AN EVALUATION OF THE QUALITY OF FREE PRIMARY EDUCATION IN PUBLIC PRIMARY SCHOOLS IN MACHAKOS MUNICIPALITY

BY

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A PROJECT SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL MANAGEMENT, POLICY AND CURRICULUM STUDIES IN THE SCHOOL OF EDUCATION IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF EDUCATION OF KENYATTA UNIVERSITY.

2011DECLARATION

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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DEDICATION

This work is dedicated to my children; Prudence Neema and Emmanuel Munene for their love and affection while I was undertaking the course; may God grant them to be better scholars.

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I wish to acknowledge my supervisors; Dr. Mary Otieno and Dr. Ogeta Nobert for their instruction and guidance, Dr. Orodho for his instruction during course work and classmates for their encouragement and support.

Lastly but not least, I feel indebted to my husband Peter for his financial and moral support, not forgetting his patience and willingness to take care of our young children while I was away.

May the Almighty God bless you all.

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LIST OF ACRONYMS AND ABBREVIATIONS

CATs	-	Continuous Assessment Tests
DC	-	District Commissioner
DEO	-	District Education Officer
DP	-	Development Plan
ECDE	-	Early Childhood Development and Education
EFA	-	Education For All
FPE	-	Free Primary Education
GDP	-	Gross Domestic Product
GER	-	Gross Enrolment Ratio
GPA	-	General Purpose Account
KCPE	-	Kenya Certificate of Primary Education
KESSP	-	Kenya Education Sector Support Programme
KNAP	-	Kenya National Association of Parents
KNEC	-	Kenya National Examination Council
MDGs	-	Millennium Development Goals
NARC	-	National Alliance Rainbow Coalition
PDE	-	Provincial Director of Education
PTA	-	Parents Teachers Association
PTR	-	Pupil-Teacher Ratio
SA	-	Simba Account
UNDHR	-	Universal Declaration of Human Rights
UNICEF	-	United Nations International Children Education Fund

UPE	-	Universal Primary Education
WHO	-	World Health Organization

ABSTRACT

Introduction of Free Primary Education (FPE) in 2003 was meant to ensure access, retention and completion of primary education in line with the Millennium Development Goal (MDG) number two. This resulted to large classes with limited facilities and learning materials, characterized by low learner achievement; which are threats to Quality Education. The topic of the study was 'An evaluation of the quality of Free Primary Education in Public primary schools in Machakos Municipality.' The purpose of the study was to evaluate the quality of Free Primary Education (FPE) in public primary schools in Machakos Municipality. Quality of Free Primary Education (FPE) was measured by use of variables which the researcher presumed to be determinants of quality education. These variables included: Admission policy in FPE, Teacher-pupil ratio, Mode and frequency of pupil assessment in various grades, Adequacy of teaching/learning materials and physical facilities, Disbursement of funds in various schools and Performance trend of pupils in the Kenya Certificate of Primary Education (KCPE) between 2004-2009. The study locale had 15 public primary schools with a total population of 14,848. The study population was 5616 in 5 public primary schools. The study adopted a Descriptive survey design whereby 5 schools were sampled through purposive sampling method. The respondents included: headteachers, senior teachers and classroom teachers, parents and pupils. Simple random sampling method was used to sample teachers. Parents were sampled through convenient sampling method while pupils were sampled using systematic sampling method by use of their class registers. The sample for the study included 5 headteachers, 5 senior teachers, 55 classroom teachers, 400 pupils and 10 parents. The total sample was 475. The instruments for data collection included: questionnaires for classroom teachers and pupils, interview schedules for Headteachers, Senior teachers and parents and an observation guide which was used by the researcher in assessing the physical facilities. The research instruments were piloted in 2 public primary schools for reliability. The pilot schools were not part of the study sample. A test-retest method was used to determine the reliability of the instruments. The validity of the instruments was determined by the experts (researcher's supervisors among others). Data was coded manually and later analyzed quantitatively and qualitatively using descriptive statistics and Excel computer programme. The findings were presented on frequency tables, pie-charts, percentages, graphs and in narrative form. Conclusions were made based on the findings. The findings revealed that there was no admission policy, there were high teacher-pupil ratios, inadequate teaching-learning materials and physical facilities and inadequate funds which were late in their disbursement. This resulted to an average KCPE performance trend in public primary schools in Machakos Municipality, therefore necessitating the governments' and policy makers' intervention for Quality Education to be achieved.

CHAPTER ONE

1.0 **Introduction**

This chapter presents the Background to the study; Statement of the problem; Purpose and objectives of the study; Research questions; Assumptions of the study; Limitations; Delimitations; Significance of the study; Theoretical and Conceptual framework; and Operational definitions of terms.

1.1 **Background of the study**

Education is as old as mankind. It is an important tool for imparting knowledge, attitudes, skills and values from one generation to another (Oluoch, 1982). Use of experts and specific premises was a common practice among the classical societies to avoid distortion (or to ensure quality) of cultures, customs and beliefs. In modern society, education is important in several ways: Globally, it is regarded as a necessary tool for poverty reduction and improvement of living standards. UNESCO (2005), report acknowledges the importance of education in fostering civic participation, greater tolerance and intercultural dialogues. It also delivers economic benefits to individuals as well as nations (Stevens, 2003), and is key in national development meaning that Education 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 in order to increase people's 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 goal being attainment of Universal Primary Education (UPE) by 2005, which is only possible through FPE; in Kenya this is long overdue.

Several global declarations and conventions have been put in place to ensure that education is given priority among nations. These include: the Universal Declaration of Human Rights (UDHR) of 1948 which made education a basic human right, the convention on the rights of a child of 1989, the Jomtien world platform for action of 1995 on Education For All (EFA), the convention on the elimination of the worst forms of child labour of 1999 and the Dakar framework of action on EFA of 2000 (National report, 2008). These policy documents emphasize the need for Quality Education.

Kenya is a signatory to these conventions and declarations and has therefore domesticated the same through various policy pronouncements and legislations since independence which target the provision of FPE. At independence in 1963, Kenya African National Unity (KANU) published a manifesto entitled, 'what a KANU government offers you' committing herself to offering a minimum of 7 years of FPE (Sifuna, 2007). This was however, not possible at independence. The Ominde commissions of 1964 and the sessional paper No. 10 of 1965 required the government to take full charge of education policy and provide FPE; owing to the fact that the majority of the population were poor. In 1971, an attempt to provide FPE was made when the presidential decree abolished fees for class 1-4, and imposed a fee of Ksh. 60 for classes 5-7 in order to increase enrolments. This resulted to increased enrolments but created a problem on physical structures like classrooms. To solve the problem, a building levy was introduced in 1974 to cater for buildings leading to a high drop-out (Sifuna, 2007). Further attempts to re-introduce FPE by the retired president Daniel A. Moi in the late 1970s were unsuccessful. In 2002, National Alliance Rainbow Coalition (NARC) party included provision of FPE in her campaign manifesto and on forming the government in 2003, FPE was re-introduced in order to increase access and ensure retention and completion to all school age going children.

Re-introduction of FPE in 2003 led to high enrolments whereby the Gross Enrolment Ratio (GER) in public primary schools rose to 98.1% in 2003 and further to 101.5% in 2004, with Western and Eastern provinces recording the

highest GER (Republic of Kenya, 2005). Efforts to expand enrolment must be accompanied by attempts to enhance Education Quality in order to achieve meaningful outcomes (EFA, 2000).Kattan (1999) while doing a research on Education in Thailand notes that Thailand has made substantial progress in expanding access (enrolment) to education at all levels. However, much remains to be done concerning the Quality of Education in order to achieve the objectives of education. Kattan (1999) recommends that in order to improve the Quality of Education, certain indicators of quality must be examined. These indicators include teacher-pupil ratios, retention rates and drop out rates among others.

Given the direction towards which international, regional and educational discourse is heading, it is essential that Educational Quality as a concept along with its implications and applications is clearly understood (Ruhiel, 2006). If not, the goal that educational quality embodies risks being rhetorical rather than substantive. Educational quality is however an international concern and it streams down to the regional and national arena; the national arena being influenced by the global arena (Meyer et al, 1997). Governments and EFA partners have committed themselves to ensure provision of Quality Education to citizens.

Quality is at least the heart of education and what takes place in classrooms is fundamentally important to the future well-being of children, young people and adults (EFA, Dakar, 2000). This means that Education Quality should be

conceptualized as a process perspective and not just an outcome perspective like only passing the Kenya Certificate of Primary Examination (K.C.P.E.). The key questions that guided the study on the education quality of FPE were: what are the guidelines for pupil admission from the Ministry of Education? What is the average number of pupils per class? How often are pupils assessed before the end of the term? Do public primary schools in Machakos Municipality have adequate teaching-learning materials and physical facilities? Have FPE funds been disbursed in time? What is the performance trend in KCPE from 2004 to 2009? In so doing, Education Quality was seen as a continuous process of improvement which was answered by the above stated questions. Since the introduction of FPE in 2003, the pupil performance in KCPE according to Kenya National Examinations Council (KNEC) statistics has been on a downward trend (East African Standard, Sept. 2009).This was confirmed by the study as indicated by the findings from the headteachers' questionnaire.

Much concern has been expressed over the performance in public primary schools as compared to private primary schools. According to the Standard (Dec. 2009), out of the top 100 candidates nationally in 2004, only 1 came from a public primary school while the rest were from private primary schools. In 2009 KCPE results, it was noted that private primary schools performed well in Eastern Province taking nine slots in the top 100 pupils nationally. On the other hand, of all schools in Machakos Municipality, there was only 1 pupil from a public primary school while the rest were from private

schools (Daily Nation, December 2009). Given such a scenario, the Quality of Education of FPE countrywide is questionable and there is urgent need to evaluate the education system. A study was therefore carried out in Machakos Municipality as a representation of different municipalities in the whole country to evaluate the Quality of Education that was being offered in public primary schools from 2004-2009.

The study gave a clear picture of the Quality of FPE given that pupils who entered grade one in 2003 were in grade eight in 2010, Daily Nation (Jan. 2010).

1.2 **Statement of the problem**

FPE was introduced in 2003 in line with the Millennium Development Goal (MDG) number two in order to ensure access, retention and completion of education to all school age going population. The result was large teacher-pupil ratios of 1:100 pupils in rural areas and 1:120 pupils in urban slums (Republic of Kenya, 2005). Physical facilities like classrooms and sanitation facilities were not increased in order to avoid time wastage and congestion. According to the Standard (January 2010), there had been delays and misappropriations of FPE funds; this would affect procurement of learning resources.

The study sought to evaluate the Admission policy, Teacher-pupil ratios, Frequency of pupil assessment, Adequacy of teaching-learning materials and Physical facilities, Disbursement of funds and the Performance trend in KCPE.

This will help to either improve or maintain the quality of education in public primary schools.

1.3 **Purpose of the study**

The purpose of the study was to evaluate the quality of Free Primary Education in public primary schools in Machakos Municipality.

1.4 **Objectives of the study**

The study was based on the following specific objectives:

(i) To assess the admission policy of FPE.

(ii) To determine the teacher-pupil ratios in various grades.

(iii) To analyze the mode and frequency of pupil assessment in various grades.

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

(v) To analyze the funding of FPE in various schools.

(vi) To determine the performance trend of pupils in KCPE between 2003-2009.

