils’ performance in KCPE examination in public schools which include institutional supervision by the headteachers, time management by the teachers, and availability of teaching/learning aids and availability of physical facilities. Some of the literature review demonstrate that the above institutional factors influence pupils’ performance in other parts of the world. Other researches on the same topic yield different results. Information on how institutional factors influence pupils’ performance in public primary schools in Kangundo Division is scanty. This study provided knowledge in this area and eventually filled the gap.

2.8 Theoretical framework
The study adopted the systems theory whose proponent was a biologist known as Ludwig Von Bertalanffyin (1940). The theory emphasizes that systems are open, goal directed and engages in feedback with the environment in order to meet the goals. Every part of the system is interdependent with each other working towards the goal. The performance of the system depends on how the elements work together and not how each element works independently. School setting brings in all the school organs and issues some including the departments, the pupils, teacher, school finances, academics, co-curriculum activities and the support staff members.
The settings are influenced by the instructional supervision by the head teacher, time management by teachers, the availability of learning/teaching aids resources and the availability of physical facilities. Each system’s functioning and the interdependency amongst all the systems eventually brings about the level of KCPE mean score. The head teacher controls all the systems, thus need to realize the importance of strengthening each and every system for the feedback transformation process that interact between the components thus bringing about improved performance amongst the pupil.
2.9 Conceptual frame work

Figure 2.1

Relationship between institutional factors and pupils’ performance
Figure 2.1 shows the inter-relationship among institutional factors and pupils’ performance in KCPE. These factors are assumed to be directly related such that a change in the independent variables causes a change in the dependent variable. The independent variables are the institutional factors which are the input into the teaching and learning process. They influence the teaching process which in turn influences the outcome that is the pupils’ performance in KCPE examination.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter focuses on the research methodology to be used in conducting the study. The chapter includes: research design, target population, sample size and sampling procedures, research instruments, validity of the instrument, reliability of the instrument, data collection procedures and data analysis techniques.

3.2 Research design
Jwan (2010) defined research design as a structure that guides execution of a research method and the subsequent analysis of the acquired data. This study attempted to analyze the influence of institutional factors on pupils’ performance in KCPE in Kangundo Division in public primary schools. The study adopted descriptive study design. Orodho (2003) says descriptive survey design is suitable because it is used to obtain information that describes existing phenomena by asking individuals about their perceptions, attitudes, behaviours or values. The descriptive design was used because it allowed for the collection of large amounts of data relatively quickly and effectively.

3.3 Target population
Best and Kahn (2011) defined target population as a group of individuals that have one or more characteristics common and of interest to the researcher. For this study the target population consisted of 30 public primary schools in Kangundo division. The schools had different enrolments but were influenced
by almost the same institutional factors. The target population of the study consisted of 1244 standard 7 pupils, 30 head teachers and 310 teachers (Sub-County Director of Education Office Kangundo, 2015).

3.4 Sample size and sampling procedures
Orodho (2004) defines sampling as the process of selecting a subset of cases in order to draw conclusion about the entire set. To make the study manageable as well as representative the sample should be proportionate to the target population. Mugenda and Mugenda (2003) 10 to 30% can be used as adequate sample for the study. The sample in this study consisted of 13 percent of the target population of the Standard Seven pupils. The total number of standard seven pupils was 1,244, therefore 13 percent was 162 pupils. This number was divided among the 30 schools and resulted in 6 pupils per school.

Therefore the sample size was 6 pupils in each school yielding to a total of 180. The researcher used simple random sampling method where the pupils were grouped into boys and girls separately. Each group took numbers from one up to the last. These numbers were written each on a small piece of paper (each group at a time). These pieces of paper were mixed and then only 3 were picked. Thus there were 3 boys and 3 girls who were respondents. Two teachers from each school were selected purposively, (Std 7 class teacher and the senior teacher) this gave a total of 60 teachers which was 20 percent of the 310 teachers. All the 30 head teachers were selected.
3.5 Research instruments

Oso and Onen (2005) indicate that research instruments are the tools used in collecting data on the phenomenon of the study. Three different sets of questionnaires and an observation check list were used. According to Mugenda and Mugenda (1999) a questionnaire is a list of standard questions prepared to fit a certain inquiry. The three different sets of questionnaires targeted three groups of respondents namely; the head teachers, teachers and the standard seven pupils. The headteachers’ questionnaire (Appendix II) consisted of five parts geared towards institutional factors influencing performance.

The teachers’ questionnaire (Appendix III) covered the teaching and learning process and had two parts while the pupils’ questionnaire (Appendix IV) covered their general view on performance and institutional factors influencing it. The observation checklist (Appendix V) comprised of the existing facilities and their state of affairs.

3.6 Validity of the instrument

Validity is defined as the appropriateness, correctness and meaningfulness of the specific inferences, which are selected on research results (Best & khan 1998). The validity is improved by pilot study. The researcher used face validity to review and developed an informal opinion as to whether or not the test measured what it was supposed to measure. Content validity on the other hand was used by the researcher to check whether the items in the questionnaire answered the research objectives. The supervisors who were
experts in the area of the study validated the instrument through expert judgment.

3.7 Reliability of the instrument

Reliability refers to degree to which a particular measuring technique gives consistent result over a number of trials (Orodho, 2004). To enhance the reliability the pilot study was conducted in two schools which were not included in the main study. The main aim of piloting was to gauge the clarity and relevance of the instrument items so that those items found to be inadequate for measuring variables could either be discarded or modified to improve the quality of the research instrument. This ensured that the instrument captured all the required data, from the administration of test-retest reliability method. It involved administering the same instruments twice to the same group of subject with time lapse between the first and the second test. A Pearson’s product moment correction coefficient formula was used.

\[ r = \frac{(N \text{ } x\text{ } y) - \sum x}{\sqrt{N \sum (x)^2 - \sum x)^2 \text{ } [(N \text{ } y)^2 - \text{ } \sum y)^2}] \]

**Key**

Xy - sum of gross product of scores of each variable

[\sum x^2] - sum of squared deviations in x

[\sum y^2] - sum of squared deviations in y

According to Mugenda and Mugenda (1999) a coefficient of 0.80 or more will simply show that there is high reliability of data. The Pearson product moment correlation formula was used to correlate the scores from both test periods to
obtain correlation coefficient of 0.81 for the headteachers, 0.81 for the teachers and 0.81 for the pupils. Hence the instruments was reliable.

