STATUS OF EDUCATION QUALITY IN THE CONTEXT OF FREE PRIMARY EDUCATION IN NGINDA ZONE, MURANG'A COUNTY, KENYA

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DECLARATION

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

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We confirm that the work reported in this research project was carried out by the candidate under our supervision.

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DEDICATION

This work is dedicated to my children Melvin Macharia and Alex Njoroge for their love & affection while I was undertaking the course. May God grant them to be better scholars.
ACKNOWLEDGEMENT

I wish to acknowledge my supervisor professors Grace W. Bunyi and Dr Charles M. Magoma for their instruction and wisdom.

I also acknowledge my wife for her moral and social support, patience and willingness to take care of our family and shoulder some of my responsibilities while I was away. May the almighty God bless you all.
ABSTRACT

Introduction of FPE in January 2003 was meant to ensure access, retention and completion of primary education despite of high enrollment in classes, limited teaching/learning materials and inclusion of all learners with diverse needs. This was characterized by low learning achievements which is a threat to quality education. The study aimed at investigating the status of education quality in the context of free primary education in public primary schools in Murang’a County. The purpose of the study was to investigate the status of education quality in the context of FPE. Quality of FPE was measured by use of variables which the researcher presumed to be determinants of education quality. These variables included; - KCPE performance trend, teacher pupil ratio, mode and frequency of pupils assessment, teachers’ effectiveness and adequacy of teaching learning materials and physical facilities. The study locale had ten public primary schools. The study population was 465 in five sampled public primary schools. The study adopted a descriptive survey design whereby five schools were sampled through purposive sampling method. The respondents included head teachers, teachers and pupils. Simple random sampling method was used to sample teachers while systematic sampling methods was used to sample pupils by use of their class registers. The sample of the study included 5 head teachers, 40 teachers and 420 pupils to give a total sample of 465. The instruments for data collection included questionnaires for teachers and pupils and interview schedules for head teachers. Observation guide was used by the researcher to assess the physical facilities. The research instruments were piloted in two schools for reliability. The pilot schools were not included in the sample study. The findings were presented in frequency tables, pie charts, percentages, graphs and in narrative form. Conclusion was based on the findings. The findings revealed that there was high teacher pupil ratios, inadequate teaching learning materials and physical facilities and ineffectiveness of teachers. This resulted to an average K.C.P.E performance trend in public primary schools in Nginda zone thus necessitating the government and policy makers for intervention for quality education to be achieved.
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<tr>
<td>ECDE</td>
<td>Early Childhood Development and Education</td>
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<td>EFA</td>
<td>Education for All</td>
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<td>FPE</td>
<td>Free Primary Education</td>
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<td>GER</td>
<td>Gross Enrollment Ratio</td>
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<td>KCPE</td>
<td>Kenya Certificate of Primary Education</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>PTR</td>
<td>Pupils Teacher Ratio</td>
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<td>UPE</td>
<td>Universal Primary Education</td>
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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter presents the background to the study, statement of the problem, purpose and objectives of the study, research questions, significance of the study, limitations, delimitations, assumptions, theoretical and conceptual framework and operational definition of central terms.

1.2 Background to the Study

Education is as old as mankind. It is an important tool for imparting knowledge, altitudes, skills and values from one generation to another (Oluoch, 1982). Globally education is regarded as a necessary tool for poverty reduction and improvement of living standards. UNESCO (2005) reports acknowledge the importance of education in fostering civil participation, greater tolerance and intercultural dialogues. It also delivers economic benefits to individuals as well as nations (Stevens, 2003). It is also key in national development meaning it should be of good quality (Audinos, Lairez and Makwati, 2003). Education is key in terms of wealth creation, social welfare and international competitiveness (Kenya vision 2030). This document emphasizes the need for provision of education of good quality. According to UNESCO (2006) education is the primary agent of transformation towards sustainable development inorder to increase people capacities to transform their visions for society in reality.

The World Bank (1997) acknowledges the need for quality education and further states that education quality is ensuring that students actually learn. The document
further states that there is credible evidence that educational quality has strong casual impact on individual earnings and economic growth. Owing to its importance to mankind, education has been highly esteemed globally, internationally and locally. This has led to the endorsement of the Millennium Development Goals (MDGS) with the number two goals being attainment of Universal Primary Education (UPE) by 2015.

Every child has a right to education. This is clearly stipulated in article 26 of universal declaration of human right of 1948. Successive international declaration have all emphasized on the need for the international community to commit itself fully to enabling its citizen to access basic quality education. This draws global attention to the fact that education for all (EFA) is a fundamental human right which cannot be realized without enabling all children to access basic quality education.

Kenya like many African countries is a signatory to the United Nations millennium development goals, one of which is achieving universal primary education by 2015. It has made huge strides in addressing this. In January 2003 it introduced free primary education (FPE) to fulfill an election pledge by the national rainbow coalition (NARC) government thus giving a strong political will.

According to statistics in the government of Kenya (GOK) economic survey, 2010, gross enrolment rates increased from 5.9m in 2003 to 8.5m in 2008. The enrolment outstripped the available resources both material and human resources. This meant overcrowding in public primary schools negatively affecting the very quality of
education the learners received. Recent report from Africa progress panel (APP, 2010) has vividly painted the picture for the wider region concerned with the quality of education offered through FPE with many countries still struggling to push up enrollment figures. Despite the push to meet the MDG education goals, many children of school going age do not have access to quality education, even if they are in learning institutions (App, 2010). In its progress report of September, 2012, it documented that millions of children on the continent are not in school and those that are schooling; a large percentage are failing to learn. It also admits that in the past decade, overall enrollment levels have increased and gender gaps narrowed as more children proceeded to secondary school throughout the continent. APP (2012) also confirmed that about 60% of children in schools receive education of such abysmal quality as they lack basic literacy and numeracy skills.

The civil society group Uwezo (2010) has affirmed that basic numeracy and literacy skills of primary school children in East Africa are deficient. The result of Uwezo survey taken in Kenya, Uganda and Tanzania implies that most pupils are not acquiring basic skills during the early years of primary school as is expected in the national curriculum despite the countries initiating universal primary education. Abolishing school fees in Burundi, Ethiopia, Ghana, Mozambique, Malawi, Nepal, Tanzania and Kenya has created a great shortage of teachers due to the increased enrollment in schools. Ghana for example has recruited retirees and volunteers to meet teachers demand while Tanzania embarked on an ambitious Programme of education reform building 54,000 classrooms between 2002 and 2006 as well as hiring 18,000 additional teachers. Like in Kenya most children in Zambia are
getting out of primary school half baked despite the country registering 90% of the children in primary schools however serious challenges have bedeviled the implementation of the FPE policy, (UNICEF & World Bank, 2009) such as congested classrooms, limited teaching learning materials and physical facilities, inconsistence pupils assessment and teachers ineffectiveness negatively impacted on the quality of teaching and learning on one hand and contributed to indiscipline in schools on the other hand (Okwach & George, 1997). The researcher thus was inspired by the above emerging issues to look into the status of education quality in the context of FPE with reference to regular public primary schools in Nginda zone Murang’a County.

1.3 Statement of the Problem

The implementation of free primary education (FPE) in January 2003 by the Kenyan government was a positive milestone towards the achievement of education for all (EFA) goals by 2015. According to statistics in the government of Kenya economic survey 2010 after FPE, gross enrollment ratio increased from 5.9m in 2002 to 8.5m in 2008. Apart from enrollment, completion rate for primary school has also gone up over the recent years from mere 62.8% in 2002 to 97.8% in 2009 (GOK 2010). The increase in enrollment has been happening without the expansion of the school infrastructure leading to overcrowding in classrooms (APP 2010). The enrollment has adversely affected the quality of education these children receive in their learning institutions (Uwezo, 2010). The Kenya national examination council (KNEC) 2011 Newsletter underscores the poor quality of candidates sitting for the national primary school examination. The 2011 KCPE examination newsletter depicts the inability of many of the candidates to
communicate fluently in English and Kiswahili citing several examples of words that the candidates used, which though similar to the language were non-existent. The study sought to find out the indicator of education quality such as KCPE performance trends, teacher-pupil ratio, assessment of pupils, adequacy of teaching learning materials and physical facilities and teachers effectiveness in regular public primary schools more so in Nginda zone Murang’a County. This will either improve or maintain the education quality in the schools.

1.4 Purpose of the Study

The purpose of the study was to investigate the status of education quality in context of FPE in Nginda zone, Murang’a County.

1.5 Objectives of the Study

The objectives of the study was:-

i) To assess the performance trend of pupils in KCPE between 2003-2011.

ii) To determine the teacher-pupil ratio in regular public primary schools.

iii) To analyze the mode and frequency of pupils assessment in regular public primary schools.

iv) To assess the adequacy of teaching learning materials and physical facilities.

v) To determine teachers effectiveness in public primary schools.

1.6 Research Questions

The study was guided by the following questions:-

i) What is the performance trend of pupils in KCPE from 2003-2011?

ii) What is the teacher-pupil ratio per class in regular public primary schools?
iii) How are pupils assessed in regular public primary schools?
iv) How adequate are the teaching learning materials and physical facilities?
v) How are teachers effective in teaching in regular public primary schools?

1.7 Significance of the Study

It was the researchers hope that the finding will theoretically and practically benefit the school and the society in improving the quality of education in the area of the study. The finding will guide the policy makers in the ministry of education in the formulation of future policies inorder to improve the quality education in all public primary schools in the country. Given that quality education is the key to economic development, this will also help to fight against poverty in that all children regardless of their social economic background will enjoy quality education.

The finding will also help the government, non-governmental organization and government development partners to provide more funds to help in improving education quality in public primary schools by ensuring better staffing, more learning resources and physical facilities. Ensuring quality education will also help to minimize dropout rates and improve the transition rate from primary to secondary schools.