1.5 **Research questions**

The study was guided by the following questions:

(i) What are the guidelines for pupil admissions from the Ministry of Education?

(ii) What is the average number of pupils per class?

(iii)How often are pupils assessed before the end of the term?

(iv) How adequate are the teaching-learning materials and physical facilities in public primary schools in Machakos Municipality?

(v) How timely and adequately were the FPE funds disbursed?

(vi) How is the performance trend in KCPE from 2004 to 2009?

1.6 **Significance of the study**

The findings of the study will be important in many ways; the findings will guide the policy makers in the Ministry of Education in the formulation of future policies in order to improve the Quality of Education in all public primary schools in the country. Given that Quality Education is key to economic development, this will also help in the fight against poverty in that more pupils from poor economic backgrounds will enjoy Quality Education. This will help them access higher education. Education will therefore be no longer a preserve of children from rich economic backgrounds who can access private primary schools (where education is of good quality) and consequently join national secondary schools and public universities. On the other hand, the findings will help the Government, Non-governmental organizations and the government's development partners to provide more funds to help in improving educational quality in public primary schools by ensuring better staffing, more learning resources and physical facilities. Ensuring Quality Education will also help to minimize drop-out rates and improve the transition

rate from primary to secondary schools. This will help to reduce social problems like high crime rate as a result of unemployment.

1.7 **Limitation and delimitation of the study**

1.7.1 **Limitation of the study**

The study covered primary schools in Machakos Municipality. Not all primary schools were sampled due to inadequate time and finances. A small number of respondents were sampled.

1.7.2 **Delimitation of the study**

Though the study was carried out in primary schools in Machakos Municipality, it only included public primary schools and not private primary schools because the study evaluated FPE which is only offered in public primary schools which are funded by the government and not by individuals.

1.8 **Assumptions of the study**

The study was based on the assumption that:

(i) Any child who had attained school going age was admitted in school.

(ii) Classes were overcrowded.

(iii) Pupils were only assessed at the end of the term.

(iv) Learning materials and physical facilities were inadequate.

(v) FPE funds were not disbursed in time.

(vi) KCPE performance was poor between 2003-2009.

1.9 **Theoretical framework**

The study was based on the General Systems Theory (Richey, R. 1986). A theory establishes a course and effect relationship between variables with the purposes of explaining and predicting phenomena (Mutai, B.K. 2000).

According to the General Systems Theory, our world is ordered and rational. In every system there must be order which is brought about by planning. Order and planning according to this theory helps us to understand relationships and the effects of a given process, attitude or object upon other people' events (Richey, R. 1986). The theory further states that a system has a mission or a goal. Open systems according to Bertalanffy (1975) interact with the environment. The environment which is the society provides the persons and objects which enter the system and leave at a given point.

The quality of these elements (persons and objects) determine to a great extend the quality of operation of the system. General Systems Theory states that a system stabilizes itself by use of feedback which can either be positive or negative. Negative feedback should not be seen as undesirable and be avoided since it keeps the system on course and attempts to maintain the same quality of response of the system to its environment as was originally planned. On the other hand, positive feedback creates mechanisms through which an open system can be changed by interacting with the environment. This change can either bring growth in the system or destroy the system altogether.

1.9.1 **Relevance of the general systems theory to the study**

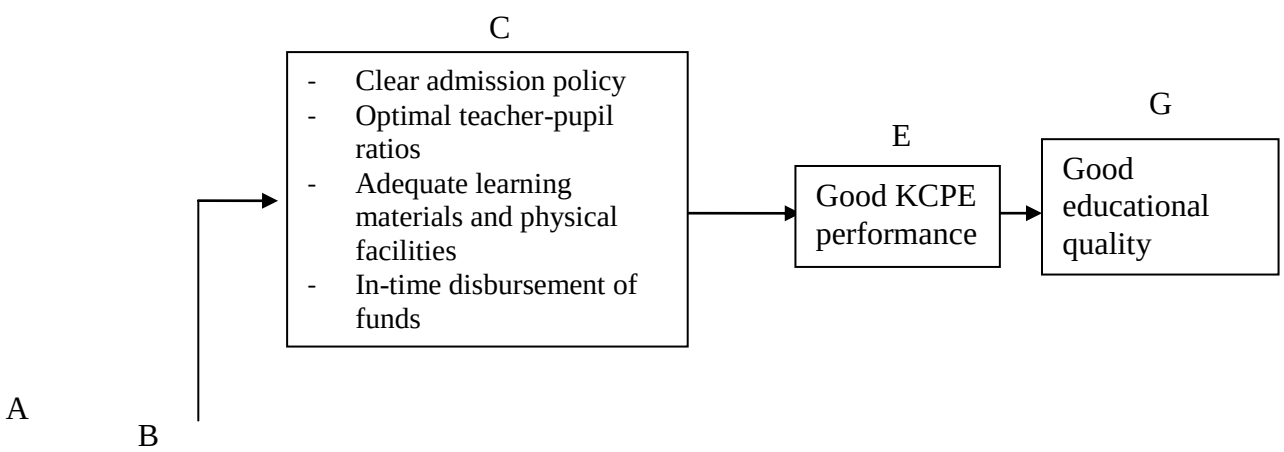
A school is a system which has order and this is brought about by planning. In every education system for instance FPE, planning is crucial and must be guided by research.

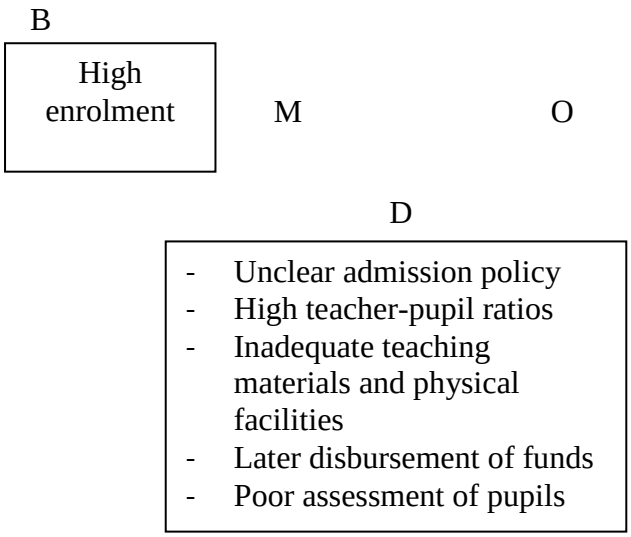
Introduction of FPE had a mission and a goal just like all other systems. The mission and goal of FPE are clearly spelt out in many policy documents including Kenya Education Sector Support Programme (KESSP) document and vision 2030 among others. Just like other systems schools have an inward and outward flow from the system into its environment. The environment (society) provides persons (pupils) and objects (parameters of Quality Education) like admission policy, teachers, learning materials, physical facilities and funds into the education system. Adequacy of these elements (determinants of quality cited above) determine the quality of FPE.

With FPE, KCPE results and internal examinations provide the best feedback regarding the quality of FPE. Both negative and positive feedback in FPE are crucial as they can either be used to improve or maintain Quality Education respectively. This supports the rationale for carrying out regular researches in different locales to ensure good quality of FPE in the country.

1.10 **Conceptual framework**

Figure 1.1: Model showing indicators of quality FPE





Source: Researcher

The conceptual framework outlines two key variables. Quality education is the dependent variable whereas admission policy, teacher-pupil ratios, teaching-learning materials, disbursement of funds, assessment of pupils and performance at KCPE 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 processes and the quality of outcomes (the pupils graduating after 8 years).

Introduction of FPE (Box A) led to high enrolments (Box B). From box B, there are two arrows which are parallel, each leading to a separate box (C and D). This explains the factors necessary for either good educational quality or poor educational quality. In box C, informed admission policies, optimal teacher-pupil ratios, adequate teaching-learning resources and physical facilities, in-time disbursement of funds and regular assessment of pupils, enable learners to perform well in KCPE (Box E) and this translates to

education of good quality (Box G). In box D, there is a shortfall of the variables in box C which results to poor KCPE performance and poor Educational Quality (box H). From boxes C and D, there are two broken arrows each pointing to the opposite direction meaning that the transition is not automatic. This implies that poor management of the variables in box C can lead to a change in the direction of education (arrow O) and result to poor KCPE 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 KCPE performance leading to good educational quality as shown by arrow M. A regular evaluation of FPE through research by planners and scholars is therefore paramount if educational quality is to be improved or maintained.

There are no arrows connecting boxes G and H since the outcomes from each box are independent and completely different from each other.

1.11 **Operational definitions to central terms**

Free Primary Education	-	Referred to primary education that Does not attract any levies (cost free education).
Discipline	-	Referred to the ability of a pupil to do what is expected without coercion.
Quality education	-	Referred to school characteristics that influence pupil's achievement. For instance, teacher-pupil ratios, teaching-learning materials and physical facilities

		among others.
Learning materials	-	Referred to teaching learning aids necessary for learning to take place (textbooks, charts and others).
Physical facilities	-	Referred to tangible infrastructure that provides a conducive learning environment (classrooms, toilets and others).

CHAPTER TWO

LITERATURE REVIEW

2.0 **Introduction**

This chapter provided an overview of the factors that other scholars had found to affect the quality of education in FPE between 2004 and 2009. The review focused on parameters of quality which included: admission policy in FPE, Teacher-pupil ratios, mode and frequency of assessment, learning materials and physical facilities, disbursement of funds and KCPE performance.

2.1 **Admission policy**

Admission policy referred to set guidelines for entrance into the education system. Matters concerning admission policy have drawn global, regional and local attention. According to UNESCO bureau of education of 2006, admissions for grade 1 in South Africa was done by the year a child turned 7

years. However, those whose age was 5 and were turning 6 in June of the subsequent year were admitted. Younger children were also admitted as they desired subject to the availability of places. This was a clear indication that the admission policy was not clear.

On the other hand, Wikipedia (March 2011) noted that the compulsory age for admission in elementary school in USA was varying by state. However, the official age was considered as age 5 or 6 - 11 years meaning that there was no clear admission policy.

In Kenya, the overall FPE has been a successful pro-poor policy whereby poorer districts had seen larger increase in enrolment compared with richer districts (Kimenyi, M. et al, 2009). However, the composition of pupils entering education had indeed changed since the introduction of FPE. The age profile had been affected by the introduction of FPE with older pupils entering or returning to school. For instance, the proportion of pupils who were at least one year older than the regular age in grade 8 had increased from 28% to 48% between the year 2002 to 2004 (Kimenyi et al, 2009). 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 were free. These children according to UNESCO 2005 lacked orientation in writing and reading skills and had to be given orientation in grade one; a case that wasted time for other pupils. Pre-school experience is important because it forms the basis in an individual's educational achievement (Oluoch, J.O. 1982).