3.8 Data collection procedure

A letter of clearance was obtained from the Department of Educational Administration and Planning of the University of Nairobi. The researcher then sought for a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). The researcher paid courtesy call to the Deputy Sub-county Commissioner, Kangundo Sub county who wrote a letter of introduction of the researcher to the headteachers. The researcher then visited each of the schools and booked appointments for administering the questionnaires to the respondents and filling the observations check list.

3.9 Data analysis techniques

The completed questionnaire was checked for completeness as part of preparation for analysis. The data was then coded using Statistical Package for Social Sciences (SPSS) version 20. Descriptive statistics was used to analyze quantitative data after which findings were presented in frequency Tables and graphs. According Kothari (2008) descriptive statistics enable the researcher to meaningfully describe a distribution of scores or measurements using few indices or statistics. Qualitative data generated from open ended questions was organized into themes, categories and the patterns pertinent to the study and analyzed using descriptive statistics. Pearson correlation coefficient (r) was used to test for relationships between the independent variables and the dependent variables.
3.10 Ethical Considerations

According to Mugenda and Mugenda (1999) ethical considerations are important for any research. In this study, the research ethics was reviewed by an Ethics Board to ascertain ethical guidelines for conducting the research so that ethical values are not violated. Such issues included proper conduct of the researcher during the research process, avoidance of plagiarism and fraud, confidentiality and privacy of the information obtained from the respondents, avoidance of physical and psychological harm to the respondents, obtaining voluntary and informed consent from the respondents and dissemination of the findings, these values were strictly adhered to.
CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter is comprised of the instrument return rate, research findings, their presentation and interpretation. The interpretations for this chapter are based on each of the objectives and questionnaire that guided this study. Presentation was done using Tables, charts and graphs for easy yet effective communication. The analysis was based on the predefined objectives and entered answering the following questions: To what extent did instructional supervision by the headteachers influence pupils’ performance in KCPE? To what extent did the time management by teachers influence pupils’ performance in KCPE? To what extent did the availability of teaching and learning resources influence pupils’ performance in KCPE? To what extent did the availability of physical facilities influence pupils’ performance in KCPE?

4.2 Instrument return rate

Questioners were used to collect data from 30 headteachers, 60 teachers and 180 pupils. All the 30 headteachers sampled returned the questionnaires marking a 100 percent return rate. Out of 60 teachers sampled 57 returned the questionnaires marking 95 percent return rate. Out of 180 pupils sampled only 153 returned the questionnaires giving a return rate of 85 percent.
Table 4.1

Instrument return rate

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Return Rate</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(f)</td>
<td>%</td>
</tr>
<tr>
<td>Headteachers’</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>Teachers’</td>
<td>57</td>
<td>95</td>
</tr>
<tr>
<td>Pupils’</td>
<td>153</td>
<td>85</td>
</tr>
</tbody>
</table>

According to Kumar (2005) a questionnaire return rate of above 50 percent is a good response. This return was therefore adequate as majority of them were returned.

4.3 Demographic data of headteachers and teachers

The demographic information was based on gender, age, teaching experience and professional qualification. This was because the researcher sought to establish whether the above factors influenced pupils’ performance in KCPE in Kangundo division.

4.3.1 Demographic information about headteachers and teachers

The headteachers and teachers were required to tick on their respective gender in order to find out whether gender could affect KCPE performance. The data were as represented in Table 4.2.
The data in Table 4.2 indicate that there were more male headteachers than female as indicated by 90 percent and 10 percent respectively. The females teachers were either not willing to take the leadership position or had not been promoted to those positions. This could affect the girl child effort to excel and hold top position and this could affect KCPE performance. The data shows that there were more female teachers as indicated by 70 percent than the male 25 percent. This means that boys do not have enough male teachers that key can look up to. It is imperative to have both genders of teachers well-presented so that pupils can benefit from their strengths.

### 4.3.2 Distribution of the headteachers and teachers by age

The age of both headteachers and teachers was considered important factors which could affect KCPE performance. The study sought to find out the extent to which age could affect pupils’ results.

#### Table 4.2

<table>
<thead>
<tr>
<th>Gender</th>
<th>Headteachers</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(f)</td>
<td>(%)</td>
</tr>
<tr>
<td>Male</td>
<td>27</td>
<td>90</td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>No response</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 4.3

Distribution of headteachers by age

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Headteachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(f)</td>
<td>(%)</td>
</tr>
<tr>
<td>25 years and below.</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>26-35</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>36-45</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>46 and above</td>
<td>11</td>
<td>36.7</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

The results in Table 4.3 indicate that most of headteachers (50%) were in the age bracket of 36-45. The teachers who were below the age of 25 years were not promoted to headteacher. The data indicated that age is an important factor for one to be promoted to be a headteacher.

Table 4.4

Distribution of teachers by age

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Teachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(f)</td>
<td>(%)</td>
</tr>
<tr>
<td>20 and below</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>21-30</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>31-40</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>41 and above</td>
<td>21</td>
<td>35</td>
</tr>
</tbody>
</table>
The data in Table 4.4 indicated that 80% were above 30 years of age. Both headteachers and teachers in age group are energetic and active and could influence KCPE performance. This concurs with Waimahiu (1995) who observed that the age of teachers in most schools form an important input variable which can have tremendous impact of KCPE performance.

### 4.3.3 Distribution of headteachers and teachers by teaching experience

The study attempted to establish the influence of experience of both headteachers and teachers on pupils’ performance.