1.8 Limitations of the Study

The following were the limitation of the study:-
The study limits itself to only one zone. For more conclusive result all the zones in the division should have been studied, however this was not possible due to financial constrains.
The researcher was also faced with problem of time. Being a teacher the researcher had no study leave so the researcher has to attend his classes, prepare questionnaires and even travel to take them in the selected schools.

The schools under the area of study are not closely located. This means the researcher was faced with problem of transport from one school to another.

1.8.1 Delimitations of the Study

The project involved public primary schools. Private public primary schools were excluded because they do not benefits from free primary education funds. The pupils and teachers involved in the sample were those in session in the respective schools by the time of study. Those absent were not included in the sample even though they would have had interest inputs.

There are many determinants that may affect education quality but this study only focused on the; KCPE performance trend, teacher - pupils ratio, mode and frequency of pupils assessment, adequacy of teaching learning materials and physical facilities and teachers effectiveness.

1.9 Assumption of the Study

In the project study the following was assumed: - all respondents will be co-operative and provide reliable response, all the pupils selected for the study have gone through the same level of education in terms of teaching time and have covered the same syllabus. All the teachers selected for the study were professionally trained and all the sampled schools receive free primary funds.
1.10 Theoretical Framework of the Study

The researcher used constructivist learning theory as discussed by Wikipedia free encyclopedia. Constructivism is a revolution in education psychology built on the work of Piaget and Bruner, which emphasizes the importance of active involvement of learners in constructing knowledge for themselves. Constructivism emphasizes top down processing, begins with complex problem and teach basic skills while solving the problems. Constructivism explains why students do not learn deeply by listening to a teacher or reading from a textbook, learning science research is revealing the deeper understanding based on how knowledge construction works. To design effective environment, one need a very good understanding of what children know when they come to the classroom. This requires sophisticated research into children’s cognitive development as the learning sciences draws heavily on psychological studies of cognitive development. The learning theory of John Dewey, Marie Montessori and David Kolb serves as the foundation of constructivist learning theory. It views learning as a process in which the learners actively construct or build new ideas or concepts based upon current and past knowledge or experiences. This means learning involves constructing ones knowledge from ones own experiences. It is a personal endeavor whereby internalized concepts, rules and general principles, may consequently be applied in a practical real world context. It has many variations such as active learning, discovery learning and knowledge building. Regardless of the variety, It promote a students free exploration within a given framework or structure. The teacher acts as a facilitator who encourages student to discover principles for themselves and to construct knowledge by working to solve realistic problems. Aspect of constructivism can be found in self-directed learning, transformational learning and experiential learning. The theory was found relevant for this project study because it advocated active involvement of the learner in the learning process. It encourages teachers to be facilitators hence, child centred approach thus promoting basic quality of education learners receives.
1.11 The Conceptual Framework

Figure 1.1: Model showing indicators of education quality of FPE

The conceptual framework outlines two key variables: - Quality education is the dependent variable while teacher-pupil ratio, teaching learning materials and physical facilities, assessment of pupils and teacher effectiveness are the independent variables on which quality education depends. Quality education can
be conceptualized as the quality of pupils entering the school system, quality of inputs and instructional process and the quality of outcomes for instance pupils graduating after 8 years (K.C.P.E results).

Introduction of FPE (Box A) led to high environment (Box B). The arrow above box B leads to Box C which explains the factors necessary for good educational quality while the lower arrows leads to Box D which explains the factors of poor education quality.

Box C of factors of good educational quality leads to good K.C.P.E performance in Box E which translate to good educational quality in Box G.

In Box D there is a shortfall of the variables in Box C which result to poor K.C.P.E performance and poor educational quality (box H).

From boxes C and D there are 2 broken arrows each pointing to the opposite direction meaning that the transition is not automatic. This implies that poor management of variables in box C can lead to a change in the direction of education (arrow O) and result to poor K.C.P.E performance leading to poor quality of education. The reverse is also true that improvement of box D variables through government intervention can lead to good K.C.P.E performance leading to good education quality as shown by arrow M.

A regular evaluation of F.P.E through research by planners and scholars is therefore important if educational quality is to be improved or maintained. There are no arrows connecting boxes G and H since the outcome from each box is independent and completely different from each other.
1.12 Operational Definitions of Central Terms

Free Primary Education

This refers to education that does not attract any levies (cost free education).

Quality Education

This refers to the school characteristics that influence pupil’s achievement for example teacher-pupil ratio, teaching learning materials and physical facilities among others.

Physical Facilities

This refers to tangible infrastructure that provide a conducive learning environment such as: classrooms, latrines among others.

Learning Materials

This refers to teaching learning aids necessary for learning to take place such as: textbooks, maps, charts and others.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter provided an overview of education status in developing countries in Africa and Kenya, KCPE performance trend, Teacher-pupil ratio, pupils assessment, teaching learning materials and physical facilities, and teachers effectiveness and summary.

2.1 Situation in Developing Countries

It was in 1870 that compulsory education was first established in Britain Gidden. In 1996 countries such as Holland, Switzerland and United State followed suit almost immediately. The concern was a result of social classes created by education levels and differences. Free Universal and compulsory education was therefore supposed to overcome social inequalities extended to developing and underdeveloped world. The united Nation Charter therefore allowed free and compulsory education to percolate in pre-colonial and post-colonial era, school from a world viewpoint became a social concern.

After the formation of United Nation (UN) in October 1945 many countries looked at the social, economic and political development as priorities. The UN formed agencies which were to strengthen objectives reached at various meetings. Education as a social concern was put under United Nations Educational scientific and cultural organization (UNESCO).
The main function of the education agency (UNESCO) was to contribute to peace and security by promoting collaboration among the nations through Education, science and culture in order to further universal respect for justice for the rules of law and for human rights and fundamental freedom which are affirmed for the people of the world without distinction of race, sex, language or religion. This made countries to become interactive and responsive. Education was looked at as a basic human need and therefore everybody was entitled to basic education.

From 1948 various steps were taken by the UN organization, for example continental meeting have been held since 1950, in 1956 Latin America and the Caribbean held their meeting on free and compulsory education in Lima. A similar meeting was held in two cities;- Karachi India in 1960 and Tokyo in 1962. In Africa the first meeting was held in Addis Ababa Ethiopia in 1961. Alongside the continental meeting the former British colonies also held common wealth education conference in oxford in 1968, Canberra in 1971 and in Kingston in 1974. However all these countries did not have proper budgetary provision and resource materials to embark fully on the UN agendum. Education requires good planning and quality assurance. Education became an essential item as the development of industries and invention increased. Basic education as a result became a tool for social, economic and political development.

2.1.1 The Situation in Africa

The level of illiteracy in the African continent is still alarming. Gidden (1996) states that universal education is far from fully being established throughout the world. Educational systems of most third world countries have expanded rapidly
but still several societies have half of their children not receiving formal schooling whatsoever. This disparity was partly caused by colonialist who preferred lowest levels of education or none at all for Africans. The quality of education offered by then was questionable because of the approach and the education systems in Africa.

According to the World Bank (1974) education systems continued to be based on elicist conception of education ignoring 60% to 80% of the population. This created paradoxical situation in most countries of the world in which millions of educated people are unemployed while millions of jobs remains vacant. This can be attributed to already mentioned colonial legacies in African continent whereby preference was given to white collar jobs. The achievement of the universal primary education (UPE) through the UN required more than mere co-operation and human rights conditions. This explains why in African many countries are still staggering to implement the UN Programme. Ghana is an example in African countries which embraced free and compulsory education before and after its independence. Unfortunately its enrolment outstripped human resource, they recruited retirees and volunteers to meet teachers demand.

Mozambique gained independence in June 1975. The new government was determined to improve education standard from the basic levels of learning to university. As step forward schools were set up by the state and they offered free and compulsory education. A curriculum and a system of education were set up to fit into the requirement of the new state.
Liberia started free primary education after independence. The immediate problem was over enrolment with an annual production of more than 3000 graduates without gainful enrolment of admittance to the institute of higher learning in the county.

In Nigeria UPE was started and gained roots because of social economic situation in the country, again its over enrolment situation in primary schools created a problem of transition to secondary schools, poor standard and increased cases of indiscipline. Abolishing school fees in Burundi, Ethiopia, Ghana Mozambique, Malawi, Nepal, Tanzania, Zambia and in Kenya has created a great shortage of teachers due to the increased enrolment in schools. This adversely affected the quality of education these learners receive in their respective schools.

2.1.2 Situation in Kenya

At independence, Kenya inherited an education system that was characterized by racial segregation and different types of curriculum for the various races namely European, Asians, Arabs and African (UNESCO 2005). The colonial schools had a different curriculum from that of the African independent and the 65 missionary schools. According to Otach (2008) before 1960, free and universal primary education had not been extended to African children in any of the East African British colonies, racial discrimination in primary education was still intact. The expansion of primary education remained a crucial problem in the colonial era. The situation did not radically change with the achievement of independence in 1963. ACTION AID Kenya (2004) reports that, the achievement of independence heightened pressure to increase the school population and a rapid more towards UPE.
The purpose of education was political, social cultural, humanistic and economic (UNICEF & World Bank, 2009). It was expected that the education would mould a whole individual who will contribute profitably to society as far as learners are provided with basic quality education.