The report on ‘Effects of Free Primary Education in Kenya’ showed unintended result of admission of adult pupils in regular school situation that had caused social-cultural shock due to wide age gaps among pupils (Kenya Times, February 2007). This had brought about disciplinary problems between older pupils and younger teachers. UNESCO 2005, ‘Experiences from the Districts’, noted that the over age were not accustomed to the school environment. Many were unruly and indisciplined, some were used to smoking, girls knew about boyfriends, others were thieves and prostitutes. UNESCO 2005, Assessment report added that some over age pupils were house helps while others were married and therefore could not follow rules or obey teachers and therefore influenced other pupils negatively. These behaviours were said to affect the morals of other pupils in the school. UNESCO(2005) on ‘Experiences from the Districts’ further observed that movement of pupils from one school to another was not controlled since headteachers were not allowed to deny any admissions. This was seen to compromise discipline in schools since pupils with discipline problems moved from one school to another freely. Besides, over age pupils needed a lot of time for instruction to catch up, while teachers spent more time explaining concepts to such pupils a case that wasted time for other pupils. This hindered syllabus coverage. Given that not all districts were covered, the study sought to evaluate the admission policy in FPE and its effect on the quality of education within Machakos Municipality, given that the region had not been researched on.

2.2 **Teacher-pupil ratio**

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 rates 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 ratios of 50 pupils on average. For instance, Afghanistan had the highest teacher-pupil ratio with 1:83.4 while Bangladesh had the lowest with 1:50.9. On the other hand, Candice Montenegro quoted Analyn Perez in infographic news (July 2010) as having stated, that year after year public schools in Philippines saw usual scenarios of teacher-pupil ratios of 1:65.

In Kenya, FPE was introduced in 2003. This saw the GER in public primary schools increase to 98.1% in 2003 and further to 101.5% in 2004, with Western and Eastern provinces 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 had increased enrolment and participation, it also brought in problems. Staffing levels had not kept pace with increased enrolment which was associated with larger 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 per teacher in urban slums. Urban areas like municipalities were not left behind though data may be lacking; a case that provided a good reason for research to be carried out on what happened on the ground. Large classrooms are those where the pupil-teacher ratios (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 3-4 years, 1:25 for 4-5 years, 1:30 for 5-6 years and 1:40 for 6-8 years (Kenya Times, 2007). According to the TSC report of 2005, the recommended PTR for public primary schools in Kenya is 40. Increased enrolment does not necessarily translate into improved Education Quality. When the pupil-teacher ratio is raised above 40 for every teacher, the quality of teaching and learning in most contexts begins to suffer (Said, L. and Oliver, D. 2007). Large classrooms affect aspects of teacher practice such as instructional time and class management (Wilson, V. 2006).

According to UNESCO 2005, large classes have minimal teacher-pupil interaction with teachers moving with the bright students leaving slow learners unattended. Teachers find it difficult to move about to check every pupil's 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 class sizes disadvantages 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 school going age are in public primary schools, it was worth evaluating the FPE programme to establish whether it was accomplishing the global, regional and national purpose for which it was meant to accomplish. Studies/ researches done are not comprehensive in that not all areas had been covered thus need for more research on the subject.

This provides the rationale for research on teacher-pupil ratios in different schools within the study locale.

2.3 **Pupil assessment**

Assessment and particularly the assessment of pupils' learning achievement has become the object of a good deal of attention and activities all over the world, in industrialized and developing countries alike (Thomas, K. and Vincent, G. 2001). Assessment is the process of determining the level of performance of a person in a particular skill or subject area (Ministry of Education, 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 assignments in Central America. This is necessary in schools where educational quality is low.

During the Dakar framework for Action in April 2000 in Senegal, it was observed that learning outcomes 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), added that homework is an extension of class work and is therefore, part of the school day. It is the best way to learn how to learn through private study and effort. According to Psacharopoulos et al (1992), homework and assignments are associated with achievement.

However, with the introduction of FPE mass enrolments resulted to high PTR as discussed earlier. This brought many challenges as far as pupil assessment was concerned. UNESCO (2005) observed that, due to increased work load, teachers no longer gave as many assignments as they used to do in the past and this threatened the goal of FPE of 'equipping pupils with quality education'. Such a scenario may be dangerous to pupils especially in subjects like Mathematics, English and Kiswahili which require constant practice and feedback; not forgetting that some parents may never bother to 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 asked pupils to exchange their books and mark for each other. Such teachers cannot understand a pupil's weakness and needs. Although UNESCO and others have highlighted some issues on pupil assessment, their work was not comprehensive since they did not cover all areas. This provided the need to evaluate the pupil assessment in other regions thus the rationale for research in the study locale.

2.4 **Teaching-learning materials and physical facilities**

2.4.1 **Physical facilities**

Teaching-learning materials 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 requirements of safe environmentally friendly, and easily accessible facilities, safe and protective learning environments with water and sanitation facilities. Ehsani, L.R. (2006) also concurred with this view. This helps to curb cases of drop outs especially among adolescent girls who require 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 toilet 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 Ministry of Education has set the minimum standards for the provision of toilets and water as contained in the government's handbook for inspection of 2000. The minimum number of toilets is 4 for the first 30 pupils, thereafter a ratio of 25:1 and 30:1 applies for girls and boys respectively. The average pupil-toilet ratio in government schools is 47 for girls and 56 for boys. Additionally, a day school should have at least 5 litres of water for one child a

day and a water point for every 50 students. Owing to the fact that an unhealthy child demonstrates low participation rate, it was of paramount importance to carry out a study to evaluate how well public schools had upheld health requirements. Nokes et al (1992), observed that children with worm infections have lower marks in schools than uninfected children; they also have low school attendance which may lead to drop out cases. The World Health Organization report, WHO (1997) argued that lack of adequate water and sanitation facilities in school creates an unsafe environment where diseases are transmitted. Since much had not been documented on availability of physical facilities in schools especially as far as safe environment was concerned, a study on the same was very crucial in order to ensure Quality Education.

2.4.2 **Teaching-learning materials**

Teaching and learning materials are aids to the teaching and learning process. Purves, A. (1973) observed that there is a positive association between availability of educational materials and pupil achievement. These learning materials include: wall charts, textbooks, chalks, teachers guides and others. According to Emiliana, V. (2007), many teachers in developing countries work in schools that lack adequate teaching materials or basic infrastructure; materials like textbooks; this is a primary obstacle affecting teaching and learning. However, he further stated that these severe challenges that affected developing countries were not unique; they resembled the United States schools with the lowest income student populations. Candice Montenegro

quoting Analyn Perez in the infographic in July 2010 stated that in Philippines, there were no learning materials; some teachers used their money to buy them since there were no reference materials in the library.

According to UNESCO (2005), on Experiences from the Districts, inadequate learning resources led to a decline in quality of education. Textbooks are important for revision purposes.

Olembo, J.A. and Cameron, J. (1986) concured with UNESCO by stating that good reading habits are strengthened by quiet reading at home especially for children in grades two (2) to other higher levels; this helps children to learn. Michaelowa (2001) added that having books available in students' homes can improve achievement scores by 2-3%.

Given such an importance of learning materials and specifically textbooks, it is worth noting that schools should have a criterion in pupil-textbook ratio. Ezeh, A. et al (2008) described the government policy on pupil-textbook ratio as follows: In lower primary (grade 1-4) pupils ought to have a ratio of at most 3:1, while upper primary should have a ratio of at most 2:1 in the core subjects. This is because missing out in learning experiences during the lower grades could mean that such pupils would be disadvantaged in terms of achievement for the rest of their schooling life. The researcher therefore sought to evaluate the situation on the ground as far as teaching and learning resources provision was concerned.

2.5 **Disbursement of funds**

Quality education is determined by parameters such as adequate teaching staff, physical facilities, teaching and learning materials and support staff. Provision of all these requirements calls for adequate and in time disbursement of funds. For instance, Emiliana, V. (2007) reiterated that when Brazil increased educational funding, schools' enrolments increased and the gap in student test scores narrowed.

Richey, R. (1986) stated that an education system relies upon funding from the government. The conflict between rising enrolments and declining educational resources may be leading to the erosion of school quality in the 3rd world countries (Bruce, F. 1986). He quoted Sierra Leone as having spent US dollars 66 per student for all instructional resources (including teachers) while Bolivia allocated only US dollars 0.80 per student for instructional materials; thus students achievements and school characteristics were quite low. UNESCO (2007) in a article on 'Towards quality for Roma children' stated that disadvantaged and Roma children needed a superior funding programme in order to ensure free access, best teachers, more enriched environments, superior pedagogy and smaller child/staff ratios. This resembles Kenya where majority of pupils are from poor backgrounds

In Kenya, the government remits FPE funds by direct wire transfer to school accounts held in a reputable bank in the district (Nyamute, M. 2006).

Each pupil is supposed to get Ksh. 1020 every year broken down into: Ksh.650 for general purpose paid under account one commonly known as Simba Account (SA) and Ksh. 370 for the purpose of textbooks paid through

account two known as General Purpose Account (GPA). Funds for account one are meant for the purpose of instructional materials that include textbooks while money from GPA is for payment of watchman, general repairs, activities and other subsistence (The Standard, Jan 2010) and (Republic of Kenya, 2005).

Given the fact that our country's Gross Domestic Product (GDP) cannot support such a budget, part of the funds are provided by donor community. Donors include: The World Bank which gave Ksh. 3.7 billion in 2003/04 financial year, the British government through department for international development gave Ksh. 1.6 billion while Petroleum Exporting Countries (OPEC) gave Ksh. 1.2 billion, Swedish government gave Ksh. 430 million and United Nations International Children Education Fund (UNICEF) gave Ksh. 250 million (Sifuna, D.N. 2003). However, this donor funding is temporary and the extent to which funds are disbursed either constrains or facilitates the systems activities.

UNESCO (2005: Ibid) in her experiences from the Districts noted delays in disbursement of funds for purchase of school learning materials. This was later echoed by Daily Nation (March, 2009) quoting the Kenya National Association of Parents (KNAP) Secretary General that, 'School children had no textbooks or writing materials as the Ministry had last released funds in April 2008'. According to the Daily Nation reporter, Samuel Siringi, the Booksellers and Stationers Association was making plans on how to get the

government to pay for the previous year's supply because they were owned more than 1.7 billion shillings and had stopped supplies to public schools.

An education system cannot function without learning materials; otherwise the quality of education offered to children would be compromised. In order to ensure that quality is upheld, a base situation analysis was necessary. The researcher therefore evaluated the funding of FPE in selected schools within the study locale to ascertain the extent to which FPE was funded and how it impacted on Education Quality in different schools.

2.6 **KCPE performance trend**

Examinations are used to separate the low achievers from the high achievers in order 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 a secondary school. Michaelowa (2001) further elaborated that learner achievement is used as an indicator of Educational Quality. Although majority of children in all regions of the world except Sub-Saharan Africa attend primary school, the quality of education is low and disparities in pupil 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 students 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 (Argentina, Belize, Colombia, Iran, Kuwait, Morocco and Turkey) had a much lower

performance than those done in developed countries (France, United Kingdom and USA). This showed that performance on achievement tests in low income countries had low academic achievements.

Kenya Certificate of Primary Education (KCPE) is a National examination that is offered at the end of 8 years of primary education. According to Wasanga (2004), centrally administered National examinations 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 2003, the pupil 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 7,067 in 2008 from 2,952 in 2007 and 3,711 in 2006. Similarly the number of candidates who obtained D- cascaded to 42,084 in 2008 from 24,467 in 2007 and 27,582 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 African Standard Sept. 2009).

However, there has been concern over the performance in public primary schools as compared to the private schools, according to the Kenya Primary School Heads Association as was reported by their chairman (Daily Nation, Jan. 2009).