**Table 4.5**

<table>
<thead>
<tr>
<th>Number of years</th>
<th>Headteachers</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(f) (%)</td>
<td>(f) (%)</td>
</tr>
<tr>
<td>0-5 years</td>
<td>1 (3.3)</td>
<td>6 (10)</td>
</tr>
<tr>
<td>6-15</td>
<td>5 (16.7)</td>
<td>15 (25)</td>
</tr>
<tr>
<td>16-25</td>
<td>9 (30)</td>
<td>12 (20)</td>
</tr>
<tr>
<td>26 and above</td>
<td>15 (50)</td>
<td>24 (40)</td>
</tr>
<tr>
<td>No. response</td>
<td>0 (0)</td>
<td>3 (5)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30 (100)</strong></td>
<td><strong>60 (100)</strong></td>
</tr>
</tbody>
</table>

The data in Table 4.5 indicates that, 50% of headteachers and 40% of teachers had teaching experience of 26 years and above. This was a good indication
that most schools had experienced headteachers and teachers who could understand the issues which might contribute to KCPE performance.

4.3.4 Headteachers’ and teachers’ responses on professional qualification.

This was a very important variable based on the assumption that there is a high correlation between professional qualification and KCPE performance.

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Headteachers</th>
<th>teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>B.ED degree</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Diploma</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>P1</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>No response</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

The findings in Table 4.6 indicated 46.7 percent of headteachers had the B.ED degree and above, while 26.7 percent had diplomas. This revealed that majority of headteachers were aware of the importance of high professional qualifications as they are key curriculum implementers in school. Their qualifications could affect performance. Some of schools headed by graduated headteachers performed very well in KCPE. This is in line with Okumbe (1998) who identifies that professional qualification is important to
headteachers as they are the implementers of the school curriculum and without appropriate academic qualification, such implementation may prove difficult.

The teachers data indicated that 35 percent of teachers had attained minimum qualification. Quality of teachers in terms of qualification and dedication could affect pupils’ performance, Ochanda (1978) cited. Awuonda (2011) pointed out that quality of teaching staff is the main determinant of pupils achievement in examinations. Chinelo (2010) observed that graduate teachers performed significantly better than non-graduate science teachers.

4.4 The influence of headteacher follows up on teacher’s professional documents

Teachers preparation of professional documents was considered as a factor that contribute to pupils academic performance. Teachers were therefore, requested to indicate the frequency with which headteachers check their professional documents. Their responses were as shown in Table 4.5
Table 4.7

Frequency of headteachers’ follow up teachers’ work

<table>
<thead>
<tr>
<th>Rate of headteachers inspection</th>
<th>(f)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a week</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Once a month</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Once a term</td>
<td>39</td>
<td>65</td>
</tr>
<tr>
<td>No response</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

The data in Table 4.7 revealed that all of the headteachers checked teacher professional documents, 65 percent indicated that their documents were checked once a term. This showed that the headteachers did not check the teachers’ documents as they ought to. The reluctance by headteachers on checking professional documents of teachers may cause failure of teachers preparing the documents regularly. This would make teachers to teach unprepared which could ultimately contribute to poor performance.

Musungu and Nasongo (2008) carried out a study on headteachers’ role on performance. They found out that headteachers in high performing schools supervised teachers’ professional documents frequently compared to those in average and low performing schools. Khaemba (2009) pointed out that teachers should be supervised in areas such as keeping professional documents in order that the mission of the school may be accomplished.
4.4.2 Teachers response of frequency of supervision while teaching

Table 4.8
Headteachers’ supervision during teaching

<table>
<thead>
<tr>
<th>Response</th>
<th>(f)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a week</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Once a month</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>Once a term</td>
<td>42</td>
<td>50</td>
</tr>
<tr>
<td>No response</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

The results in Table 4.8 indicate that 50 percent of the teachers were supervised only once per term. When headteachers do not supervise teachers regularly, it may encourage lack of preparation which may affect teaching and ultimately affect performance. The schools where headteachers supervised teachers frequently performed better in KCPE than those which were not supervised frequently. Goldberry (2009) found that supervision benefitted teachers in their teaching duties and it helped them to improve on their performance.

4.4.3 Teachers’ preparation of professional documents

Teachers should conform to their professional ethics. The research indicated that teachers should show the frequency with which they prepared their professional documents.

Table 4.9 indicates their responses.
Table 4.9
Teachers’ preparation of professional documents

<table>
<thead>
<tr>
<th>Documents</th>
<th>Always (f) (%)</th>
<th>Most time (%)</th>
<th>Rarely (f) (%)</th>
<th>No response (f) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schemes of work</td>
<td>48 (80.0)</td>
<td>6 (10.0)</td>
<td>3 (5.0)</td>
<td>3 (5)</td>
</tr>
<tr>
<td>Lessons plans</td>
<td>27 (45.0)</td>
<td>15 (25.0)</td>
<td>18 (30.0)</td>
<td>3 (5)</td>
</tr>
<tr>
<td>Lessons notes</td>
<td>29 (48.3)</td>
<td>15 (25.0)</td>
<td>13 (21.7)</td>
<td>3 (5)</td>
</tr>
<tr>
<td>Pupils progress report</td>
<td>39 (65.0)</td>
<td>12 (20.0)</td>
<td>6 (10.0)</td>
<td>3 (5)</td>
</tr>
</tbody>
</table>

The findings in Table 4.8 reveal that 80 percent of the teachers prepared schemes of work as represented by 80.0 percent of the teachers. Schemes of work guide teachers by sharing the content to be covered within a specific time. Lesson plans were not prepared regularly as only 45.0 percent of the teachers prepared daily lesson plans, 25.0 percent prepared most times and 30.0 percent prepared lesson notes rarely. Failure to prepare lesson plans daily could cause poor KCPE performance as lesson plans enables teachers to teach effectively and efficiently. Preparation of lesson notes was not well observed as only 48.3 percent prepared daily, 25.0 percent prepared most times and 13.0 percent rarely prepared lesson notes. This indicated that they went to class unprepared and this could affect pupils academic performance. Preparation of
progress report was observed by most teachers as represented by 65.0 percent those who prepared most of the times were 20.0 percent and some 6.0 percent prepared pupils progress report rarely. The progress report help teachers to make pupils follow up and this could affect performance.

4.4.4 Teachers’ Frequency of giving tests

The role of teachers in schools is to teach and give tests to pupils in order to assess their progress. The researcher wanted to find out how often the teachers ensure that teaching and learning is taking place in the school. This could be done through giving pupils tests.