The first step towards F.P.E was in 1971. (Ngaroga, 2001) this was when President Jomo Kenyatta abrogated tuition fees for the economically Marginal districts in the country. By July 1973 districts such as Marsabit, Mandera, Westpokot, Wajir, Tana River, Turkana, Samburu, Garissa and Lamu had free primary education. The government also built and supported boarding schools in these areas. A national feeding Programme was also launched in these areas. The main idea was to retain children in school. In 1973 another presidential decree made education free for the first four years of primary education throughout the country. Ngaroga, (2001) observes that the presidential decree was one of the most dramatic political pronouncements since it took the planners and the public unaware. The immediate result was increase in enrollments in primary schools from 1.8million in 1973 to 2.8 million in January 1974. This outstripped the available physical and human resources. In 1976 the Gachathi report recommended an extension of the waiver of fees to the full seven years of primary education in 1980 (UNICEF & World Bank, 2009). Despite the existence of FPE by 1980, the school witnessed many challenges that eventually contributed to its failure and the introduction of levies in primary schools.

In January 2003 the NARC (National Rainbow Coalition) government implemented the FPE Programme. This led to high enrolment rates such that public
primary schools enrolment rose to 98.1% in 2003 and further to 101.5% in 2004. Effort to expand enrolment must be accompanied by attempts to enhance education quality in order to achieve meaningful outcome (EFA, 2000). Kattan (1999) recommends that in order to improve the quality of education certain indicators like KCPE performance trend, teachers-pupil ratio, mode and frequency of pupils assessment, adequacy of teaching learning materials and physical facilities and teachers effectiveness among others need to be considered.

Given the direction towards which international, regional and educational discourse is heading. It is essential that education quality as a concept along with its implication and application is clearly understood (Ruhiel, 2006). Quality is at least the heart of education and what takes place in classroom is fundamentally important to the future well being of children, young people and adult (EFA, Dakar, 2000). Ali Mazrui (daily nation Nov 11th 2003) says that the quality of education which can benefit the entire society will depend on how much has been spent in the project both materially and in terms of human resources. Serious challenges have bedeviled education quality in context of FPE policy, (UNICEF & World Bank, 2009). They include congested classrooms, limited teaching learning materials and physical facilities. Inadequate pupils assessment and inadequate teachers preparation, which negatively impacted on the quality of teaching and learning. This paper therefore reviews the status of education quality in context of FPE highlighting some indicators of education quality like KCPE performance trend, teacher-pupil ratio, mode and frequency of pupils assessment, adequacy of teaching learning materials and physical facilities and teachers effectiveness.
2.2 KCPE Performance Trend

Examination is used to separate the low achievers from the high achievers in order to join the next education level. According to Olembo J.O. and Cameron, J (1986) external examination is very important since it selects the primary school pupils who would continue with education in secondary schools. Michaelowa (2001) further elaborated that learner achievement is used as an indicator of education quality. Although majority of children in all regions of the world except subsaharan Africa attend primary school, the quality of education is low and disparities in pupils learning outcomes are large (Emiliana, V 2007). He further observed that children in developing countries had the lowest mean test scores in international assessment of student learning and often showed the largest variation in test scores as well. A study done by Paul, G. and Michael, k (2005) in 7 developing countries namely Argentina, Belize, Colombia, Iran, Kuwait, Morocco and Turkey had a much lower performance than those done in developed countries like France, United Kingdom and United States of America. This showed that performance or achievement tests in low income countries had low academic achievements.

K.C.P.E is a National examination that is offered at the end of 8 years of primary Education. According to Wasanga (2004) centrally administered National examination for primary leavers in Kenya are stressed, the results of which are used as indicators of educational quality. However since the introduction of FPE in January 2003, the pupils performance in KCPE according to KNEC statistics had been on a downward trend. For instance in 2008, only 24% of candidates obtained a mean of C+ and above compared to 30% in 2007 and 26% in 2006. The number
of candidates who scored a mean grade of E rose to 7067 in 2008 from 2,952 in 2007 and 3,711 in 2006. Similarly the number of candidates who obtained D-cascaded to 42,582 in 2006 while those who scored a mean grade of A went down to 817 from 1,157 in 2007 and 1,165 in 2006 (East Africa Standard, September, 2009).

However there has been concern over the performance in public primary schools as compared to the private primary schools, according to the Kenya primary school Heads Association as was reported by their chairman (Daily Nation, Jan 2009). In 2004 K.C.P.E performance, out of the top 100 candidates nationally, only one came from a public primary schools while the rest 99 were from private primary schools. Parents and education experts were worried that education would soon remain a preserve of the rich. 60% of National School places in 2005 were taken by pupils from rich private primary schools who accounted for only 10% of the total K.C.P.E candidates.

In 2009 KCPE results, it was noted that private school performed well in Eastern province taking nine slots in the top 100 Nationally (Standard Newspaper December, 2009). According to the standard team parents were left with a universal question of which is better, private or public primary school? Such a trend would mean that there would be a big gap between the rich few and the majority poor which would not only cripple the country effort to attain EFA and UPE goals but also affect the country’s economic growth.
Education plays a major role in a country’s social, economic and political development. There was therefore an urgent need to address the issue of public primary school performance in KCPE. There was need to evaluate the situation at hand in the study locale in relation to KCPE performance over the years since the documented work on the subject was not comprehensive and the study locale had not been adequately covered.

2.3 Teacher - Pupil Ratio

After FPE in January 2003 the composition of pupils entering education system indeed changed. The age profile had been affected by the introduction of FPE with older pupils entering or returning to school. According to Kimenyi (2009) the proportion of pupils who were at least one year older than the regular age in grade 8 increased from 28% to 48% between 2003 to 2004. On the other hand payment of fees in early childhood development education (ECDE) affected the quality of education because parents who were not willing to pay ECDE fees enrolled their children directly into public primary schools which was free. These children lacked orientation in writing and reading skills and had to be given orientation in grade one, a case that wasted time for other pupils (UNESCO 2005).

Brewer, et al (2001) in his study on class size controversy in Philippines defined class size as the actual number of pupils taught by a teacher at a particular time. There is a worldwide, international and national disparity on teacher pupil ratio as documented by different scholars. Global primary school attendance rate according to Friedrich, H (2008) have been on a steady upward trend: out of 194 countries and territories worldwide as contained in international educational statistics, only
27 countries had 40 or more pupils per teacher. He further states that in sub-Saharan countries 11 countries had teacher-pupil ratio of 50 pupils on average. For instance Afghanistan had the highest teacher-pupils ratio of 1:83 while Bangladesh had the lowest with a ratio of 1:50.

In Kenya, FPE was introduced in January 2003. This made the gross enrolment Ratio (GER) in public primary school increase to 98.1% in 2003 and further to 101.5% in 2004. With Western and Eastern county recording the highest GER (Republic of Kenya 2005). Macharia, D and Ngigi, A (2006) stated that the GER in 2003 was 99% thus questioning educational quality. Although FPE has increased enrolment and participation, it also brought in problems. For instance staffing levels had not kept pace with increased enrollment which was associated with large class sizes (Kimenyi, M. et al, 2009). According to the education sector report of 2005, FPE had put pressure on teachers as some class sizes increased to 100 pupils in rural areas and 120 pupils in urban areas per teacher.

Large classrooms are those where pupil-teacher ratio (PTR) exceed 40:1 (Said, L. et al,2007). The teacher-pupil ratio according to the age of pupils is ideally supposed to be 1:15 for children aged 3-4years, 1:25 for 4-5years, 1:30 for 5-6years, and 1:40 fro 6-8years (Kenya times, 2007). According to the T.S.C report of 2005, the recommended PTR for public primary school in Kenya is 1:40. Increased enrolment does not necessarily translate into improved education quality when the pupil teacher ratio is raised above 40 for every teacher. When enrolment is raised the quality of teaching learning in most contexts begins to suffer (Said, L
According to UNESCO (2005) large classes have minimal teacher pupil interaction with teacher moving with the bright student leaving slow learners unattended. Teachers find it difficult to move about to check every pupils work and it is difficult to maintain order. Teachers only concentrate on those seated in front of the class. Ezeh, A. et al, (2008) concurred with UNESCO’S observation and added that large classes disadvantage weak students as the teaching methods focus on the average students. UNESCO 2005 Assessment report further observed that pupils with special needs were usually left out as they required more attention yet the teacher may not be able to offer it. Since a large number of schools going age are in public primary schools, it is worth to evaluate the status of education quality on context of FPE programme to establish whether it was accomplishing the global, regional and national purpose for which it was meant to accomplish. Studies and researches done are not comprehensive in that not all areas have been covered thus need for more research on the subject. This provides the rationale for research on teacher-pupils ratio in different schools within the study locale.

2.4 Pupils Assessment

Assessment and particularly the assess of pupils learning achievement has become the object of a good deal of attention and activities all over the world both in industrialized and developing countries (Thomas, K. and Vincent, G.2001). Assessment is the process of determining the level of performance of a person in a
particular skills or subject area (MOE, 2006). This helps to give feedback for the purpose of adjusting, improving or maintaining whatever is being assessed. Assessment helps to give feedback in order to ensure good quality of products in a system.

According to Emiliana, V. (2007) there were increased homework assignment in central America. This is necessary in schools where education quality is low. During the Dakar framework for Action in April 2000 in Senegal, it was observed that learning outcome must be well defined in both cognitive and non-cognitive domains, assessment should be continuous and an integral part of the teaching and learning process. Olembo and Cameron (1986) asserted that homework is an extension of class work and is therefore part of the school work. It is the best way to learn through private study and effort. According to Psacharopoulos et al (1992) homework and assignment are associated with achievement.

However with introduction of FPE mass enrollment resulted to high PTR as discussed earlier. This brought many challenges as far as pupils assessment was concerned. UNESCO (2005) observed that due to increased workload teachers no longer gave as much assignments as they used to do in the past. This threatened the goal of FPE of equipping pupils with quality education especially in subjects like Maths, English and Kiswahili which requires constant practice and feedback. More still some parents may never bother to check or give homework to their children.