In 2004 KCPE results, out of the top 100 candidates nationally, only one came from a public primary school while the rest were from private schools. Parents

and education experts were worried that education would soon remain a preserve of the rich; 60% of national schools places in 2005 were taken by pupils from rich private primary schools who accounted for only 10% of the total KCPE candidates. In 2009 KCPE results it was noted that private schools performed well in Eastern province taking nine slots in the top 100 nationally (Standard, Dec. 2009).According to the standard team, parents were left with a universal question of 'which is better, private or public?' 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's effort to attain EFA and Universal Primary Education (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 schools 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.

2.7 **Summary**

Quality education in FPE is a continuous process which is derived from a combination of indicators which include: Admission Policy, Teacher-pupil ratios, Assessment of pupils, Teaching-learning materials and Physical facilities, Disbursement of funds and the Performance trend in KCPE. The

government should therefore ensure that public primary schools have adequate teachers, physical facilities, learning materials, informed admission policies and in-time disbursement of funds. This will help schools to ensure good Teacher-pupil interaction, pupil assessment and safe environment which will result to good KCPE performance thus translating into good educational quality.

As observed in the literature review, scholars have attempted to carry out studies based on Quality Education. These documented results were however, not comprehensive since they had not covered all the parts of the county. An evaluation of the Quality Education in the study locale was therefore necessary.

CHAPTER THREE

METHODOLOGY

3.0 **Introduction**

This chapter described the research design, the study locale, the target population, the sample and sampling procedures, the research instruments, piloting method, reliability of instruments, methods of data collection and the data analysis method that was applied in the study.

3.1 **Research design**

The study adopted a descriptive survey design, because it allowed for collecting information by interviewing, observation and administering questionnaires to a sample of individuals. According to Mutai (2001), this design gives an accurate account of a particular phenomena, situation, community or person. The study sought to evaluate the situation of education in FPE as far as its quality was concerned, thus descriptive survey design was most suited. Through the above cited instruments, the researcher gathered information on the indicators of quality which included, admission policy, teacher-pupil ratios, assessment of pupils, teaching-learning materials and physical facilities, disbursement of funds and performance trend in KCPE. Education quality was the dependent variable while the 6 indicators of education quality were considered to be the independent variable. This design therefore allowed the researcher to gather information, summarize, present and interpret it for the purpose of clarification.

3.2 **Location of the study**

The study locale was Machakos Municipality. It was considered suitable for the study because it is in Eastern Province, one of the provinces which had been hard hit by poor performance of KCPE as was evident in the background information on page 5 of this document. Other reasons for the choice of the study locale included the locale's social-economic background since it attracts pupils from different backgrounds (socially and economically), its population which is multi-ethnic given its cosmopolitan nature, the locales high population and the fact that it was cost-effective for the researcher to study that locale. The study was therefore representative and free from bias.

3.3 **Target population**

The Municipality has 15 public primary schools from which 5 schools were sampled. The target population for the study was 14848, while the study population was 5616. This included pupils, teachers, headteachers, senior teachers and parents; 400 pupils, 10 parents, 55 classroom teachers, 5 headteachers and 5 senior teachers and 10 parents were sampled. However, not all the pupils' and the class teachers' questionnaires were completed; 28 questionnaires and 1 questionnaire from pupils and class teachers respectively were incomplete. This reduced the number of respondents in the two categories to 372 and 54 respectively.

3.4 **Sampling techniques and sample size**

For the objectives of the study to be achieved, a combination of probability and non-probability sampling techniques were applied, using a combination of purposive, systematic, convenient, simple random and stratified sampling methods as discussed below.

Purposive sampling was used to sample schools. In purposive sampling, the researcher hand picks the cases to be included in his sample on the basis of her judgment of the sample typicality. In this case, the researcher picked 3 schools with an average population, 1 school with a small population and 1 school with a large population, to make a total of 5 schools. Systematic sampling was used to select 80 pupils from each school by use of their class registers. This method ensured equal representation of all pupils in each grade. The researcher picked 13 pupils from each class (class 3-8) at the interval of 1 pupil after every 3 pupils, assuming that each class had 2 streams. For single stream schools, pupils were sampled at the interval of 1 pupil after every 2 pupils. The total pupils sampled were 400.

All headteachers and senior teachers were included in the sample. There was a total of 5 headteachers and 5 senior teachers, who were sampled using stratified sampling method. Simple random sampling was used to sample 55 classroom teachers, 11 teachers from each school, that is, 1 teacher from class 1-5, and 2 teachers from class 6-8. The researcher used equally folded papers

depending on the number of streams in each school with one or two papers bearing a YES mark respectively as explained above; all the other papers bore a NO mark. The teacher who picked a paper with a YES mark was included in the sample. Simple random sampling is the best in selecting subjects in an attempt to form a representative sample in a population (Orodho, 2005). Finally, 10 parents were sampled using convenient sampling method whereby each school had 2 parents interviewed. The total sample size was 475 as shown on table 3.1 below.

Table 3.1 Target population and sample size

Designation	**Target population**	**Sample size**	**% sample size**
Pupils	4512	400	8.9%
Class teachers	94	55	58.5
Senior teachers	5	5	100%
Headteachers	5	5	100%
Parents	1,000	10	1%
Total	**5,616**	**475**	**8.5%**

3.5 **Research instruments**

The research instruments used in the study included: questionnaires, interview schedules and an observation schedule.

3.5.1 **Questionnaires**

Orodho (2005) observed that a questionnaire helps to save time and has no interviewer bias. This instrument was used to gather information from teachers and pupils since they formed the majority of the respondents.

The questionnaires were constructed using open ended questions, closed ended questions and matrix questions. Open ended questions are easier to construct and they provide clarity. Closed ended questions are difficult to construct and though they are easier to answer, they may not provide clarity. Matrix questions link open ended and closed ended questions.

3.5.1.1 **Teachers' questionnaire**

The teachers' questionnaires were used to collect information on teacher-pupil ratio, assessment of pupils, enrolment policy and teaching-learning materials. This instrument was named Appendix 2.

3.5.1.2 **Pupils' questionnaire**

This instrument was used to collect information from pupils on pupil-textbook ratios, assessment of pupils and availability of water and sanitation. This instrument was named Appendix 1.

3.5.2 **Interview schedule**

According to Mutai (2001), an interview avails information which would otherwise not be availed by a questionnaire or through observation. Interview schedules are more adaptive and questions can be rephrased to achieve

objective. Structured questions were used to seek information from headteachers, senior teachers and parents. The instrument was best suited for such category of respondents given that administrators may lack time to fill in questionnaires while parents on the other hand may lack literacy skills not forgetting that their visits to school are unpredictable.

The headteachers' interview schedule sought information on enrolment policy, disbursement of funds, physical facilities, performance in KCPE, teaching-learning materials and the school enrolment index. The senior teachers' interview schedule mainly sought to compliment the contribution of other respondents and comment on the discipline of pupils and learning resources.

The parents' interview schedule sought general views on adequacy of learning materials, assessment of pupils, availability of water and the quality of FPE.

3.5.3 **Observation schedule**

The observation schedule was used to determine the nature of classes, and adequacy of physical facilities (including toilets, play grounds and water points). The researcher carried out the observation in person.

3.6 **Pilot study**

Piloting involves testing of research instruments to ensure their reliability. The researcher used purposive sampling method to select 2 public primary schools within the municipality; one school had an average population while the other

school had a 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 sought expert opinion concerning the validity of the instruments. These experts included the researcher's supervisors among others.

3.6.2 **Reliability of instruments**

Orodho (2005), says that reliability of a research instrument is its consistency in producing same results. The researcher used a test-retest method whereby the questionnaires were given to the respondents to fill in, then 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 weeks whereby the findings were later analyzed as discussed above using the following formula.

$$r = 1 - \frac{6\left(\sum d^2\right)}{N(N^2 - 1)}$$

From the formula above, $\sum$ referred to summation, d^2 referred to the square of the difference between rank 1 and rank 2 of the entries while N referred to the total entries. A correlation co-efficient of 0.75 was found to be the measure of reliability. This measure was acceptable because according to Orodho (2008), a correlation co-efficient of about 0.8 should be considered high enough to judge the reliability of instruments.

3.7 **Data collection techniques**

The data collection method involved self-administered questionnaires, interviews and an observation schedule. The researcher obtained a research permit from the Ministry of Higher Education Science and Technology having been cleared for data collection exercise by the university. The research permit was presented to the DC and the DEO for authorization to carry on with the research in the study locale.

The researcher then visited the relevant schools for introduction purposes as well as to request for appointments from the respective headteachers. The researcher also informed the headteachers about the nature of the study.

On the appointment dates, the researcher sampled the respondents in each class and separated them from other pupils then explained to them the purpose of the study and what was required of them. The researcher ensured the respondents of confidentiality and distributed the questionnaires to them and asked them not to indicate their names. The researcher assisted the lower and

middle classes to fill the questionnaires by reading each item for them before they were completed. The researcher then collected the completed questionnaires to avoid distortion of the respondents' answers by other pupils. The sampled teachers were given the questionnaires and assured of confidentiality. The researcher collected the questionnaires and thanked the teachers for their contribution. The headteachers and their senior teachers were interviewed in their respective offices.

Parents were interviewed as they reported to school. The parents' interview schedule was translated by the researcher into the preferred languages where need be. The observation schedule was completed by the researcher in the sample schools during the study. All the completed instruments were bound separately depending on their category and sample school.

3.8 **Data analysis and Presentation**

The collected data was organized, broken into manageable units according to the theme of the study and coded manually before subjecting it to statistical analysis. Data obtained from open-ended questions was analyzed qualitatively (i.e. using themes, codes and categories) and quantitatively using descriptive statistics and Excel computer programme (i.e. calculations based on means, frequencies and percentages) from the responses given by the respondents for each item.

The findings were presented on frequency tables, pie charts, graphs, percentages and in narrative form. This led to the formulation of the summary, conclusions and recommendations of the study.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0 **Introduction**

This chapter presents an analysis and interpretation of the data collected from 5 schools. The data was collected through administration of questionnaires to 55 class teachers and 400 pupils. Additionally, interviews were conducted among 5 headteachers, 5 senior teachers and 10 parents. However, not all the administered questionnaires were returned; the researcher received 54 questionnaires from class teachers and 372 questionnaires from pupils that were duly completed.

The data collected was both quantitative and qualitative in nature. Quantitative data was analyzed using descriptive statistics and Excel computer programme. Closed ended questions, open ended questions and matrix questions were used. Closed ended questions were recorded on a tally table from which frequencies and percentages were computed. Qualitative data was also analyzed whereby responses to open-ended questions were analyzed according

to themes based on research questions and objectives and thereafter a summary, conclusions, implications and recommendations were drawn.

The data collected in this study was analyzed in relation to the objectives and purpose of the study as follows:

(i) Enrolment policy

This involved pupil age requirement for admission in class one, years taken in nursery school, number of over-age and under-age in each grade and their participation in interview for class one admission.

(ii) Teacher-pupil ratio

The number of pupils in each class and the number of pupils with special needs per class / school was assessed.

(iii) Pupil assessment

The number of tests administered per school per term, the number of pupils who missed/sat each test, issuance of assignments and homework as well as marking of assignments and homework was assessed.