The analysis was presented in Figure 4.1

Figure 4.1
Teachers’ response on frequency of testing pupils
The data in Figure 4.1 indicate that 50 percent gave examinations monthly as indicated by 30 teachers. Those that did weekly were 18 and 9 teachers said that they gave exams once a term. Examinations are very important in gauging pupils and help to identify their areas of weakness. Teachers said that they had a heavy work load. They said they could not give many tests due to lack of time for marking, analyzing and doing corrections. Examinations expose pupils to examination handling techniques and help them to gain confidence in doing examination. Doing few examinations could affect KCPE performance as schools that gave few tests were found to attain mean scores of less than 250 marks while those that gave tests weekly scored 250 marks and above.

4.4.5 Influence of availability of teachers on KCPE performance

Staffing levels was considered to be a factor that could affect KCPE performance. The study therefore sought to find out the extent to which it could affect pupil’s results. The responses were indicated in Figure 4.2.
Figure 4.2
Headteachers’ response on availability of teachers

The results in Figure 4.2 indicate that 67 percent of schools have inadequate teachers. Those were schools which had pupil-teacher ratio 40:1 or higher. Other schools indicated that they had adequate teachers by 33 percent and they had pupil-teacher ratio 39:1 or less. Majority of schools did not have enough teachers which meant that curriculum objectives and activities were not well covered and this could cause poor performance in examinations. It was found that some schools with adequate teachers performed very well in KCPE as compared to those which had inadequate teachers. Shiundu and Omulando 1992 assert that teachers facilitate and evaluate learners as professionals capable of rational decision making. Success in any KCPE performance depends largely on the availability of teachers.
4.4.6 Teachers’ response on adequacy of teaching staff

Teachers are directly involved with pupils as regards curriculum implementation.

It was therefore considered important to enquire from them about their staffing levels. Their responses were as indicated in the Table 4.10.

**Table 4.10**

<table>
<thead>
<tr>
<th>Adequacy of teachers</th>
<th>(f)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>In adequate</td>
<td>42</td>
<td>70</td>
</tr>
<tr>
<td>No response</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

The data in Table 4.10 revealed that were not enough as represented by 70 percent of the teachers. Understaffing could result to heavy work load to the teachers leaving very little time for pupils’ assignments which could contribute to poor performance in examinations. Nyatuka (2002) found out that many schools were understaffed which resulted to poor quality of education in those schools.

4.4.7 Pupils’ response on adequacy of staffing

Pupils are the ones that receive education from teachers. They were requested to respond to questions related to staffing levels. The responses were as indicated in Figure 4.3.
Pupils’ response on adequacy of teaching staff

The data in Figure 4.3 indicate that the pupils concurred with teachers that they did not have enough teachers as reported by 60 percent of the pupils. This could influence KCPE performance due to lack of time for individual pupils attention Hebler (2008) found out that shortage of teachers contributed to poor performance in Bangladesh.

4.5 Headteachers’ and teachers’ response to work load

This was a very important variable to consider based on the assumption that it could affect KCPE performance in Kangundo division.
Table 4.11
Headteachers’ and teachers’ response on workload

<table>
<thead>
<tr>
<th>Workload</th>
<th>Headteacher (f)</th>
<th>(%)</th>
<th>Teachers (f)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy</td>
<td>18</td>
<td>60.0</td>
<td>38</td>
<td>63.3</td>
</tr>
<tr>
<td>Moderate</td>
<td>9</td>
<td>30.0</td>
<td>17</td>
<td>28.3</td>
</tr>
<tr>
<td>Light</td>
<td>3</td>
<td>10.0</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>No response</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
<td><strong>60</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The data in Table 4.11 indicated that 60 percent of headteachers and 63.3 percent teachers concurred that the work load was heavy. Heavy work load denies teachers ample time to attend to individual needs when work is moderate teachers have sufficient time to attend to individual pupils. Both heavy and moderate workloads could affect performance.

4.5.1 Relation of work load and lesson preparation of teachers

Heavy work load was expected to have an impact on lesson preparation. The researcher therefore found it necessary to request teachers to indicate whether they had ample time for lesson preparation. The response was presented in Table 4.12.
Table 4.12

Teachers’ rating of adequacy of lesson preparation

<table>
<thead>
<tr>
<th>Response</th>
<th>(f)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate</td>
<td>42</td>
<td>70</td>
</tr>
<tr>
<td>Adequate</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>No response</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The result in Table 4.12 revealed that 70 percent of the teachers had inadequate time for lesson preparation. Lack of time to prepare lessons could make teachers to teach unprepared and could affect pupils’ performance.

4.5.2 Teachers’ responses on the influence of work load on syllabus coverage

Heavy work load was expected to have a very strong impact of syllabus coverage which could consequently affect KCPE performance. Teachers were requested to respond to questions related to syllabus coverage. Then response was represented in Figure 4.4.
4.4 Teachers’ response on syllabus coverage

The data in Figure 4.4 indicate that 40 percent of teachers completed the syllabus just before the exam, while 32 percent completed one month before KCPE examination. Some 23 percent never completed the syllabus. Results indicated that there wasn’t enough time to do revision which is necessary before pupils do the final examination. Revision prepares learners with tactics to handle examination. This could affect KCPE performance.

4.6 The effects of physical facilities of pupils’ academic performance

Physical facilities were considered as important variable which could affect pupils KCPE performance. The responses were as interpreted in Table 4.13
The findings in Table 4.13 indicate 80.0 percent of the schools had adequate classrooms and 70.0 percent had adequate desks. However 60.0 percent of headteacher indicated that they had inadequate play fields while 53.3 had inadequate kitchens.

The play fields are very essential for pupils’ co-curricular activities and this could affect KCPE performance. Kitchens are very important as well; at least a hot meal for lunch for the pupil may determine their performance. Libraries are essential resource centres which help pupils to access a lot of educational information and lack of this facility could contribute to poor performance.