East African standard (Nov, 2007) added that children in large classes of about 100 pupils had to mark their own homework, such an incidence led to withheld
feedback. Other teachers according to UNESCO 2005 ask pupils to exchange their books and mark for each other or even mark their own homework. Such teachers cannot understand pupil weakness and needs. Despite UNESCO and others highlighting some issues on pupils assessment, their work was not comprehensive since they did not cover all areas. This provided the need to establish pupils assessment in other regions thus the rationale for research in the study locale.

2.5 Teaching Learning Materials and Physical Facilities

2.5.1 Physical Facilities

Physical facilities are the tangible learning aids and facilities. According to the Dakar framework of 2000 in Senegal, education of good quality would be offered if only education institutions and programmes were adequately and equitably resourced with the core requirement of safe environmentally friendly and easily accessible facilities. Safe and protective learning environment with water and sanitation facilities. Ehsani L.R (2006) concurred with this view. This helps to curb cases of dropouts especially among adolescent girls who requires privacy. The World Bank report of 2005 further stated that safe drinking water and school environment influence children’s health and well being. Girls for instance, feel unsafe to use latrine facilities that are situated in an isolated location because of the risk of rape or harassment. In a study on primary school quality in Malawi, Bruce, f (1986) observed that only 1 in 8 students had a seat and only 1 in 88 students was provided with a desk to write on.

In Kenya, the MOE has set a minimum standard for the provision of toilet/latrine and water as contained in the government handbook for inspection of 2000. The
minimum number of toilet/latrine is 4 for the first 30 pupils, thereafter a ratio of 
latrine/toilet to pupils of 1:25 and 1:30 applies for girls and boys respectively. The 
average pupil toilet/latrine ratio in government schools is 47 for girls and 56 for 
boys. Additionally a regular water point for pupils owing to the fact that unhealthy 
child in class demonstrates low participation in school activities. It was of 
paramount importance to carry out a study to establish the status of education 
quality in terms of how well public primary schools have upheld health 
requirement. Nokes et al (1992) asserted that children with worm infection have 
lower marks in school than uninfected children. They also have low school 
attendance which may lead to low achievement. The WHO (1997) argued that 
lack of adequate water and sanitation facilities in schools creates an unsafe 
environment where diseases are transmitted. Since much have not been 
documented on availability of physical facilities in schools especially as far as safe 
environment was concerned, a study on the same was found crucial in order to 
ensure quality education.

2.5.2 Teaching/Learning Materials

Teaching learning materials are aids to the teaching learning process. Purves, A 
(1973) observed that there is a positive association between availability of 
education materials and pupils achievement. These learning materials include wall 
charts, textbooks, chalks, teachers guide and others. According to Emiliana, V 
(2007) many teachers in developing countries work in school that lacks adequate 
teaching learning materials or basic infrastructure. Materials like textbooks are 
primary obstacles that might adversely affect teaching and learning. However he 
further stated that these challenges affect both developing and developed countries.
According to UNESCO (2005) on experiences from the District, inadequate resources led to decline in quality of education as text books are important resource for revision purposes, further practice, during class work and also homework. Olembo, J.A. and Cameron, J.(1986) concurred with UNESCO by stating that good reading habits are strengthened by quiet reading at home especially for children in grade 2 to other higher levels, this helps children to learn. Michaelowa (2001) added that having books available in student homes can improve achievement score by 2 to 3%.

Given such an importance of learning materials and especially textbooks, it is worth noting that schools should have a criterion in pupils textbook ratio. Ezeh, A. et al (2008) described that government policy of pupils textbook ratio as follows:- in lower primary grade (1-4) 3:1, while in upper primary the ratio is 2:1 in the core subjects (Maths, Kiswahili and English.). When a pupil miss learning experiences during the lower grade, such a pupil would be disadvantaged in term of achievement for the rest of their school life. The project evaluated the status of education quality on the ground regarding teaching learning resources and physical facilities in the study locale.

2.6 **Teachers Effectiveness**

Teachers have been shown to have significant influence on pupils academic performance and they also play a crucial role in educational attainment because they interpret and implement the provision of the educational curriculum and policies (Afe, 2001). An effective teacher is conceptualized as one who produces desired results in the course of his/her duty as a teacher (Uchefuna, 2001).
Research carried out in schools in developing countries found out that absenteeism and reporting to school late is a common place. This is largely attributed to teacher’s low pay which demotivate them and find ways of compensating their little pay. Surprise visits made by educational officers to school revealed that teachers were late or absent for no good reason (Harber, 1989, 116-117). Research revealed that teachers were engaged in second wage earning jobs to compensate for their little pay (World Bank, 1990). Comber and Keeves (1973) observed that the more hours allowed for instruction in a subject the higher the achievement. World Bank (1990) assert that time in schools is much lost due to unscheduled school activities like staff meeting. Lateness by teachers and pupils, teachers and pupils absences.

A report by Kenya national examination council as quoted in Mutea (2002) cited lack of adequate revision time as a major factor that leads to under syllabus coverage, in return poor quality education in national examination. Ndiritu (1999) observed that time lost by teachers and students’ absenteeism definitely leads to loss of much learning time which is known to cause poor performance in examination as syllabus are never satisfactory covered. Ofofuena (1999) observed that no matter how much resources we might put into nation’s education system without properly prepared and motivated teachers and pupils, there can never be expected to be much achievement in educational outcomes. Mbiti (1974) observed that effective communication in an educational institution can be affected by distortion, filtering, omission, selective perceptions, timing and language. He said some teachers often fail to use a language which young children understand or they introduce new concepts and ideas which are difficult to grasp. Taylor and Mulhall
(2001) indicates that most teachers fail or ignore to accommodate pupils individual difference and mostly concentrate more with pupils who are above average intellectually.

Daft and Marcic (2008) observed that message being communicated by the teacher to the pupils ought to be clear. This means teachers should thoroughly be master of what they teach. Unfortunately most teachers do not prepare in advance, they use textbooks as their teaching notes in classrooms. He also observed that teacher ineffectiveness like lack of use of teaching learning resources, poor teacher-pupil relationship, inappropriate reinforcement, inadequate evaluation procedure and inappropriate teaching methods make pupils not be in a position to retain the lesson content. This results to poor basic education quality. Studies and researches done are not comprehensive in that not all areas have been covered thus need for more research on teachers effectiveness. This provided the rationale for research on the same on the researchers study locale.

2.7 Summary of the Literature Review

The literature review has generated some important themes emphasizing on the current status of education quality in most developing countries (Ongiri and Abdi, 2004 and republic of Kenya, 1998). Quality education in free primary education is a continuous process which is derived from a combination of indicators which includes teacher-pupil ratio, assessment of pupils adequacy of teaching learning materials and physical facilities and teachers effectiveness. For any country to enjoy quality education, its government ought to ensure that public primary schools among many indicators have adequate teachers, teaching learning
materials and physical facilities. This will ensure good teacher pupil ratio, good interaction, adequate pupil assessment and safe environment. Which will result to good internal examination performance and national examination performance like K.C.P.E thus translating into good education quality.

As observed in the literature review scholars have attempted to carry out studies based on education quality. These documented results were however not comprehensive since they had not covered all the parts of the country. An evaluation of the status of education quality in context of free primary education in the study locale was therefore necessary.
CHAPTER THREE
METHODOLOGY

3.0 Introduction
This chapter describes the research design, variables, location of the study, target population, sampling techniques and sampling size, research instruments, piloting method, validity and, reliability of instruments, method of data collection and data analysis methods, logistical and ethical consideration that was applied in the study.

3.1 Research Design
The study adopted a descriptive survey design. It allowed collection of information through interviewing, observation and administering questionnaires to sample of individuals. According to Mutai (2001) this design gave an accurate account of a particular phenomena, situation, community or person.

The study evaluated the status of education quality in context of free primary education thus descriptive survey design was the most suited. The researcher gathered information on the indicators of education quality which will include:- KCPE performance trend, teacher-pupil ratio, assessment of pupils, adequacy of teaching learning materials and physical facilities, and teachers effectiveness.

3.1.1 Research Variables
This research was based on the dependent variable which was education quality. While 5 indicators of education quality as was discussed in the literature review were the independent variables. They included:- KCPE performance trend,
teacher-pupil ratio, assessment of pupils, adequacy of teaching learning materials and physical facilities and teachers effectiveness. These independent variables interacted with the learners environment to influence the outcome of learning process.

3.2 Location of the Study
The study locale was Nginda zone in Murang’a County. The researcher had chosen the zone since it had been hard hit by poor performance in K.C.P.E. According to the zonal ranking in 2011 K.C.P.E performance, the zone was last in Murang’a county. (DEO’s office Murang’a South). Other reasons for the choice of the study locale included social economic background since it attracted pupils from different background (socially and economically). Its population which was high and the fact that it was cost effective for the researcher to study the locale. The study locale was therefore a representative and free from bias.

3.3 Target Population
Nginda zone had 10 public primary schools from which 5 primary schools were sampled. The target population for the study was 5,500 while the study population will be 465. This included 420 pupils, 40 teachers and 5 head teachers, that was sampled.

3.4 Sampling Techniques and Sample Size
The researcher intended to use combination of probabilities and non-probability sampling techniques. This included purposive, systematic, convenient and simple random sampling methods.
The researcher used purposive sampling to sample schools. The researcher handpicked the cases to be included in his sample on the basis of his judgment. The researcher sampled 3 schools, one school with a small population (300 pupils), a school with average population (450 pupils) and a school with large population (670 pupils).