(iv) Teaching-learning materials and physical facilities

a) Physical facilities:

This included pupil-desk ratios, pupil-toilet ratios, availability of library, type of classrooms (wall, windows, floor) and play grounds.

b) Teaching-learning materials

Pupil-textbook ratio, number of pupils possessing /not possessing textbook, number of pupils who had bought/not bought exercise books and wall hangings (charts, maps and pictures) were evaluated.

(v) Funding of FPE

This sought to assess the adequacy and the disbursement of funds.

(vi) KCPE performance trend

Information on the headteachers and senior teachers comments concerning KCPE performance in their respective schools and KCPE results analysis from 2004 – 2009 in each sampled school was sought.

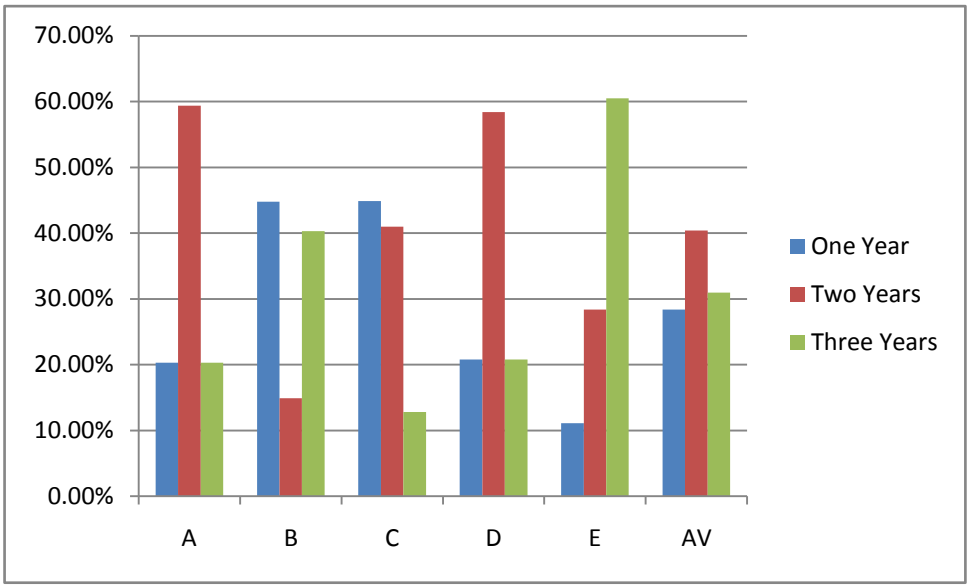
4.1 **Admission policy**

Policies are legal frameworks that direct the carrying out of tasks in an organization / system. One of the objectives of the study was to assess whether the government had issued any guidelines to headteachers pertaining admission of pupils in public primary schools.

The information was gathered from 5 headteachers, 5 senior teachers, 54 class teachers and 372 pupils. All the headteachers were interviewed whereby, 40% (2) of them advocated for admission of 6 year olds in class one, while 60% (3) stated that 5 years and above was adequate for admission in class one.

The headteachers were also not clear on the number of years a child ought to have taken in nursery. This dilemma was revealed in the pupils' responses as shown in figure 4.1 below.

Figure 4.1 Number of years taken in nursery school

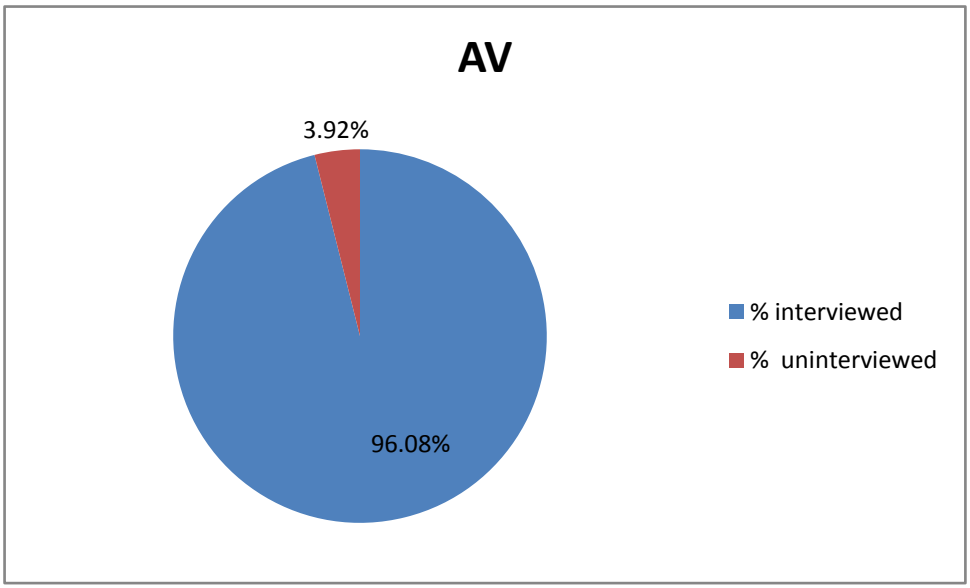


Source: Pupils' questionnaire

From figure 4.1 above, there are disparities on the number of years taken by each pupil in all the five schools. In school A and D, pupils had taken 2 years with 59.4% and 58.4% respectively, schools B and C had the majority take 1 year with 44.8% and 44.9% respectively while school E had the highest number (60.5%) who had taken 3 years in nursery. However, on average, those pupils who took 2 years in nursery were the majority, that is 40.42% while those who took 1 and 3 years in nursery were 28.3% and 30.94% respectively. The disparity may have been caused by the fear among parents of paying nursery fees as was observed by UNESCO (2005).

The study also sought information on whether admissions in class one involved an interview. The findings were as shown in figure 4.2 below.

Figure 4.2 Number of pupils interviewed before class one admission



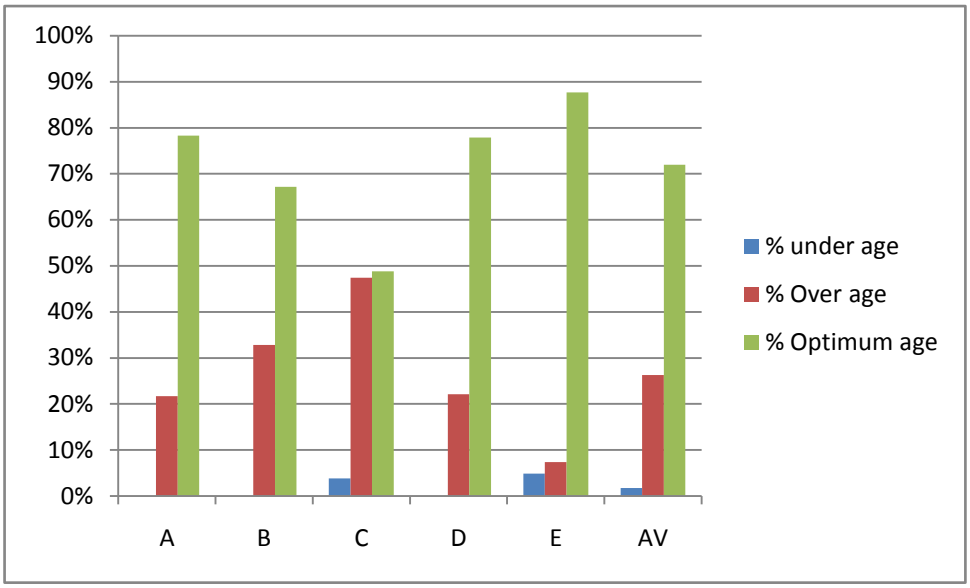
Key: AV-Average

Source: Pupils' questionnaire

Figure 4.2 above shows clearly that the number of pupils not interviewed for admission in class one was negligible, that is only 3.92%. Given that the number of interviewed pupils (96.08%) carried the day across schools, the researcher concluded that children were interviewed before joining class one. However, it was not a government policy.

The researcher also sought to ascertain whether the age of pupils admitted across the grades was uniform; 6 years was considered the optimum age for a child joining class one. Consequently, those below 6 years were presumed to be under-age while above 6 years was over-age. The results were as shown in figure 4.3 below.

Figure 4.3 Over age and under age pupils in schools (%)



Source: Pupils' and teachers' questionnaires

It was clear from figure 4.3 above that, on average there were more over-age pupils (26.28%) as compared to 1.74% of the underage pupils; pupils with optimum (required) age had the largest number. The findings are similar to those of Kimenyi et al (2009), which showed an increase of overage pupils joining public primary schools.

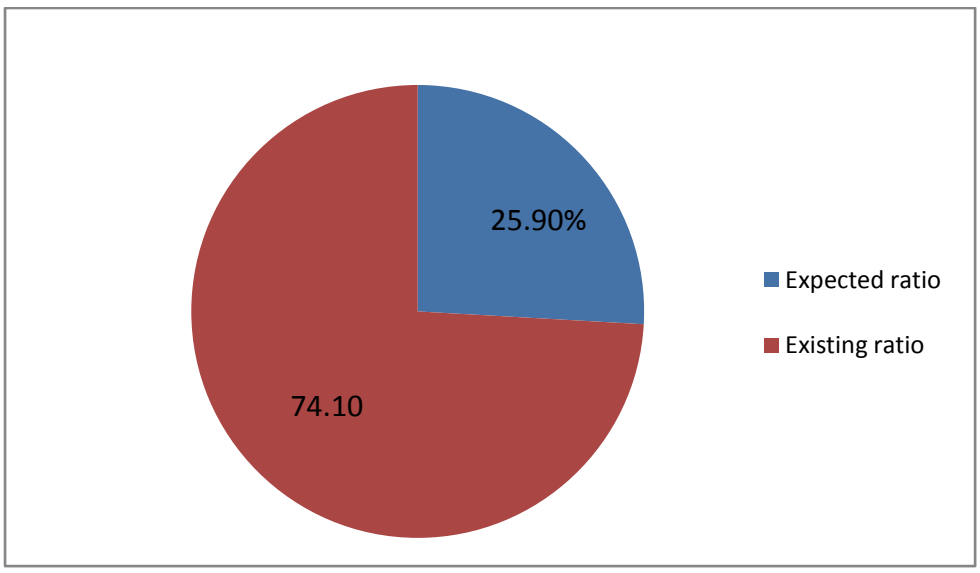
The class teachers indicated facing challenges with overage and underage pupils; this concurred with UNESCO (2005). Challenges from overage pupils included failure to take rules, below average performance, overage pupils being bullied by younger pupils, feeling equal to teachers, interaction problems, negative influence on younger pupils, truancy which subsequently led to dropping out and untidiness.

On the other hand teachers experienced the following challenges from underage pupils: low concentration span, getting tired quickly, failure to complete class work and other activities, being playful in class and being generally lazy.

4.2 **Teacher-pupil ratio**

Teacher-pupil ratio referred to the number of pupils attended by a single teacher per class. In the assessment of the same, 54 class teachers gave information as shown in figure 4.4 below.