Heynemann and Loxley (1993) in their study on the effect of availability of physical facilities on academic performance found out that the presence of a school library, related significantly to achievement in Brazil, China and Botswana. Gebregeorgis (2010) also pointed out that libraries play a

### Table 4.13
Headteachers’ response on facilities and equipment

<table>
<thead>
<tr>
<th>Facility</th>
<th>Adequate (f)</th>
<th>Adequate (%)</th>
<th>Inadequate (f)</th>
<th>Inadequate (%)</th>
<th>Not available (f)</th>
<th>Not available (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td>24</td>
<td>80.0</td>
<td>6</td>
<td>20.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Offices</td>
<td>27</td>
<td>90.0</td>
<td>3</td>
<td>10.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Latrines</td>
<td>19</td>
<td>63.3</td>
<td>11</td>
<td>36.7</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Desks</td>
<td>21</td>
<td>70.0</td>
<td>9</td>
<td>30.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pitches</td>
<td>12</td>
<td>40.0</td>
<td>18</td>
<td>60.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kitchen</td>
<td>14</td>
<td>46.7</td>
<td>16</td>
<td>53.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>library</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td>30.0</td>
<td>21</td>
<td>70.0</td>
</tr>
</tbody>
</table>
supportive role in education as lifelong learning centers. Village libraries in Uganda enhanced education by developing reading culture.

4.7 The influence of teaching and learning resources on pupils’ performance in KCPE

The teaching and learning resources could have an impact on KCPE performance. The resources include chalk boards, reference books and pupils’ books.

Table 4.14
Teachers’ response on adequacy of teaching and learning resources

<table>
<thead>
<tr>
<th>Response</th>
<th>Adequate (f)</th>
<th>Adequate (%)</th>
<th>Inadequate (f)</th>
<th>Inadequate (%)</th>
<th>No response (f)</th>
<th>No response (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalk boards</td>
<td>51</td>
<td>85.0</td>
<td>6</td>
<td>10.0</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Reference books</td>
<td>33</td>
<td>55.0</td>
<td>24</td>
<td>40.0</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Pupils books</td>
<td>26</td>
<td>43.3</td>
<td>31</td>
<td>51.7</td>
<td>3</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Table 4.14 indicates that 85% of the schools had adequate chalkboards. Chalkboards help learners to access information from teachers easily. Reference books were also adequate as represented by 55.0 percent. However pupil books which represented revision books and exercise books were inadequate as represented by 43.3 percent. Shortage of revision books and pupils exercise books was a great disadvantage to the pupils as noted by
Mulwa (2014) in his study on factors influencing pupil academic performance in KCPE examination in Mutonguni division in Kitui Sub County.

**Figure 4.5**

*Pupils’ response on punctuality in lesson attendance by teachers*

The data in Figure 4.5 indicate that 55.0 percent of teachers attended lessons on time, which meant that the teachers had good time in going through the lesson steps. This may influence the pupils’ performance in KCPE. Only 13.3 percent of the pupils indicated that teachers attended lesson before time, which is also advantageous in lesson delivery. However there were those who attended late which were represented by 16.7 percent responses from pupils. This will eventually lead to poor KCPE performance, since teachers input is key to pupils performance in examinations and other areas in their lives.
Therefore headteachers need to strive to enhance achievement by motivating teachers towards good time management.

**Figure 4.6**
**Headteachers’ response on text book pupil ratio and academic performance**

The results in Figure 4.6 indicate that 60.0 percent of the headteachers indicated that text book to pupil ratio was 1:5. The schools whose text book to pupil ratio was 1:3 posted good results in KCPE, while those with 1:10 posted very poor results. Enough textbooks enhance a comfortable learning atmosphere whereby pupils are able to access information with ease and they can cover more work on their own. These findings are in line with Ayoo (2002) who carried out a study on the factors affecting students’ performance in KCPE in public secondary schools in Maseno Division.
4.7.1 Teachers’ and pupils’ responses on other factors that influence academic performance

The researcher thought that there could be other factors which influenced KCPE performance. Teachers and pupils were requested to name other factors that influenced performance and the responses were indicated in Table 4.15.

Table 4.15
Teachers’ and pupils’ responses on other factors influencing academic performance

<table>
<thead>
<tr>
<th>Other factors</th>
<th>Teachers</th>
<th></th>
<th>Pupils</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(f)</td>
<td>(%)</td>
<td>(f)</td>
<td>(%)</td>
</tr>
<tr>
<td>Lack of motivation</td>
<td>33</td>
<td>55.0</td>
<td>108</td>
<td>60.0</td>
</tr>
<tr>
<td>Poor public relations</td>
<td>18</td>
<td>30.0</td>
<td>28</td>
<td>15.6</td>
</tr>
<tr>
<td>Indiscipline</td>
<td>6</td>
<td>10.0</td>
<td>17</td>
<td>9.4</td>
</tr>
<tr>
<td>No response</td>
<td>3</td>
<td>5.0</td>
<td>27</td>
<td>15.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>100</strong></td>
<td><strong>180</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The data in Table 4.15 indicate that 55.0 of the teachers and 60.0 percent pupils lacked motivation which could cause laxity and this could affect performance. Poor public relations between headteacher, teachers, pupils, parents and other stakeholders could cause communication breakdown which could affect performance. Undisciplined learners may spend most of their time away from school or doing punishment. These factors reflect on headteachers role in the instructional supervision and the school systems which affects the KCPE performance.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter highlights summary of the study, conclusions, recommendations, and suggestions for further research.

5.2 Summary of the study
The purpose of the study was to investigate the influence of institutional factors on pupils’ performance in Kenya Certificate of Primary Education in public primary school in Kangundo Division, Machakos County. The study was guided by the following objectives; to assess the extent to which instructional supervision by the headteachers influenced the pupils’ performance in KCPE by follow-up of teacher’s professional documents and supervision of teachers while teaching. To establish the extent to which time management by the teachers influenced the pupils’ performance in KCPE by the way the teachers attended lessons. To determine the extent to which availability of teaching and learning resources influenced the pupils’ performance in KCPE by adequacy and inadequacy of chalkboards, reference books and pupils books. To examine the extent to which the availability of physical facilities influenced the pupils’ performance in KCPE by establishing adequacy and inadequacy of classrooms, offices, latrines, desks, pitches, kitchens and libraries.