Systematic sampling was used to select 84 pupils from each school by use of class register. This method ensured equal representation of all pupils in each grade. The researcher picked 14 pupils from each class (class 3-8). The total number of pupils sampled was 420. Simple random sampling was used to sample 40 teachers. The researcher used folded papers depending on the number of streams in each school with yes and No mark to sample 8 teachers in each school. The total number of sampled teachers was 40. Simple random sampling was the best in selecting subjects in an attempt to form a representative sample in a population (Orodho 2005) No sampling methods of head teachers as each school had one.

3.5 Research Instruments

In the study the researcher used questionnaire, interview schedules and observation schedules.

3.5.1 Questionnaires

Questionnaires helped to save time and has no interviewer bias (Orodho 2005). This instrument was used to gather information from pupils and teachers since they formed the majority of the respondents. The questions were constructed using open ended, closed ended and matrix format.
3.5.1.1 Teachers Questionnaire

The researcher used teachers questionnaire to collect information of teacher-pupil ratio, assessment of pupils, teaching learning materials and teachers effectiveness.

3.5.1.2 Pupils Questionnaire

This instrument was used to collect information from pupils on pupils textbook ratio, assessment of pupils and availability of water and sanitation.

3.5.2 Interview Schedule

Interview avails information which could otherwise not be availed by a questionnaire or through observation (Mutai 2001), interview schedules are more adaptive and questions can be rephrased to achieve objectives. Interview schedule were used to collect information from the head teacher on KCPE performance trends, physical facilities, teaching learning materials, school enrollment index and teacher effectiveness.

3.5.3 Observation Schedule

The researcher used observation schedule to collect information on the nature of classes, adequacy of physical facilities like classrooms, latrines, playgrounds and water points.

3.6 Pilot Study

Pilot involves testing of research instruments to ensure their reliability. The researcher used purposive sampling method to select 2 public primary schools within the zone. The researcher used one school with an average population and
another one with small population. The two schools were not part of the schools that were sampled for the study.

3.6.1 Validity of Instruments

According to Wiersma (1985) validity is the extent to which an instrument measures what it was supposed to measure. The researcher soughted expert opinions from his supervisors concerning the validity of the instruments.

3.6.2 Reliability of the Instrument

Reliability of a research instrument is its consistency in producing same results (Orodho, 2005). The researcher used test-retest method whereby the questionnaires were given to the respondents to fill in; them the completed questionnaires were scored manually. Spearman rank order correlation (r) was employed to compute the correlation co-efficient. This was done to establish the extent to which there was consistency in eliciting the same response every time the instrument was administered. Questionnaires were issued twice with an interval of 2 days where by finding was later analyzed using the following formulae:-

\[ r = 1 - \frac{6[\sum d^2]}{N(N^2 - 1)} \]

Whereby \( \Sigma \) refers to summation, \( d^2 \) refers to the square of the difference between rank 1 and rank 2 of the entries, \( N \) refer to the total entries. A correction co-efficient of 0.75 was found, and reliability was accepted. According to Orodho (2008) a correlation co-efficient of about 0.8 was considered high enough to judge the reliability of instruments.
3.7 **Data Collection Techniques**

Before commencement of data collection the necessary authorization and research permit was requested from the ministry of higher education science and technology. This permit and letter of introduction was presented to the district commissioner (DC) and the district education office (DEO) for authorization. The researcher visited the relevant schools for introduction purposes and booked appointment.

The data collection method involved self administer of questionnaires, interview schedules and observation schedule.

3.8 **Data Analysis**

The collected data was organized according to the theme of the study and coded manually before subjecting it to statistical analysis.

Data from open-ended questions was analyzed qualitatively (using themes, codes and categories) and quantitatively using descriptive statistics and excel computer programme. Calculation was based on mean, frequencies and percentages from the responses given by the respondents for each item.

The finding was presented on frequency tables, pie charts, graphs, percentages and in narrative form. This led formulation of the summary, conclusion and recommendation of the study.
3.9 Logistical and Ethical Consideration

This project was designed to meet the necessary requirements of educational research in Kenya. It further took cognizance of the fundamental rights of the individuals respondents as enshrined in the bills of right of our new constitution. As such the researcher observed the highest possible degree of confidentiality and anonymity of the data collected from the respondents both at the stage of data collection and data analysis. All the necessary research protocols such as applying for permit, requesting permission from DEO office among others was strictly adhere to, and informal consent of the respondents was soughted before the actual presentation of the data collection instruments. The collected data was subjected properly and professionally handled at all levels of the study, stored securely and be anonymised.
CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0 Introduction

This chapter covers data analysis and interpretation of the data collected from five sampled Primary public schools. The purpose of the study was to find out the status of education quality in the context of free primary education in Nginda zone, Murang’a County. The study was guided by the following research questions:

i) What is the performance trend for pupils in KCPE from 2003-2011?

ii) What is the teacher-pupil ratio in regular public primary schools?

iii) How are pupils assessed in regular public primary schools?

iv) How adequate are the teaching learning materials and physical facilities?

v) How are teachers effective in teaching in regular public primary schools?

This chapter is organized in 2 sections, the first section covers the background information of the study respondents and the other section covers the five research questions.

4.1 Background Information of the Study

The study was conducted in five sampled primary public schools, out of which, 40 class teachers, 420 pupils and 5 Head teachers were selected. Out of 40 teachers the researcher selected 8 teachers from each sampled schools, 25 teachers were Females and 15 were Males. In each school the researcher selected 82 pupils of which 41 were girls and 41 were boys. In the five selected schools 3 Headteachers were Males while 2 were Females. The researcher received 38 questionnaires from class teachers and 400 questionnaires from pupils that were dully completed. This
data analysis is based on responses from 38 class teachers, 400 pupils and 5 Headteachers. The teachers involved in the study were asked to state their academic/professional qualifications to which they responded as shown in table 4.1 below.

**Table 4.1: Professional Qualification by Gender**

<table>
<thead>
<tr>
<th>Professional qualifications</th>
<th>Males</th>
<th>%</th>
<th>Females</th>
<th>%</th>
<th>Total Teachers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>2</td>
<td>14.3</td>
<td>2</td>
<td>8.3</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td>ATS 1</td>
<td>4</td>
<td>28.6</td>
<td>6</td>
<td>25.0</td>
<td>10</td>
<td>26.3</td>
</tr>
<tr>
<td>ATS 2</td>
<td>3</td>
<td>21.4</td>
<td>9</td>
<td>37.5</td>
<td>12</td>
<td>31.6</td>
</tr>
<tr>
<td>ATS 3</td>
<td>4</td>
<td>28.6</td>
<td>4</td>
<td>16.7</td>
<td>8</td>
<td>21.1</td>
</tr>
<tr>
<td>ATS 4</td>
<td>1</td>
<td>7.1</td>
<td>2</td>
<td>8.3</td>
<td>3</td>
<td>7.9</td>
</tr>
<tr>
<td>P1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4.2</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td><strong>100</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
<td><strong>38</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

In table 4.1 above out of the 38 teachers who participated in the study 4(10.5%) were degree holders, 10(26.3%) were approved teacher 1, 12(31.6%) were ATS2, 8(21.1%) were ATS 3,3(7.9%) were ATS 4 and 1(2.6%) were P1 certificate holders. This shows that the entire selected teacher are trained and majority had upgraded themselves professionally. This means they were likely to be aware on how to improve or maintain the educational quality in schools. The teacher involved in the study were also asked to state their teaching experiences to which they responded as shown in figure 4.1 below.
As shown in the above figure 15(39.5%) of the teachers had a teaching experience of over 5 years. 13(34.2%) had a teaching experience of between 5-10 Years while 10(26.3%) had teaching experience of between 1-5 years. The above finding shows that most teachers had over 5 years teaching experiences. This means they were likely to be aware of the educational quality needed in public primary schools.

The head teachers who participated in the study were asked to state their professional qualifications to which they responded as shown in the table 4.2 below.
Table 4.2: Headteachers Professional Qualification

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>No of Headteachers</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>3</td>
<td>60%</td>
</tr>
<tr>
<td>Diploma</td>
<td>2</td>
<td>40%</td>
</tr>
<tr>
<td>P1</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>100%</td>
</tr>
</tbody>
</table>

As shown in the above table, 3(60%) of the Headteachers are degree holders, 2(40%) are Diploma holders and 0(0%) are P1 certificate holders. This shows that the Headteachers had good professional qualifications that they can use to enhance improvement and maintenance of education quality in public primary schools.

The Headteachers involved in the study were also asked to state their working experiences to which they responded as shown in the figure 4.2 below:

Figure 4.2: Head teacher Teaching/Working Experiences
In the above figure, 1(20%) of the Head teacher had working experience between 4-7 years, 1 (20%) of the Head teacher had working experience of between 8-11 years while 3(60%) of the head teachers had teaching working experience of over 11 years. This shown that major of the selected head teachers had worked long enough to have been aware of the education quality expected in our public primary schools.

4.2 K.C.P.E Performance Trend

In Kenya, quality education provided in schools have always been measured against the K.C.P.E performance trend in schools. K.C.P.E results determine those pupils who proceed to secondary schools. Headteachers and all stakeholders in schools aspire to produce the best KCPE mean score in their endeavor to win favour with the government and the society. The area under review had not been performing well in KCPE since 2003. The whole zone has 12 public primary schools. Out of these schools only 4(33%) of the schools always score above 250 marks out of 500 marks, 2(17%) of the schools score slightly above and below 250 marks and 6(50%) of the schools score below 250 marks.

The researcher has sampled 5 schools as a representation. The study sought to answer the questions:-what are the performance trend in KCPE between year 2003 to year 2011? Table 4.3 below shows K.C.P.E between year 2003 to year 2011.
In Table 4.3 above, School D and E had a mean score of above 250 marks throughout. School C had scored slightly above and slightly below 250 marks, where else school A and B maintained below 250 marks throughout the years.