Figure 4.4: Comparison between expected teacher - pupil ratio (%) and existing ratios

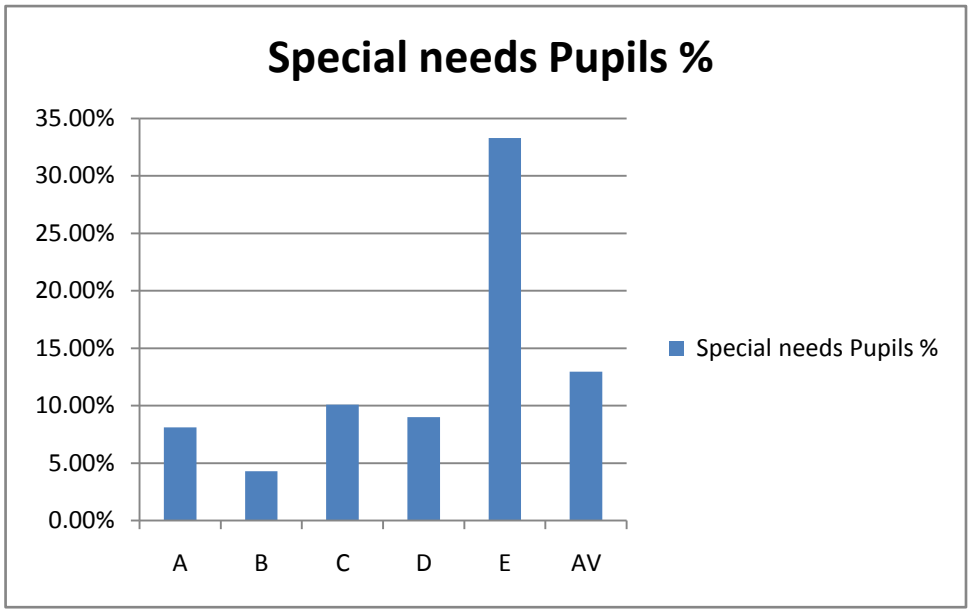


Source: Teachers' questionnaire

The findings in figure 4.4 above shows that 74.1% of the sampled teachers had a teacher-pupil ratio which exceeded 1:40, that is the optimum ratio for public primary schools according to TSC report of 2005. It was only 25.9% of the sampled teachers who enjoyed a teacher-pupil ratio of 1:40 and below. The findings therefore concur with the education sector report of 2005 since the largest % of teachers (74.1%), had a teacher-pupil ratio of between 1:41 – 1:100. Figure 4.4 above shows clearly that ¾ of the sampled teachers had large classes as was observed by Said, et al (2007).

However, besides classes being large, teachers also were found to experience difficulties in teaching given that some of their pupils had special needs as shown in figure 4.5 below.

Figure 4.5 Number of special needs pupils per school (%)



Source: Teachers' questionnaire

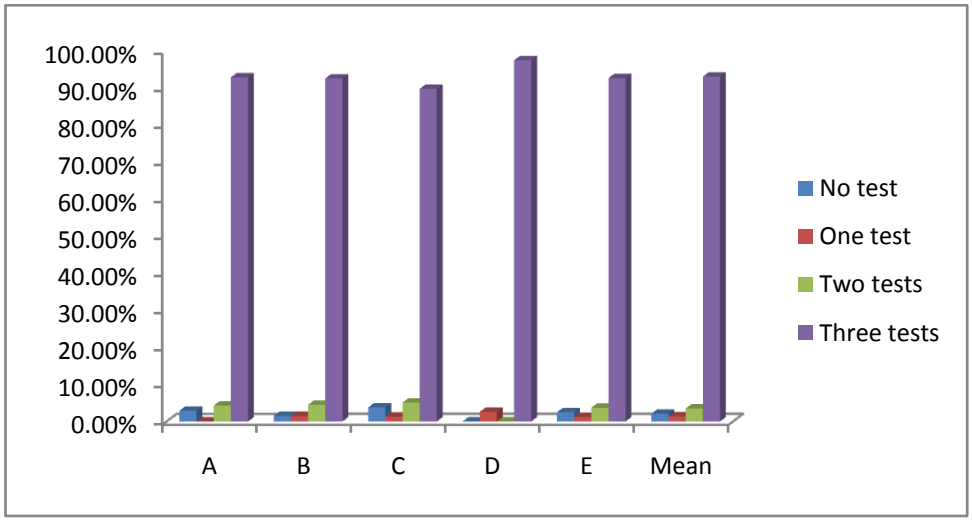
From figure 4.5 above, it was clear that each school had at least 4% and above of pupils with special needs. School E seemed to have the highest number of special needs pupils, that is 33.3%. Teachers expressed facing difficulties in handling special needs cases amidst large classes. It also emerged from the study that out of the 54 teachers who were sampled, 44.4% (24) of them had not attended any professional development course. Such teachers felt inadequate to teach special needs pupils. According to such teachers, pupils with special needs could only fit well in special schools where teachers were adequately trained on the same.

4.3 **Pupil 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 questionnaire), all sampled schools (100%) administered 3 tests per term. However, there were disparities as far as pupil participation in tests was concerned as shown in figure 4.6 below.

Figure 4.6 Pupils' participation in tests (%)



Source: Pupils' questionnaire

The findings in figure 4.6 above indicated that, in all the case studies, all pupils did not sit for the three tests. Apart from school D whereby only 2.6% had not sat the 3 tests, the rest of the schools had between 7% and 11% of the pupils who missed 1 or 2 tests; out of the cited range of 7-11% (above), at least between 1.5% and 3.8% of them had not sat any test. Concerning the issuing of assignments, 55.6% (30) of the class teachers indicated that they gave assignments everyday while the remaining 44.4% (24) were found to give assignments once or twice per week. This concurred with UNESCO's findings in 2005. However, 60% (223) of the sampled pupils reiterated that their assignments were sometimes marked by their desk mates, as was

observed by UNESCO (2005). Only 40% (149) of pupils had their assignments marked by subject teachers on a daily basis.

Parents (100%) who were interviewed expressed concern over the issue of homework. They stated categorically that pupils' homework was pegged on payment of remedial teaching fee; parents who declined to pay the levy had their sons/daughters left out. They further expressed concern that the levy was burdensome especially in lower classes (1-3) where it was as high as Ksh. 600 per child per month in some schools. They indicated their fear over the defaulters' academic achievements since homework was issued mostly during morning or evening remedials.

4.4 **Teaching / learning materials and physical facilities**

4.4.1 **Teaching / learning materials**

Teaching and learning materials referred to materials that aid the learning process. These include: textbooks, charts, maps, exercise books and photographs. The study sought to assess the adequacy of teaching and learning materials in public primary schools.

The pupils' questionnaires and headteachers interviews showed a state of inadequacy of textbooks; 80% of pupils shared textbooks in the ratio of 1:4 thus contravening the government policy as was observed by Ezeh, et al (2008) that pupil-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 possess any textbook as shown on table 4.1 below.

Table 4.1 Text book availability to pupils (%)

School	Entries (n)	% Without any text books	% with at least one text book
A	69	29%	71%
B	67	13.40%	86.60%
C	78	10.30%	89.70%
D	77	9.10%	90.90%
E	81	14.80%	85.20%
Mean	**74.4**	**15.40%**	**84.60%**

Source: Pupils' questionnaire

According to the findings in table 4.1 above, 84% of the pupils possessed at least one textbook. However, school D though included in the average mean had the highest percentage (90.9%) of pupils with at least one textbook, while school A had the least with 71% possessing at least one textbook. Out of the total pupil sample, 15.4% of the pupils did not have any textbook; a case that cannot be under looked. This is a clear indication that 15.4% of the pupils sampled were not able to do private study at home due to lack of textbooks. This affects academic achievement as was observed by Michaelowa (2001) and Olembo, J.A and Cameron, J (1986). However, all teachers had teaching guides.

The study further indicated the existence of a serious problem as far as pupils' exercise books were concerned. Table 4.2 below shows the number of pupils who had bought / not bought exercise books.

Table 4.2 Pupils (%) who bought exercise books

School	Entries (n)	% pupils who bought Exercise books	% pupils who bought No Exercise books
A	69	100%	0%
B	67	70.10%	29.90%
C	78	80.80%	19.20%
D	77	83.10%	18.90%
E	81	80.20%	19.80%
Mean	**74.4**	**82.40%**	**17.60%**

Source: Pupils' questionnaire

The findings in table 4.2 above clearly indicate that at least 82.4% of pupils in all the sampled schools bought exercise books. School A had a more serious situation since 100% (all) of the sampled pupils bought exercise books. All (100%) parents gave the same sentiments indicating that they bought exercise books right from class one whereby each pupil had to buy 12 books before admission. According to the study, it was only 17.6% of the pupils on average who had not bought exercise books in the previous term. This created some interest of finding out where such pupils noted down teachers' instruction.

Additionally, the researcher observed that charts, diagrams, maps and pictures were very few in classes. This was a clear indication that learning was inadequate.

4.4.2 **Physical facilities**

Physical facilities referred to school structures and equipment that provide a good learning environment. The study sought to assess the adequacy of facilities such as desks, classrooms, toilets, libraries play grounds and water points.

The findings indicated that 20% (2) of the sampled schools had a pupil desk ratio of 1:2; the remaining 80% (4) of the schools had a ratio of between 1:3 and 1:4. Reacting to this situation, 80% of the headteachers cited that the situation was caused by the high teacher-pupil ratios and inadequate classrooms. The researcher on the other hand observed that, 80% (4) 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 already in use. The researcher further observed that it was only 20% (1) of the sampled schools that was complete with window panes, doors, concrete floors and block walls. However, all schools as observed by the researcher were not presentable; they had old paints and roofs with old iron sheets.

It emerged from the senior teachers' interviews that 100% of the sampled schools did not have a library. According to the senior teachers, books were stored in cartons or shelves, either in the deputy teachers' or senior teachers' office, or in a book store. 80% (4) of the sampled schools had a play ground though they were poorly maintained and dusty; only 20% (1) did not have a play ground due to its poor landscape.

All schools had water points. However, only 40% (2) of the sampled schools had water available once or twice a week; the water was however unsafe for drinking since it was never treated. Pupils thus carried water from their homes. The remaining 60% (3) of the schools did not have water throughout the year. All the sampled parents gave a similar report and indicated that they had been accustomed to having their children carry water to school throughout the year.

The study also sought to assess the state of pupil-toilet ratios. The information in tables 4.3 and 4.4 below was achieved after calculations were done in every school based on the number of boys and girls toilets; the minimum number of toilets in public primary schools is 4 for the first 30 pupils. Thereafter, a ratio of 25:1 and 30:1 should apply for girls and boys respectively.

Table 4.3 Boy - toilet ratio per school

School	No. of boys	No. of toilets	No. of boys per toilet
A	800	16	64
B	560	10	66
C	500	12	58

D	364	20	21
E	478	16	37
Mean ratio	**540**	**15**	**46**

From the findings in table 4.3 above, all the schools recorded a high boy- toilet ratio than the expected ratio of 30:1. It is clear that 80% of the schools did not meet the government requirement; only 20% (school D) had attained a boy-toilet ratio of 21:1 which is good in relation to the expected ratio. On average all the schools had a boy-toilet ratio of 46:1 meaning there was need for construction of more toilets.

Table 4.4 Girl - toilet ratio per school

School	No. of girls	No. of toilets	No. of girls per toilet
A	821	18	56
B	532	10	83
C	528	12	62
D	371	16	28
E	442	16	34
Mean ratio	**539**	14	**46**

Source: Headteachers' and Senior teachers' questionnaires

It is clear from the findings in table 4.4 above that all schools recorded a higher girl-toilet ratio. The expected girl-toilet ratio is 25:1 according to the government requirement. 60% of the sampled schools had doubled the

expected girl-toilet ratio; a case which is alarming given that girls require more privacy especially during teenage. Generally, it emerged from the respondents (pupils) that there were no separate toilets for lower primary and upper primary. This may result to truancy among adolescent girls.