The study was based on the systems theory. It used descriptive research design which helped to answer questions concerning the status for subjects under
study. The target population consisted of 30 primary school in Kangundo Division which had 30 headteachers, 310 teachers and 1,244 standard seven pupils.

All the headteachers were selected for the study. The 60 teachers out of the 310, were selected purposively, standard 7 class teacher and the senior teacher from each of the 30 schools. Simple random sampling method was used to select 180 pupils from the population of 1,244 standard 7 pupils. The research instruments used to collect data from respondents were three sets of self administered questions and an observation checklist filled by the researcher. The headteacher’s questionnaire consisted of five parts which were geared towards influence of institutional factors on pupils’ performance in KCPE. The teacher’s questionnaire had two parts geared towards teaching and learning process while the pupils questionnaire covered general overview of the influence of institutional factors on pupils’ performance in KCPE. The observation checklist consisted of the physical facilities that may be found in a school compound. Data was analyzed by use of statistical package for social sciences version 20, computer software programme.

Findings on the extent of the influence of instructional supervision reveal that headteachers’ professional support was not adequate. Out of 60 teachers contacted 39 (65 %) reported that headteachers checked their professional documents only once a term while 6(10%) reported that their document were checked once a week. This could make teachers to relax in preparing the
documents which guide them during their teaching process. This could contribute to poor KCPE performance in most schools in Kangundo Division.

Findings indicated that time management in attending lessons by teachers influenced performance in KCPE. 55 percent of the schools whose teachers attended lessons on time performed well while 16.7 percent of schools whose teachers attended lesson late performed poor in KCPE.

Findings on teaching and learning resources revealed that there were inadequate pupils’ books as indicated by 51.7 percent of the teachers. Teaching aids such as reference books were inadequate as reported by 40.0 percent of the teachers. Pupils learn more through revision, reading their books and displayed charts. This could contribute to poor pupils KCPE performance.

Findings on the extent of influence on availability of physical facilities indicate that 80 percent of the schools had adequate classrooms, 70 percent had adequate desks. However, 60 percent schools had inadequate play fields and 53.3 percent had inadequate kitchens. Playing fields and hence co-curricular activities thus influencing KCPE performance. Provision of hot meals for lunch was an important factor that influenced performance in KCPE. Also it was found that libraries were not available as was reported by 70 percent of the headteachers. However 30 percent of headteachers reported that they had libraries which were inadequate. No school had adequate libraries. Lack of libraries could affect the pupils’ performance as libraries act as resource centre for both pupils and teachers.
5.3 Conclusion

Based on the findings, it was concluded that headteachers did not provide enough instructional supervision and this could affect pupils’ performance in KCPE. The findings on follow-up of teacher’s work revealed that 65% of headteachers checked the teachers’ work only once per term, 50% of headteachers supervised teachers who are teaching only once a term, this trend should be improved so as to improve the pupil’s performance. On time management, most schools in the division were understaffed, in that 70% of the schools had inadequate staffing. This contributed to high pupil teacher ratio which increased teachers’ workload and leaving very little time for individual pupil attention.

Schools did not have adequate teaching and learning resources such as reference books which were indicated as inadequate by 40% of the schools and pupils’ books which were indicated as inadequate by 51.7% of the schools. This affected the pupils’ performance in KCPE. Schools did not have adequate physical facilities such as libraries indicated by 70% of the schools as not available, pitches indicated by 60.0% of the schools as inadequate, classrooms indicated by 20% of the schools as inadequate and kitchens indicated by 53.3% of the schools as inadequate, this affected the pupils’ performance in KCPE.

5.4 Recommendations

The following recommendations are put forward.
Headteachers should carry out their professional role in curriculum supervision through checking teachers’ professional documents regularly and supervising teachers as they carry out their teaching duties.

The Ministry of Education Science and Technology should provide opportunities for capacity building and furthering education for both Headteachers and teachers so as sharpen skills and improve on service delivery especially time management.

The government should provide enough teachers to all schools in order to optimize the workload in teaching. This will improve the teachers’ effectiveness and efficiency.

The headteachers and school committees assisted by the government should provide adequate teaching and learning resources. This will improve the service delivery by the teachers and improve learning of the pupils.

The headteachers should improve the instructional supervision tactics to ensure that the teachers attend to their teaching roles punctually and willingly. The headteachers, communities and the government should ensure that all the required physical facilities are made available in all the public primary schools.
5.5 Suggestions for further research

The researcher recommends further study on the following:-

i. A similar study should be carried out in other divisions of Machakos County to establish whether they share similar challenges as per the findings.

ii. A study should be carried out to establish the challenges facing primary school headteachers in instructional supervision.
REFERENCES


Clark, (2007). *The effects of leadership styles on Hotel employees commitment to services and quality; Cornell hospitality quarterly.vol.50 issues 2 pg. 209.


Murnane, R. J., & Philips, B. R. (1981, March). *What do effective teachers of Inner City Children have in Common?* Social Science Research, 10, 83-100. Lagos:


APPENDICES

APPENDIX 1: LETTER OF INTRODUCTION

Timothy Musyoka Nthumo
University of Nairobi
P.O. BOX 30197
NAIROBI.
25th May 2015

The Headteacher

Dear Sir/Madam,

RE: PARTICIPATION IN RESEARCH

I am a post graduate student in the University of Nairobi. I am carrying out a research on the “influence of institutional factors on pupils’ performance in KCPE examination in public primary schools in Kangundo Division, Kangundo sub-County, Machakos County, Kenya.” Please allow me to carry out research in the school among the teachers and the pupils. I will administer questionnaires and enquire any other information that may help to carry out the research. The identity of the respondent will be treated with great confidentiality and the information will be used for academic purpose only.

Thank you.