On average all the schools portrayed an average mean score with the highest being 290 marks in 2009 and the lowest being 150 marks in 2008 out of 500 marks. However the general K.C.P.E performance trend in the sampled schools was inconsistence and wanting. In 2011 three schools (60%) scored below average while two schools (40%) scored above average this show that the general K.C.P.E performance trend in the sample schools was in consistence as it is being characterized by a zig-zag trend.

Teachers were also found to experience difficulties in teaching given that some of their pupils had special needs as shown in figure 4.3 below.
From figure 4.3 above it was clear that each school had pupils with special needs. School A seemed to have the highest number of SNP of 25% and school D the lowest number of SNP of 5%. Teachers expressed facing difficulties in handling special needs cases amidst large classes. It also emerged from the study that out of the 38 teachers who were sampled, 29 (76.3%) of them had no knowledge of special education. Such teachers felt inadequate to teach special need pupils. This shows that pupils with special need could only fit well in special schools where teachers were adequately trained on the same.

4.3 Teacher-Pupil Ratio

Teacher-pupil ratio referred to the number of pupils attended by a single teacher per class. The whole zone has 12 schools with 5500 pupils and 121 teachers (from zonal office). This means the teacher pupil ratio in the zone is 1:43. Table 4.4
below shows teacher pupil ratio in the sampled public primary schools which had 2552 pupils and 60 teachers.

Table 4.4: Teacher-Pupil Ratio per Class

<table>
<thead>
<tr>
<th>School</th>
<th>No of pupils in the class</th>
<th>No of Teachers</th>
<th>Tr pupil ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>688</td>
<td>16</td>
<td>1:43</td>
</tr>
<tr>
<td>B</td>
<td>630</td>
<td>14</td>
<td>1:45</td>
</tr>
<tr>
<td>C</td>
<td>440</td>
<td>8</td>
<td>1:55</td>
</tr>
<tr>
<td>D</td>
<td>350</td>
<td>10</td>
<td>1:35</td>
</tr>
<tr>
<td>E</td>
<td>444</td>
<td>12</td>
<td>1:37</td>
</tr>
<tr>
<td>mean</td>
<td>510</td>
<td>60</td>
<td>1:42</td>
</tr>
</tbody>
</table>

The table above shows that 3(60%) of the sampled schools had large classes and 2(40%) of the sampled schools had the optimum ratio of 1:40. This shows that enrollment in public primary schools is higher as compared to the employed teachers.

Fig 4.4 below gives the comparison between the expected teacher ratio and what exists in public primary schools. In the assessment of the same 38 teachers gave information as shown in figure 4.4 below
Figure 4.4: Comparison between expected teacher-pupil ratio (%) and existing ratios

![Pie chart showing comparison between expected and existing teacher-pupil ratios.]

Figure 4.4 above shows that 30(78.94%) of the sampled teachers had a teacher pupil ratio which exceeded 1:40 that is the optimum ratio for public primary schools according to the T.S.C report 2005. It was only 8(21.06%) of the sampled schools who enjoyed a teacher pupil ratio of 1:40 and below. This shows that enrolment in public primary schools is higher as compared to the number of teachers employed.

4.4 Pupils Assessment

Assessment of pupils is crucial in determining quality in education. The study sought to assess the mode of assessment that was used by teachers. From the findings (pupils questionnaires) all sampled schools administered 3 tests per term. That is opener, midterm and end of term exams. However there were disparities as far as pupils assessment in tests was concerned as is shown in figure 4.5 below.
The findings in figure 4.5 above indicated that in all the case studies, all pupils did not sit for the three tests. School D and E had the highest number of 80(20%) of pupils who participated in the three tests while school B had the lowest number of 65(16.25%) of pupils. It is worth noting that 29(7.25%) of the sampled pupils did not participate in all the three tests in all the sampled schools.

Concerning the issue of assignment, 20(52.6%) of the class teachers indicated that they gave assignment everyday while the remaining 18(47.4%) of the teachers were found to give assignment once or twice per week. This concurred with UNESCO’s finding in 2005 that observed that due to increased work load teachers no longer gave as much homework as they used to do in the past. However 260(65%) of the sampled pupils said that assignment were sometimes marked by their desk mates as was observed by UNESCO (2005). The teacher asks pupils to exchange their books and mark for each other or even mark their own homework. Only 140(35%) of pupils had their assignment marked by subject teachers on a
daily basis. This shows that teachers are likely to be overloaded thus compromising the education quality pupils receive due to inadequate marking and assignment given.

4.5 Teaching/Learning Materials and Physical Facilities

4.5.1 Teaching/Learning Materials

Teaching/learning materials referred to materials that aids the learning process. This includes textbooks, charts, maps, exercise books and photographs. The study sought to assess the adequacy of teaching learning materials in public primary schools.

Information gathered from pupils questionnaire and head teachers interview guide showed a state of inadequacy of textbooks. 220(55%) of pupils shared textbooks in the ratio of 1:4 thus contravening the government policy (pupils textbook ratio) as was observed by Ezeh et. Al (2008) that pupils textbook ratio was supposed to be 1:3 in lower and 1:2 in upper primary. The shared textbooks were only recorded under one pupil for accountability purposes as a result many pupils were found not to access any textbook as shown on table 4.5 below.
Table 4.5: % of Textbook available to Pupils

<table>
<thead>
<tr>
<th>School</th>
<th>No. of Pupil</th>
<th>No. of Pupils without any textbook</th>
<th>% without any textbook</th>
<th>No of pupils with at least one textbook</th>
<th>% with at least one textbook</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>74</td>
<td>21</td>
<td>28.4%</td>
<td>53</td>
<td>71.6%</td>
</tr>
<tr>
<td>B</td>
<td>72</td>
<td>9</td>
<td>12.5%</td>
<td>63</td>
<td>87.5%</td>
</tr>
<tr>
<td>C</td>
<td>84</td>
<td>8</td>
<td>9.5%</td>
<td>76</td>
<td>90.5%</td>
</tr>
<tr>
<td>D</td>
<td>83</td>
<td>7</td>
<td>8.4%</td>
<td>76</td>
<td>91.6%</td>
</tr>
<tr>
<td>E</td>
<td>87</td>
<td>12</td>
<td>13.8%</td>
<td>75</td>
<td>86.2%</td>
</tr>
<tr>
<td><strong>MEAN</strong></td>
<td><strong>80</strong></td>
<td><strong>12</strong></td>
<td><strong>15.0</strong></td>
<td><strong>68</strong></td>
<td><strong>85</strong></td>
</tr>
</tbody>
</table>

In table 4.5 above only 68(85%) of the pupils access at least one textbooks on average. However school D had the highest number 76(91.6%) of pupils with at least one textbook while school A had the least with 53(71.6%) pupils accessing at least one textbook. Out of the total number of pupils sampled 12(15%) of pupils did not have any textbooks. This is a clear indication that 12(15%) of the pupils sampled were not able to do private studies at home due to lack of textbooks. This in turn affects academic achievement as was observed by Michaelowa (2001) and Olembo J.A and Cameroon J (1986).

### 4.5.2 Physical Facilities

Physical facilities referred to school structures and equipment that provides good learning environment. The study sought to assess the adequacy of facilities such as desk, classrooms, toilets, libraries, playgrounds and water points. Table 4.6 shows desk pupil ratio in schools.
Table 4.6: Desk Pupil Ratio in Schools

<table>
<thead>
<tr>
<th>School</th>
<th>Desks</th>
<th>No. of pupils</th>
<th>1:2</th>
<th>1:3</th>
<th>1:4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>23</td>
<td>74</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>18</td>
<td>72</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>28</td>
<td>84</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>42</td>
<td>83</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>44</td>
<td>87</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>31</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The finding indicated that 2(40%) of the sampled schools had a desk pupils ratio of 1:2, the remaining 3(60%) of the schools had a ratio of between 1:3 and 1:4. Information gathered from the head teachers showed that only 2,(40%) of the sampled school had the recommended desk pupils ratio of 1:2.

Classroom

The researcher on the other hand observed that 3(60%) of the schools had incomplete classrooms (being constructed or stalled). Surprisingly although some of the said buildings had no concrete floors, windows and doors, they were used as teaching facilities. The researcher further observed that all of the sampled schools had unpresentable classrooms in term of windows panes, doors, concrete floors, block walls, old paints and roofs with old iron sheets.

Library

It emerged from the teachers that all sampled schools had no library. According to the teachers, reference books were stored in cartons or shelves either in the deputy head teacher office or in the staffroom. 4(80%) of the sampled schools had a
playground though poorly maintained and dusty. Only 1(20%) did not have a playground due to its poor landscape.

**Water point**

All sampled schools had water points, however, 3(60%) of the sampled schools had water available daily. The water was however unsafe for drinking since it was not treated. The other 2(40%) of the schools had water available twice a week. Table 4.7 below tabulates the above information.