4.5 **Disbursement of funds**

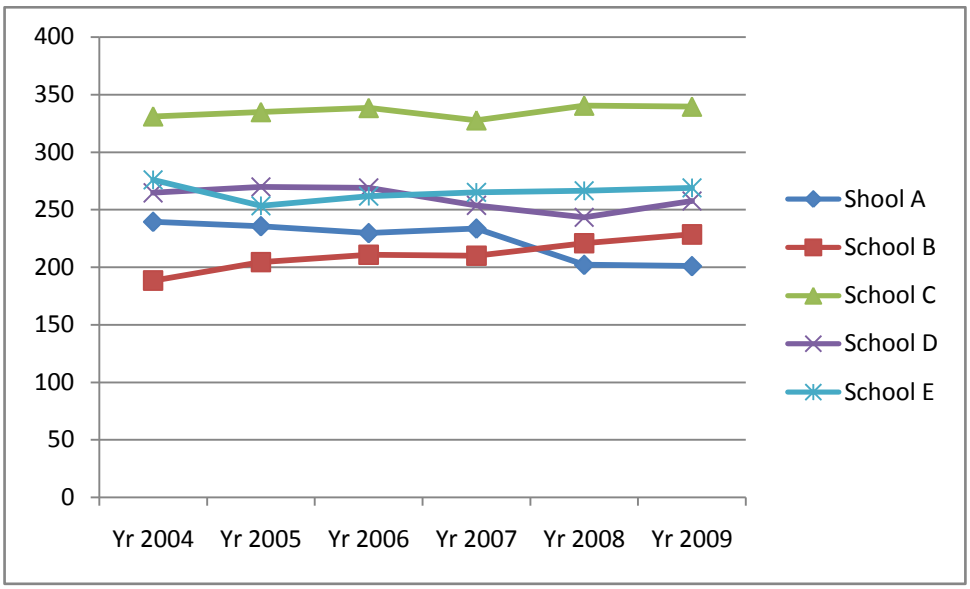
Adequacy and availability of funds is a crucial element for any system to achieve her objectives. The study sought to assess the adequacy and availability of FPE funds. All (100%) headteachers indicated that FPE funds were inadequate, besides their late disbursement. They stated that the Ksh. 1,020/= allocation per pupil per year was not enough for tuition let alone other requirements like maintenance, employment of subordinate staff and renovations. According to the headteachers, the additional funds from Constituency Development Fund (CDF) and Local Authority Trust Fund (LATF), though helpful were not guaranteed. Additionally, the headteachers stated that, the late disbursement of funds was a major challenge in the learning process. According to them inadequacy and unavailability of funds led to stalled buildings and conflicts with suppliers; a state which forced the headteachers to stop any procurements of important learning materials like books. These findings concurred with the sentiments in Daily Nation, March 2009 which quoted the Kenya National Association of Parents (KNAP) Secretary General stating that suppliers had stopped supplies to public primary schools.

On the other hand, headteachers expressed concern over parents laxity since the inception of FPE; parents were no longer willing to support any project in school. 70% (7) of the interviewed parents on their part stated that headteachers were given enough funds by the government to run schools. As such only 30% (3) of the parents saw the need to chip in as far as their children's' education was concerned.

4.6 **KCPE performance trend**

Quality education has always been measured against the KCPE performance trend in schools. KCPE results determine those pupils who proceed to the next level of education. Headteachers and all stakeholders in schools aspire to produce the best KCPE mean scores in their endeavour to win favour with the government and the society. The study sought to answer the question: what is the performance trend in KCPE between year 2004 to year 2009? 20% of headteachers said their performance was good while the rest (80%) had a below average performance. The KCPE results analysis for year 2004-2009 were as shown in figure 4.7 below.

Figure 4.7 KCPE mean score per school (2004 - 2009)



Source: Headteachers' questionnaire

From the above figure, schools E and C had a mean score of above average. School D had scored slightly above and slightly below average, whereas schools B and A maintained a below average mean score through the years. The KCPE trend in individual schools was not well defined in that, in school C (the best school) for instance, there was a drop from a mean score of 338.25 in 2006 to 327.47 in 2007; similarly there was a drop from 340.28 in 2008 to 339.42 in 2009.

On average, all the schools portrayed an average mean score with the highest being 274.4 marks in 2008 and the lowest being 259.0 marks in 2009 out of 500 marks. However, the general KCPE performance trend in the sampled schools was inconsistent and wanting, being characterized by a zigzag trend.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 **Introduction**

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

5.1 **Summary**

From the results of the study, there is evidence that:

The government had not stipulated a policy to act as a guideline for admission of pupils. Headteachers were not clear on the number of years a child ought to

have taken in nursery school, as was indicated by the interview. This was clearly indicated in the pupil questionnaire and figure 4.1 on page 40 where on average 28.38% took 1 year, 40.42% 2 years and 30.94% took 3 years.

Additionally, the admission age in class one was unclear with 40% of headteachers citing a requirement of 6 years and 60% of them citing 5 years as a requirement. It was clear that pupils were interviewed when joining class one. The results of the study indicated that only 3.92% of the respondents (pupils) had not been interviewed. Lastly, it emerged that there were both underage and overage pupils in the FPE system; underage on average were 1.74% while overage were 26.28%. These categories of pupils had challenges in the teaching-learning process as was observed by UNESCO (2005).

Teachers in the sampled schools had large classes as observed by Said, L et al in 2007 whereby 74.1% of them had teacher-pupil ratios of between 1:41 and 1:100. Additionally, each school had pupils with special needs with at least each sampled school having 4% of special needs pupils on average. However, 44.4% of the teachers lacked knowledge on how to handle special needs pupils.

Concerning pupil assessment, it was found that all schools gave 3 tests in a term though not all pupils sat the tests. Assignments were also given. However, 60% of sampled pupils had assignments marked by desk mates as was observed by UNESCO (2005). According to parents, homework was given to only those who paid remedial fees / levies.

Teaching and learning materials were inadequate as had been observed by Ezeh, A et al (2008). Textbooks were inadequate with majority of pupils sharing books in the ratio of 1:3 or 1:4. Charts, maps and photographs were limited. However, class teachers stated that teachers' guides were available. Pupils on the other hand had to buy exercise books.

Physical facilities like classrooms, toilets, water and desks were inadequate. Classes were congested; 80% of pupils sat in 3^{s} and 4^{s} with only 20% of the sampled pupils sitting in 2^{s}. All schools did not have libraries. Books were kept in cartons. All pupils carried water from their homes since water was not available always. All schools had pupil-toilet ratios which were above the expectation.

Funds were inadequate and unavailable thus many projects were either incomplete or stalled. Lastly, performance in KCPE was inconsistent and generally on average.

5.2 **Conclusions**

The findings of this research have shown that:

There was no admission policy in operation right from class one to class eight. For instance, there were no guidelines on the number of years a child ought to have taken in nursery school as well as the required age of a child joining class one. The results therefore showed varying information in regard to admission policy with some pupils taking only one year in nursery school while others

took two or three years. This could have been the major reason behind poor KCPE performance due to poor academic foundations.

Teachers in public primary schools handled large classes. Some had high teacher-pupil ratios of up to 1:90. According to the study, schools had inadequate teaching-learning materials and physical facilities (textbooks, charts, toilets and water points).

The government on the other side had not provided adequate and in time funds to help in the procurement of all the requirements for Quality Education; this has made the procurement of the necessary instructional materials and other requirements difficult.

The findings also showed that pupils were not assessed equally in all public primary schools. Homework was given to only those pupils who paid remedial fees. This has affected pupils negatively especially those from poor families since they could not afford the levies; a case which resulted to unpleasant KCPE performance. Lastly, it was clear from the findings that public primary schools in the study locale did not perform as was expected in KCPE between 2004 – 2009 as shown in figure 4.7 .

5.3 Recommendations

Specific recommendations have been made on the basis of the findings that:

(i) Inclusion of early childhood education (ECE) into basic education along side recruitment of nursery school teachers by the government. This will

ensure that all parents are able to have their children access basic education (ECE) and therefore give equal educational foundation to all children since parents will not avoid the current fees levied by private practitioners.

(ii) Employment of more teachers to match the increasing number of pupils in public primary schools in order to improve on the teacher-pupil ratios for better academic achievement.

(iii) Provision of more FPE funds to ensure better and adequate physical facilities as well as learning materials in an attempt to raise the quality of education.

5.4 **Suggestions for further research**

The researcher recommends that:

(i) In order to improve the quality of education in public primary schools, this research should be done in other parts of the 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) A research should be carried out to assess the difference between children who attend nursery school for a longer time and those who take a shorter time as far as academic achievement in life is concerned.

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

(iv) There is need for a research to be conducted to show the relationship and differences between single sex and mixed primary schools in relation to academic achievement.

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LIST OF APPENDICES

APPENDIX I
PUPILS QUESTIONNAIRE ON EDUCATION QUALITY

The researcher is a post graduate student at Kenyatta University. This questionnaire consists of 11 questions. Please read the instructions for each question carefully before you give the answers required. You are assured that the information you will give will be treated confidentially. Please DON'T

identify yourself by writing your name or your school anywhere in the questionnaire.

SECTION A:

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

1. Gender: Male …….. Female……..
   (tick one)
2. Class:……. (be general e.g. Class 2 but not 2A, etc)
3. (i) Do you have both parents? Yes …… No…… (tick one)
   (ii) If no, specify……
4. Who takes care of your schooling needs?.....

SECTION B:

This section contains questions relating to admission policy, mode and frequency of pupil assessment and the adequacy of teaching-learning materials and physical facilities respectively.

1. **ADMISSION POLICY**
   (a) How old are you? ……..……
   (b) Did you attend nursery school? Yes …… No…….. (tick one)
   (c) How many years did you take in nursery school?.....

   (d) Did you sit for any interview before joining class one?
   Yes……..... No…….. (tick one)
   (e) Have your ever dropped out of school? Yes……. No…… (tick one)
   If yes, in what class and when did you return to school? …….

2. **MODE AND FREQUENCY OF PUPIL ASSESSMENT**
   (a) Are you given homework everyday? Yes…….. No…… (tick one)
   If No, specify ……..……..

(b) Who marks your assignment(s)? (tick one)

i) Teacher …….

ii) My deskmate …….

iii) My parent / guardian ……..……

(c) Does the teacher revise homework in class? Yes …. No… (tick one)

(d) How many CAT (s) do you sit for in a term? (tick one)

One ……Two…… Three …….. None …….

3. **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 a __ if none)

i) Mathematics …….. iv) Science ……

ii) English …… v) Social studies ……..…

iii) Kiswahili …….. vi) C.R.E. ….……

b) Has your parent / guardian bought you any textbooks?

Yes ……. No……. (tick one)

If yes, how many?.....

In what subjects (s) ……..

c) Do you buy any exercise books for class work? Yes… No… (tick one)

If yes, how many?.....