Yours faithfully,

Timothy Musyoka Nthumo
APPENDIX 11: HEADTEACHERS’ QUESTIONNAIRE

This questionnaire is designed to gather data about “influence of institutional factors on pupils’ performance in KCPE in Kangundo Division.” The information you give will be used for study purposes only and your identity will be treated with absolute confidentiality. Do not write your name or the name of your school. Please fill in each question by ticking or filling in blanks to all the items in the questionnaire as honestly and correctly as possible.

Part 1: Background information.

(Tick [√ ] whichever is appropriate)

1. What is your gender?
   a) Male [ ]
   b) Female [ ]

2. What is your age bracket?
   a) 25 years and below [ ]
   b) 26-35 years [ ]
   c) 36-45 years [ ]
   d) 46 years and above [ ]

3. What is your teaching experience?
   a) 0-5 years [ ]
   b) 6-15 years [ ]
   c) 26 and above [ ]

4. What is your professional qualification?
   a) Masters [ ]
   b) Degree [ ]
   c) Diploma [ ]
   d) P1 [ ]

5. What is the size of your school?
   a) Single stream [ ]
   b) Double stream [ ]
   c) Triple stream and above [ ]
Part II: Academic performance

6. School academic performance since 2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Pupils Enrolment</th>
<th>KCPE position in your Division</th>
<th>KCPE position in the Sub County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. How would you rate your school performance?
   a) Good [    ] b) Average [    ]
   c) Below average [    ] d) Others, explain the performance of your school …………………………………………………

8. How do you rate the attitude of pupils in your school towards education?
   a) Positive [    ] b) Neutral [    ]
   c) Negative [    ]

Part III: Staff establishment

9. Indicate the respective teacher academic level

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters</td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td></td>
</tr>
<tr>
<td>P1</td>
<td></td>
</tr>
</tbody>
</table>
10. How do you rate the number of teachers in your school.

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

11. On average how many teachers have taught for the following number of years in your school?

   a) 0-5 years [ ]
   b) 6-15 years [ ]
   c) 16 years and above [ ]

12. On average what is each teacher’s workload per week? [ ]

13. How many teachers are in your school? [ ]

   **Part IV: Teaching and learning resources**

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

<table>
<thead>
<tr>
<th>Material</th>
<th>Available</th>
<th>Adequate</th>
<th>Inadequate</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalkboards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference books</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupils books</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. What is the convenient number of chalk boards in a classroom?

(a) One [ ]              (b) Two [ ]          (c) Three [ ]
16. On average what is the Teacher reference book ratio?

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

17. In your opinion how is the number of the text books?

   (a) Enough [ ] (b) Few [ ] (c) Very few [ ]

18. On average what is the pupils’ book ratio per class?

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

19. i) How do you rate the Number of text books in every subject?

   a) Adequate [ ] b) Not adequate [ ]

Part V: Physical facilities

20. Indicate the type of buildings in your school

   (a) Permanent [ ] (b) Semi permanent [ ] (c) Temporary [ ]

21. Indicate the adequacy of the following physical facilities in your school.

   Tick as appropriate.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Available</th>
<th>Adequate</th>
<th>Inadequate</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latrines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pitches</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
22. How many streams are in your school
   (a) Single stream [ ] (b) Double Stream [ ] (c) Triple Stream [ ]

23. What is the condition of the sanitary facilities
   a) Good [ ] (b) Fair [ ] (c) Poor [ ]

24. When do you expect the performance to improve by a mean score of over 10%?
   (a) After 1 year [ ] (b) After three years [ ] (c) After Five years [ ]

   Thank you.
APPENDIX III: TEACHERS’ QUESTIONNAIRE

This questionnaire is aimed at collecting data about “institutional factors that may influence the pupils’ performance in KCPE in public primary school in Kangundo Division, Kangundo Sub-County.” Identity of each and every respondent will be held with total confidentiality and the information used only for the purpose of this study. Please complete each questions according to the instructions given. Do not write your name or the name of your school. Kindly respond to all the questions.

Part I: Background information

1. What is your gender?
   a) Female [ ]  b) Male [ ]

2. What is your age bracket?
   a) 20 year and below [ ]  b) 21-30 years [ ]
   c) 31-40 years [ ]  d) 41 years and above [ ]

3. How long have you been teaching in this school?
   a) Less than 5 years [ ]  b) 5-10 years [ ]
   c) 11-20 years [ ]  d) 21 years and above [ ]

4. What is your current teaching workload per week? ……………………

5. How do you rate the workload?
   a) Heavy [ ]  b) Moderate [ ]
   c) Light [ ]

6. What is your professional qualification?
   a) Master [ ]  b) Degree [ ]
   c) Diploma [ ]  d) P1 [ ]
7. Indicate your teaching experience in years
   a) 0-5 years [ ]        b) 6-15 [ ]
   c) 16-25 years [ ]      d) 26 years and above [ ]

Part II: Academic performance

8. How regularly do you test your pupils?
   a) weekly [ ]       b) monthly [ ] (c) Termly [ ]

9. How often do you give pupils assignments/homework?
   a) Daily [ ]        b) Weekly [ ] (c) Monthly [ ]

10. How do you rate the frequency at which you prepare your professional documents?
    a) Always [ ]      b) Most of the times [ ] (c) Rarely [ ]

11. What is the impact of teaching and learning resources on pupils’ performance?
    (a) Positive [ ] (b) Negative [ ] (c) No impact
    What is the impact of physical facilities on pupils’ performance.
    (a) Positive [ ] (b) Negative [ ] (c) No impact

12. How do you rate the time for lesson preparation?
    a) adequate [ ]      b) inadequate [ ]

13. How do you rate the staffing in your school?
    Adequate [ ]      b) Inadequate [ ]

14. Which is the most convenient class enrolment when teaching?
    (a) Upto 20 pupils [ ]      b) upto 35 pupils [ ]
    (c) above 40 pupils. [ ]
15 How many times does your headteacher asses you while teaching?
   a) Once a week [   ]  b) Once a month [   ]  c) Once a term [  ]

16 From your own reasoning, how long should a headteacher stay in one school before transferring to a new school?
   (a) Upto 3 years [   ]  (b) Upto 5 years [   ]  
      c) Upto 10 years [  ]

Thank you
APPENDIX IV: PUPILS’ QUESTIONNAIRE

This questionnaire is designed to gather data about “influence of institutional factors on pupils’ performance in KCPE in public primary school in Kangundo Division.” Kindly respond to all the questions do not write your name or the name of your school.