### Table 4.7: Adequacy of Physical Facilities

<table>
<thead>
<tr>
<th>School</th>
<th>No of pupils</th>
<th>Classrooms</th>
<th>Library</th>
<th>Playground</th>
<th>Water point</th>
<th>Availability of water</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>74</td>
<td>16</td>
<td>0</td>
<td>1</td>
<td>2300L</td>
<td>Daily</td>
<td>✓</td>
</tr>
<tr>
<td>B</td>
<td>72</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>1000L</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>84</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>5000L</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>83</td>
<td>10</td>
<td>0</td>
<td>1</td>
<td>40,000L</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>87</td>
<td>12</td>
<td>0</td>
<td>1</td>
<td>2300L</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>80</td>
<td>12</td>
<td>0</td>
<td>1</td>
<td>10120L</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The study sought to assess the status of pupils toilet ratio. The information in table 4.8 and 4.9 below was achieved after calculation were done in every school based on the no of boys and girls toilets. The minimum number of toilets in public primary school should be in the ratio of 25:1 and 30:1 for girls and boys respectively.
Table 4.8: Boys Toilet Ratio per School

<table>
<thead>
<tr>
<th>School</th>
<th>No of boys</th>
<th>No of toilets</th>
<th>No of boys per toilets</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>344</td>
<td>8</td>
<td>43</td>
</tr>
<tr>
<td>B</td>
<td>320</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>C</td>
<td>372</td>
<td>12</td>
<td>31</td>
</tr>
<tr>
<td>D</td>
<td>315</td>
<td>9</td>
<td>35</td>
</tr>
<tr>
<td>E</td>
<td>225</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>Mean</td>
<td>315</td>
<td>7</td>
<td>34</td>
</tr>
</tbody>
</table>

In table 4.8 above almost all the schools recorded a high boy-toilet ratio than the expected ratio of 30:1. It is clear that 4(80%) of the schools did not meet the government requirement. Only school E (20%) had attained a boy-toilet ratio of 25:1 which is good in relation to the expected ratio. On average all the schools had a boy-toilet ratio of 34:1. This shows there was a need for construction of more toilets.

Table 4.9: Girls Toilet Ratio per School

<table>
<thead>
<tr>
<th>School</th>
<th>No of girls</th>
<th>No of toilets</th>
<th>No of girls per toilets</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>340</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>B</td>
<td>325</td>
<td>9</td>
<td>37</td>
</tr>
<tr>
<td>C</td>
<td>360</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>D</td>
<td>310</td>
<td>10</td>
<td>31</td>
</tr>
<tr>
<td>E</td>
<td>224</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>Mean</td>
<td>312</td>
<td>10</td>
<td>32</td>
</tr>
</tbody>
</table>
In table 4.9 above, all the schools recorded a higher girl toilet ratio except school E. The expected girl-toilet ratio is 25:1 according to the government requirement. 4(80%) of the sampled schools had high girl toilet ratio with unmaintained doors a case which is alarming given that girls requires more privacy especially during teenage. Generally it emerged from the respondent (pupils) that there were no separate toilets for lower primary and upper primary. This shows there is likely to be truancy among adolescent girls.

4.6 Teachers Effectiveness

Teachers effectiveness have great influence on pupils academic performance as it plays a crucial role in educational attainment because teachers interpret and implement educational curriculum and policies. The study sought to assess teachers effectiveness in public primary schools in terms of schemes of work and lesson plan preparation.

In the assessment of the same 38 classroom teachers and 5 head teachers information gathered from Teachers questionnaires and interview guide gave information as shown in table 4.10 below.
Table 4.10: % of teachers who prepared schemes of work

<table>
<thead>
<tr>
<th>School</th>
<th>Teachers</th>
<th>% of teachers who do not prepare regularly</th>
<th>% of teachers who prepares regularly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>A</td>
<td>10</td>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>B</td>
<td>7</td>
<td>5</td>
<td>85.7</td>
</tr>
<tr>
<td>C</td>
<td>6</td>
<td>3</td>
<td>83.3</td>
</tr>
<tr>
<td>D</td>
<td>7</td>
<td>3</td>
<td>42.9</td>
</tr>
<tr>
<td>E</td>
<td>8</td>
<td>26</td>
<td>37.5</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>26</td>
<td>68.4</td>
</tr>
</tbody>
</table>

The finding in table 4.10 above indicates that on average 26(68.4%) of teachers in all the sampled schools do not prepare schemes of work always. According to the study it was only 12(31.6%) of the sampled teachers on average who always prepare schemes of work. This affects academic achievement as was observed by Michaelowa (2001) and Olembo J.A and Cameroon. J (1986).

Lesson plan

The study further indicated the existence of a problem as far as lesson plan preparation was concerned. Table 4.11 shows the numbers of teachers who prepares/do not prepare lesson plans.
Table 4.11: % of Teachers who Prepares Lesson Plan

<table>
<thead>
<tr>
<th>Schools</th>
<th>Teachers</th>
<th>% of teachers without lesson plan</th>
<th>% of teachers with lesson plans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>A</td>
<td>10</td>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>B</td>
<td>7</td>
<td>6</td>
<td>85.7</td>
</tr>
<tr>
<td>C</td>
<td>6</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td>D</td>
<td>7</td>
<td>3</td>
<td>42.9</td>
</tr>
<tr>
<td>E</td>
<td>8</td>
<td>3</td>
<td>37.5</td>
</tr>
<tr>
<td>Mean</td>
<td>6</td>
<td>26</td>
<td>68.4</td>
</tr>
</tbody>
</table>

The finding in table 4.11 above, shows a high percentage of teachers unpreparedness. It is clearly indicated from the table that school A had a more serious situation since 9(90%) of the sampled teachers do not prepare lesson plans. According to the study it was only 12(31.6%) of the teachers on average who prepares lesson plan. This clearly shows that teachers do not present their lessons chronologically in their respective lessons.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 Introduction

In the preceding chapter, the collected data was analyzed and reported. This chapter gives summary conclusion, recommendations and suggestions for further research.

5.1 Summary

The purpose of the study was to find out the status of Education quality in the context of free Primary Education in Nginda zone Murang’a County. The study was conducted in 5 sampled schools to which 400 pupils, 38 teachers and 5 head teachers participated in the study. The research instruments used included questionnaires for pupils and teachers, Interview guide for head teachers and observation schedules for researcher. Given below is a summary of key study finding:-

From the results of the study. There is evidence that:-

Teachers in the sampled schools had large classes whereby 30(78.94%) of them had teacher pupils ratio of between 1:41 and 1:100. Additionally each school had pupils with special needs with at least each sampled school having 5% of special need pupil on average. However 29(76.3%) of the teachers lacked knowledge on how to handle these pupils.
Concerning pupils’ assessment, it was found that all schools gave 3 tests in a term although not all pupils sat the given tests. Assignment were also given, however 260(65%) of the sampled pupils had their assignment marked by desk mates as was observed by UNESCO 2005.

Textbooks were inadequate with majority of pupils of 220 (55%) sharing textbooks in the ratio of 1:4, charts, maps and photographs were limited. However class teachers stated that teachers guides were adequate and available. Pupils on the other hand had to buy exercise books.

Physical facilities like classrooms, toilets, water and desks were inadequate. Classes were congested. 240(60%) of pupils sat in 3 and 4 per desk with only 160(40%) of the sampled pupils sitting in 2 per desk. All schools did not have libraries; books were kept in cartons and shelves in staffroom or in deputy head teachers office. Pupils carried water from their homes since water was not available always. All sampled schools had pupils-toilet ratio which were above the expectation of 1:25 and 1:30 for girls and boys respectively? KCPE performance for all the sampled years was inconsistent and in all sampled schools they were characterized by inconsistency trend of performance.

Concerning teachers effectiveness it was noted from the study that at least 26(68.4%) of teachers in all the sampled schools do not prepare schemes of work. Further the study noted that on average it was only 12(31.6%) of the sampled teachers on average who always prepare. This was noted to affect academic achievement as was observed by Michaelowa (2001).
5.2 Conclusion

This study sought to find out the status of education quality based on the findings summarized on the preceding section. It can be concluded that the status of education quality is coupled with many education quality indicators. The finding of this research has shown that:

- Teachers in public primary schools handled large classes. Some had high teacher pupil ratio of up to 1:100. According to the study, schools had inadequate teaching learning materials and physical facilities.

- The finding also showed that pupils were not assessed equally in all public primary schools. Homework was not given always and still one given it was marked by their desk mates.

- The finding also prevailed short fail of teachers preparedness in all sampled schools. Lastly it was clear from the findings that public primary schools in the study locale did not perform as was expected in KCPE between 2003 to 2011. This shows that education quality in the study locale have been comprised. The enrollment is high, teachers are trained but curriculum supervision seems to be lacking as majority of teachers do not prepare.
5.3 Recommendations

Recommendations have been made on the basis of the finding that:-

i) Employment of more teachers to match the increasing number of pupils in public schools in order to improve on the teachers –pupil ratio for better academic achievement.

ii) Quality assurance officers and school head teachers to advice teachers to prepare regularly so as to present their lesson chronologically, have consistency of their professional work hence improving the general K.C.P.E performance.

iii) Provision of more free primary education funds to facilities school purchase adequate physical facilities as well as learning materials in an attempt to raise or maintain the quality of education.

iv) Schools to source money to construct libraries so as to support school programme and motivate both the teachers and pupils for better academic achievement.

5.4 Suggestions for Further Research

The researcher recommends that:-

i) The same research is done in other parts of country. This is because the sample size of this research was small with a different social, economic and environmental background to other parts of the country.

ii) Need for a research to be conducted to show the relationship and difference between single sex and mixed primary school in relation to academic achievement.

iii) It is necessary to conduct a research in different parts of the country to assess different cohorts in relation to retention, repetition, competition, and transition. This will help to unveil more factors that affect the quality of education.
REFERENCE


APPENDICES

APPENDIX ONE

PUPILS QUESTIONNAIRE ON EDUCATION QUALITY

Section A

This section seek to gather general information. Please tick (√) or give information in the space provided.

1. Gender: Male ( ) Female ( )

2. Class: ...................................................... (be general e.g. class 4 but not 4a)

3. (i) Do you have both parents? Yes ( ) No ( )
   (ii) If no specify ...........................................................................................................

4. Who takes care of your schooling needs? ...........................................................................

Section B

This section contains question related to mode and frequency of pupils assessment, adequacy of teaching learning materials and physical facilities and teachers effectiveness.