Instructions: Tick [√ ] where appropriate.

1. What is your gender?
   a) Male [ ] b) Female [ ]

2. How much work are you given?
   a) Too much [ ] b) Little [ ] c) Enough [ ]

3. What is your age bracket?
   a) 10-14 years [ ] b) 15 years and above [ ]

4. How do you rate the adequacy of textbooks in your school?
   a) Excess [ ] b) Enough [ ] c) Not enough [ ]

5. How do you assess the performance of KCPE in your school?
   a) Satisfactory [ ] b) Average [ ] c) Below average [ ]

6. How many times does your headteacher check your text books per term?
   a) Once [ ] b) Twice [ ] c) Thrice [ ]

7. How do you rate your teachers’ punctuality in lesson attendance?
   a) Before Time [ ] b) On time [ ] c) Late [ ]
8. How do you rate yourself on completion of assignments/homework given to you by your teachers
   a) Before time [    ] b) on time [    ] (c) Does not Complete [    ]

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

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

11. How do you rate the number of teachers in your school?
   (a) Adequate [    ] b) Inadequate [    ]

Thank you.
# APPENDIX V: OBSERVATION CHECKLIST

<table>
<thead>
<tr>
<th>S/No</th>
<th>Item</th>
<th>Availability</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number available</td>
<td>Adequate or inadequate</td>
</tr>
<tr>
<td>1.</td>
<td>Classrooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Administration offices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Pitches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Boys latrines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Girls latrines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Staff latrines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Jikos in the kitchen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Stores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Water points</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Computers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Teachers Desks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Teachers chairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Pupils’ lockers/desks in std 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Halls</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX VI: LIST OF THE SCHOOLS THAT WERE VISITED

<table>
<thead>
<tr>
<th>S/NO</th>
<th>NAME OF SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ITUUSYA</td>
</tr>
<tr>
<td>2</td>
<td>KATHITHYAMAA</td>
</tr>
<tr>
<td>3</td>
<td>MASEWANI</td>
</tr>
<tr>
<td>4</td>
<td>MBILINI</td>
</tr>
<tr>
<td>5</td>
<td>ST. FRANCIS</td>
</tr>
<tr>
<td>6</td>
<td>KANZOKEA HGM</td>
</tr>
<tr>
<td>7</td>
<td>KANGUNDO DEB</td>
</tr>
<tr>
<td>8</td>
<td>MULINGANA</td>
</tr>
<tr>
<td>9</td>
<td>KANZALU HILL</td>
</tr>
<tr>
<td>10</td>
<td>KWA MBALU</td>
</tr>
<tr>
<td>11</td>
<td>KITWII GIRLS</td>
</tr>
<tr>
<td>12</td>
<td>NGULUINU AIC</td>
</tr>
<tr>
<td>13</td>
<td>KYAAKA SA</td>
</tr>
<tr>
<td>14</td>
<td>KIVULUNI</td>
</tr>
<tr>
<td>15</td>
<td>MATUNGULU AIC</td>
</tr>
<tr>
<td>16</td>
<td>KAMBAI AIC</td>
</tr>
<tr>
<td>17</td>
<td>UNYUANI</td>
</tr>
<tr>
<td>18</td>
<td>MUIKOIKONI</td>
</tr>
<tr>
<td>19</td>
<td>KILALANI</td>
</tr>
<tr>
<td>20</td>
<td>KWAMWILILE</td>
</tr>
<tr>
<td>21</td>
<td>KITWII BOYS</td>
</tr>
<tr>
<td>22</td>
<td>KAWAUNI</td>
</tr>
<tr>
<td>23</td>
<td>KYAI</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>24</td>
<td>MATETANI</td>
</tr>
<tr>
<td>25</td>
<td>KYELENDU</td>
</tr>
<tr>
<td>26</td>
<td>KANGUNDO AIC</td>
</tr>
<tr>
<td>27</td>
<td>MBONDONI</td>
</tr>
<tr>
<td>28</td>
<td>KIKAMBUANI</td>
</tr>
<tr>
<td>29</td>
<td>KWANDIU</td>
</tr>
<tr>
<td>30</td>
<td>KAMUTONGA</td>
</tr>
</tbody>
</table>
APPENDIX VI - PERMIT

THIS IS TO CERTIFY THAT:

MR. TIMOTHY MUSYOKA NTHU KO
of UNIVERSITY OF NAIROBI, 0-90115
Kagundo, has been permitted to
conduct research in Machakos County
on the topic: INFLUENCE OF
INSTITUTIONAL FACTORS ON PUPILS'
PERFORMANCE IN KENYA PRIMARY
CERTIFICATE OF EDUCATION IN PUBLIC
PRIMARY SCHOOLS IN KANGUNDO
DIVISION, MACHAKOS COUNTY, KENYA

for the period ending:
31st August, 2015

Director General

National Commission for Science,
Technology & Innovation

CONDITIONS

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

REPUBLIC OF KENYA

National Commission for Science,
Technology and Innovation

RESEARCH CLEARANCE
PERMIT

Serial No. A 5262

CONDITIONS: see back page
APPENDIX VII - LETTER OF AUTHORISATION

NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349, 310571, 2219420
Fax: +254-20-318245, 318249
Email: secretary@nacostki.go.ke
Website: www.nacostki.go.ke
When replying please quote

Ref: No.

10th June, 2015

NACOSTI/P/15/8320/6129

Timothy Musyoka Nthumo
University of Nairobi
P.O Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Influence of institutional factors on pupils’ performance in Kenya Primary Certificate of Education in public primary schools in Kangundo Division, Machakos County, Kenya,” I am pleased to inform you that you have been authorized to undertake research in Machakos County for a period ending 31st August, 2016.

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

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

DR. M. K. RUGUTT, PhD, HSc.
DIRECTOR-GENERAL/CEO

Copy to

The County Commissioner
Machakos County.

The County Director of Education
Machakos County.