1. Mode and frequency of pupils assessment

   a) Are you given homework every day? Yes ( ) No ( )
      If no, specify ........................................................................................................
      ............................................................................................................................
      ............................................................................................................................
      ............................................................................................................................
      ............................................................................................................................
      ............................................................................................................................
b) Who marks your assignment(s)
   i) Teacher only (   )
   ii) My desk mate (   )
   iii) Myself (   )
   iv) Teacher and sometimes myself (   )

c) Does the teacher revise homework in class?
   Yes (   )  No (   )

d) How many continuous assessment tests (CAT) do you sit for in a term?
   One (   )  Two (   )  Three (   )
   Four (   )  None (   )

2. Adequacy of teaching learning materials and physical facilities

   i) Adequacy of teaching learning materials

   (a) How many textbooks do you have in each subject? (Put 0..... if none)

       Mathematics ___________________ science ________________________________
       English _______________________ social studies ________________________
       Kiswahili _____________________ CRE _________________________________

   (b) Have your parents/guardian bought you any textbook?

       Yes (   )  No (   )

       If yes, how many____________________________________________________

       In what subject ____________________________________________________

   (c) Are you given exercise books in your school?
Yes ( ) No ( )

If yes, are they enough to cater for your termly needs.
Yes ( ) No ( )

ii) Adequacy of physical facilities

(a) How many of you share a desk? ..............................................................

(b) Do you have drinking water in school? ....................................................
Yes ( ) No ( )

If yes, how often do you get it.
Every day ( )
Twice a week ( )
Once a week ( )
Not at all ( )

(d) Do you have separate latrines for boys and girls?
Yes ( ) No ( )

Are the available latrines enough?
Yes ( ) No ( )
iii) Teachers Effectiveness

In the table below please indicate by use of a tick (✓) which statement best describes the practices that are very common in your school.

<table>
<thead>
<tr>
<th>Practice</th>
<th>Always</th>
<th>Sometimes</th>
<th>Very few times</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Some teachers miss lessons even when in school.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Some teachers uses textbook to teach.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Teachers give homework and assignment regularly.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Teachers mark homework and assignment regularly.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Teachers give pupils continuous assessment test after every topic.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX TWO

CLASS TEACHERS QUESTIONNAIRE ON EDUCATION QUALITY

Section A

This section seeks to gather information. Please tick (√) or give information in the space provided.

1. Gender:  Male (   )  Female (   )

2. Class teacher, standard ............................. (be general e.g. class 3 not 3a)

3. What is your academic/professional qualification?
   - Master degree (   )
   - Degree (   )
   - Diploma (   )
   - Ats Iv (   )
   - P1 (   )
   - Others (specify) ...........................................................................................................

4. What is your teaching experience? ..............................................................................

Section B

This section contains questions related to teacher pupil ratio, mode and frequency of pupils assessment, adequacy of teaching learning materials and physical facilities and teachers preparedness.

1. Teacher-pupil ratio
   a) How many pupils do you have in your class? .........................................................
   b) Do you have pupil with special needs in your class?
      Yes (   )  No (   )
If yes, are you able to meet their needs? Yes ( ) No ( )

c) Are you able to cater for individual needs while teaching and interacting in the classroom? Yes ( ) No ( )

If no what intervention would you recommend to enable you be effective in your teaching?

i) .......................................................... ..........................................................

ii) .......................................................... ..........................................................

iii) .......................................................... ..........................................................

2. Mode and frequency of pupils assessment

a) Given the number of pupils in your class how often are you able to give homework and assignment in your subject area?

Everyday ( )

Twice per week ( )

Once per week ( )

Thrice per week ( )

Rarely ( )

b) Are you able to mark each pupils homework and assignment given the number of pupils in your class?

Yes ( ) No ( )

c) How many CATS do you give to pupils before the end of the term exam? One ( ) Two ( ) Three ( ) None ( )
3. Adequacy of teaching learning materials and physical facilities

(i) Teaching –learning materials

(a) What is the text-book pupils ratio in your class per subject?

<table>
<thead>
<tr>
<th>Subject</th>
<th>1:2</th>
<th>1:3</th>
<th>1:4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiswahili</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.R.E</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Do you have enough reference materials in each subject?

Yes ( ) No ( )

(c) Are pupils allowed to carry textbooks at home?

Yes ( ) No ( )

If no, Why .................................................................

(d) Do you have any learning aids (Maps, charts e.t.c.) in your class?

Yes ( ) No ( )

(ii) Physical facilities

(a) How many pupils share a desk in your class?

(2-2) ( ) 2-3 ( ) 3-4 ( ) 4-5 ( )
(b) Are you able to move around the classroom with ease as you attend to your pupils?
   Yes ( ) No ( )

(c) If your answer in b above is No, what intervention do you think are necessary?
   i) ..............................................................
   ii) ..............................................................

4. Teacher effectiveness

   (a) Do teacher use textbook as their teaching note while teaching?
       Yes ( ) No ( )

   (b) Are you able to prepare all the lessons in your subject area daily?
       Yes ( ) No ( )

   (c) How often do you prepare schemes of work?
       Always ( ) sometimes ( ) Rarely ( )

   (d) Are you able to give and mark pupils homework and assignment regularly?
       Yes ( ) No ( )

   (d) Do you make a consistent preparation of record of work covered
       Yes ( ) No ( )

   (e) How often do you prepare and keep pupils progressive record?
       Always ( ) sometimes ( ) Rarely ( )
APPENDIX THREE

HEADTEACHER INTERVIEW GUIDE ON EDUCATION QUALITY

Section A

This section seeks to gather general information. Please feel free to give the relevant information sought for. (√Tick one).

1. Gender:
   Male (   )
   Female (   )

2. What is your academic /professional qualification
   Master degree (   )
   Degree (   )
   Diploma (   )
   P1 (   )
   Any other (specify) .................................................................

3. For how long have you been teaching?
   0-3 years (   ) 4-7 years (   ) 8-11 years (   )
   above 11 years (   )

4. For how long have you been in this school? ........................................
Section B

This section seeks to gather information on teacher pupil ratio, mode and frequency of pupils assessment, adequacy of teaching learning materials and physical facilities and teacher preparedness.

(i) KCPE performance trend between 2003-2011

a) How has your school been performing in KCPE since 2003?

   Very well ( )
   Satisfactory ( )
   Below average ( )

b) If not very well, what do you think, should be done to mitigate the situation?

   i) .................................................................
   ii) .................................................................
   iii) .................................................................

(ii) Teacher-Pupil ratio

a) How many streams does your school have? ...........................................

b) What is the average number of pupils per class? ...................................

c) What is the total enrollment in your school? ........................................

d) With regard to curriculum based established (CBE) do you have adequate teachers in your school? .................................................................

   Yes ( )   No ( )

   If no, what is the short fall? .................................................................
(iii) **Mode and frequency of pupils assessment**

a) How many CAT(s) are your pupils in various class supposed to sit per term?

Class 1-3 ..............................................................
Class 4-7 ..............................................................
Class 8 ..............................................................

b) Are your CAT(s) and exams prepared by subject teachers or are they bought? ..............................................................

..............................................................

c) Are the CAT(s) and exam results reported to pupils and parents for follow up?

Yes ( ) No ( )

If no, comment ........................................................................

(iv) **Adequacy of teaching learning materials and physical facilities**

**Teaching learning materials**

a) How adequate are textbooks and teaching aids in your school?

Adequate ( ) Inadequate ( ) more than adequate ( )

b) Do you have a library?

Yes ( ) No ( )

If no, where do you store your books ........................................

..............................................................

If yes, how often do you stock your library?

Once per year ( ) twice a year ( ) not applicable ( )
c) What are the most common complaint from teachers as far as the teaching learning process requirement are concerned?
   i) .................................................................
   ii) ........................................................................
   iii) ........................................................................

Physical facilities

a) What is the average pupil-desk ratio Per class?
   Class 1-3  1:2  ( )  1:3  ( )  1:4  ( )
   Class 4-6  1:2  ( )  1:3  ( )  1:4  ( )
   Class 7-8  1:2  ( )  1:3  ( )  1:4  ( )

b) How many latrines do you have for:-
   Boys ...........................................................................
   Girls ............................................................................

c) Do you have a water point in your school?
   Yes  ( )  No  ( )

   If yes, is it enough for the whole school for daily use?
   Yes  ( )  No  ( )

   Given the population in your school, do you have enough classrooms and latrines?
   Yes  ( )  No  ( )
iv) Teachers effectiveness

a) In your school do teachers use textbooks as their teaching note?
   Yes (  )  No (  )

b) How often are your teachers prepare the following professional documents?

<table>
<thead>
<tr>
<th>Documents</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schemes of work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson plans</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Record of work covered</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupils progressive record</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c) Do you make a consistent follow up to ensure that the above documents are well prepared, up-dated and maintained?
   Always (  )
   Sometimes (  )
   Rarely (  )
   Not at all (  )
APPENDIX FOUR

OBSERVATION SCHEDULE ON SCHOOL INFRASTRUCTURE AND LEARNING MATERIALS

School name ........................................................................................................................................

Number of streams ................................................................................................................................

Learning resources and physical facilities

b) Special rooms and amenities (Tick where necessary).

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Available</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School hall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type writer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicating machine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing field</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water source</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latrines: Boys</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latrines: Girls</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c) Inside the class (Tick where appropriate).

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Adequate</th>
<th>Not adequate</th>
<th>More than adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chalk board</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall chart</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ventilations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
d) Classrooms (Tick where necessary).

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mud</td>
<td></td>
</tr>
<tr>
<td>Timber</td>
<td></td>
</tr>
<tr>
<td>Stone</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX FIVE

RESEARCH PERMIT