(ii) **Adequacy of physical facilities**

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

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

If yes, how often do you get it? (tick one)

i) Everyday …….

ii) Twice a week ……..

iii) Once a week ……..

c) Do you have separate toilets for boys and girls? Yes … No... (tick one)

Thank you and God bless you.

APPENDIX 2

CLASS TEACHERS' QUESTIONNAIRE ON EDUCATION QUALITY

The researcher is a post graduate student at Kenyatta University. Please read the instructions for each question carefully before you give the answers required. You are required to give the information sought accurately and freely. The information you will give will be treated confidentially and will be used for research purposes ONLY. Thank you in advance for accepting to volunteer to give the information being sought from you.

SECTION A

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

1. Gender: Male…….. Female ……. (tick one)
2. Class teacher standard……. (be general e.g. class 2 but not 2A, etc)
3. What is your academic / professional qualification?
   Degree …….
   Diploma …….
   P1 ……..
   KC.S.E. ……..
   Others(specify)……
4. For how long have you been teaching? ……..
5. Have you gone for any in-service course? Yes…… No…… (tick one)

SECTION B:

This section contains questions relating to Admission policy, the teacher-pupil ratios, mode and frequency of pupil assessment, and the adequacy of teaching –learning materials and physical facilities. Please give the information sought.

1. **ADMISSION POLICY**
   (a) Are pupils in your class within the same age bracket?
   Yes …… No…….. (tick one)

If no, specify the ages and state the challenges that you experience from each category.

i) Over-age, how many? …….
Challenges ……..…….
……

ii) Under-age, how many? ……..…….
Challenges …….
……

(b) Do you have transfer cases in your class? Yes…… No……. (tick one)
If yes, are they within the required age bracket? Yes… No.. (tick one)

(c) Do you experience any challenges with the over-age transfer cases? Specify.
……
……

2. **TEACHER-PUPIL RATIO**

(a) How many pupils do you have in your class? ……

(b) Do you have any pupils with special needs? (e.g gifted and talented, slow learners, etc) in your class? Yes…… No……. (tick one)

(c) If yes, given the number of pupils in your class, are you able to meet the needs of such pupils? Yes…… No……. (tick one)

(d) If no, what interventions would you recommend to enable you be effective in addressing such needs?

i) ……
ii) ……
iii) ……

3. **MODE AND FREQUENCY OF PUPIL ASSESSMENT**

(a) Given the number of pupils in your class, how often are you able to give homework and assignments in your subject area? (tick one)
Everyday ……. Twice per week ……

Thrice a week …… Once a week ……

Rarely ……

(b) Are you able to mark each pupil's homework and assignments given the number of pupils in your class? Yes…… No……. (tick one)

(c) How many CAT(s) do you give to pupils before the end term exam?

One …….. Two…… None……

(d) How can the government assist you become more effective?

……..……

…….

4. **ADEQUACCY OF TEACHING-LEARNING MATERIALS AND PHYSICAL FACILITIES**

i) **Teaching - learning materials**

(a) What is the textbook-pupil ratio in your class per subject? (tick one)

Mathematics:	1:2 (…..)	1:3 (…..)	1:4 (…..)	(Tick one)
English:	1:2 (…..)	1:3 (…..)	1:4 (…..)	(Tick one)
Kiswahili:	1:2 (…..)	1:3 (…..)	1:4 (…..)	(Tick one)
Science:	1:2 (…..)	1:3 (…..)	1:4 (…..)	(Tick one)
Social studies:	1:2 (…..)	1:3 (…..)	1:4 (…..)	(Tick one)
C.R.E:	1:2 (…..)	1:3 (…..)	1:4 (…..)	(Tick one)

(b) Do you have teachers' guides in each subject? Yes… No…. (tick one)

(c) Are pupils allowed to carry textbooks at home? Yes… No…. (tick one)

If no, why? ……..... ……

(d) Do you have any learning aids (maps, charts, etc) in your class?

Yes…… No……. (tick one)

ii) **Physical facilities**

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

2 -3 ( ) 3 – 4 ( ) 4 – 5 ( ) Others (specify) ……..……

(b) Are you able to move around the classroom with ease as you attend to your pupils?

Yes…… No……. (tick one)

(c) If your answer in (ii)(b) is No, what interventions do you think are necessary?

……

……

Thank you and God bless you.

APPENDIX 3

HEADTEACHERS' INTERVIEW GUIDE ON QUALITY EDUCATION

The interviewer is a post graduate student at Kenyatta University. You are requested to listen carefully and give relevant answers to the questions. The information you will give will not be disclosed to anybody but will be used for research purposes only. Thank you for accepting to offer the information.

SECTION A:

This section seeks to gather general information. Please feel free to give the relevant information sought for.

1. Gender: Male …… Female:…… (tick one)
2. What is your academic / professional qualification?
   Masters 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 Admission policy, teacher-pupil ratios, mode and frequency of pupils assessment, adequacy of teaching-learning materials and physical facilities, the funding of FPE and the performance trend in KCPE since 2003.

1. **ADMISSION POLICY**
   (a) What is the government requirement for admission of pupils in:

Grade 1?

i) ……

ii) ……

iii) ……

Other grades?

i) ……

ii) ……

iii) ……

(b) Do you have pupils who had dropped from school (your school and transfer cases) and later joined your school? Yes…. No…… (tick one)

If yes, what challenges do you experience from them?

……

……

2. **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 enrolment in your school? ……..

(d) With regard to curriculum based establishment (CBE), do you have adequate teachers in your school? Yes …….. No …… (tick one)

If No, what is the short fall? ……

3. **MODE AND FREQUENCY OF PUPIL ASSESSMENT.**

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

Grade 1 - 3 …….

Grade 4 - 7 …….

Grade 8 …….

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

(c) Are the CAT(s) and exams results availed to pupils and parents for follow-up?

Yes …… No ……. (tick one)

If No, comment ……..

……

4. **ADEQUACY OF TEACHING-LEARNING MATERIALS AND PHYSICAL FACILITIES**

i) **Teaching – learning materials**

(a) How adequate are textbooks and teaching aids?

Inadequate ( ) Adequate ( ) More than adequate ( )

(b) Do you have a library? Yes …… No …….. (tick one)

If No, where do you store your books? ……...

(c) How often do you stock your library?

Once a year ( ) Once in two years ( ) Rarely ( )

(d) What is the most common complain by teachers as far as the teaching-learning process requirements are concerned?

i) ……

ii) ……

iii) ……

ii) **Physical facilities**

(a) What is the average pupil-desk ratio per grade?

Grade 1 – 3

1:2 ( ) 1:3 ( ) 1:4 ( ) (tick one)

Grade 4 – 6

1:2 ( ) 1:3 ( ) 1:4 ( ) (tick one)

Grade 7 – 8

1:2 ( ) 1:3 ( ) 1:4 ( ) (tick one)

(b) How many toilets do you have for:

Boys ……

Girls ……

(c) Do you have a water point in your school? Yes ….. No … (tick one)

If yes, how often is water available in school? (tick one)

Everyday: …… Once a week ……..

Thrice a week …….. Rarely ……..

(d) Given the population in your school, do you have enough classrooms and toilets?

Yes…… No…….. (tick one)

5. **DISBURSEMENT OF FUNDS**

(a) The government is not prompt in disbursing funds for the implementation of FPE.

(tick where appropriate)

(i) Strongly disagree (…….)

(ii) I disagree (…….)

(iii) I agree (…….)

(iv)I strongly agree (……)

(v) Undecided (……)

(b) If you agree with the statement in 5(a) above, how has this problem affected teaching and learning in your school? (e.g procurement of materials, establishment and management of infrastructure, etc)

i) ……

ii) ……

iii) ……

6. **PERFORMANCE TREND IN KCPE BETWEEN 2004 - 2009**

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

Very well ( )

Satisfactory ( )

Below average ( )

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

i) ……

ii) ……

iii) ……

Thank you and God bless you.

APPENDIX 4

SENIOR TEACHERS' INTERVIEW GUIDE ON QUALITY EDUCATION

The interviewer is a post graduate student in Kenyatta University. The interview is designed to solicit information on quality education. You are kindly requested to give the required information appropriately. The information you will give will be treated confidentially and will be used for academic purpose only.

SECTION A:

This section seeks to gather general information. Please feel to give the information sought for.

1. Gender: Male…… Female…….. (tick one)
2. What is your professional / academic qualification?
   Degree ……..…
   Diploma ……..
   Other (specify) ……..
3. For how long have you been teaching?
   0 -3 years ( ) 4 -7years ( ) 8 -11 years ( ) Above 11 years ( )
4. For how long have you been in this school? ……..

SECTION B:

This section seeks information to compliment the headteacher's report. It will seek information on Admission policy, mode and frequency of pupil assessment, teaching-learning materials and physical facilities and performance trend in KCPE since 2003.

1. **ADMISSION POLICY**
   (a) Do you have any pupils who had dropped from school (your school and transfer cases) and later joined your school? Yes (……..) No (……..) (Tick one)

   (b) If your answer is yes in (a) above, what challenges do you face from such pupils?
   i) ……
   ii) ……
   iii) ……

   (c) Do you have pupils in (a) above whom you can term as over-age?
   Yes (……..) No (……..) (Tick one)

If yes, what challenges as far as discipline is concerned do you face from them?

i) ……

ii) ……

iii) ……

2. **MODE AND FREQUENCY OF PUPIL ASSESSMENT**

(a) How many CAT(s) are pupils supposed to sit for officially in a term?.....

(b) Are exams set by teachers or they are bought?.....

(c) If the exams are bought, who pays for the exam and what happens to defaulters?

……

……

3. **TEACHING-LEARNING MATERIALS AND PHYSICAL FACILITIES**

i) **Teaching-learning materials**

(a) Do you have a library? Yes……. No…….. (tick one)

If No, how do you store the books?.....

……..……

(b) Comment on the adequacy of pupils' textbooks and teachers' guides. (tick one)

Inadequate ( )

Adequate ( )

More than adequate ( )

ii) **Physical materials**

(a) How many toilets do you have for:

Boys …….

Girls …….

(b) Is there a distinction between toilets for lower primary and those for upper primary in each case? (tick one)

Yes ……. No ……..

(c) If No, how do you think this may affect the teaching-learning process?

……

……

(d) Do you have adequate water points in the school?

Yes ……. No ……. (tick one)

If inadequate, how do you think it impacts on the teaching-learning process?

……

……

4. **PERFORMANCE TREND IN KCPE BETWEEN 2004 - 2009**

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

Very well ( )

Satisfactory ( )

Below average ( )

(b) If not satisfactory, what do you think should be done to investigate the situation?

i) ……

ii) ……

iii) ……

iv) ……

v) ……

Thank you and God bless you.

APPENDIX 5

PARENTS' INTERVIEW GUIDE ON QUALITY EDUCATION

The interviewer is a post graduate student in Kenyatta University. The interview is intended to seek information on quality education. The information you will give will be used for educational purposes only. Do not write your name anywhere on this paper for confidentiality purposes.

1. Are you a parent / guardian in this school?

   Yes (…….) No (……) (Tick one)

2. How many children do you have in this school?.....

   Specify their levels (class 1, 2, 3, etc)……..

3. Do you have other children in other levels of education?

   Yes (…….) No (……) (Tick one)

   If yes, tick where appropriate.

   Pre-school (……..)

   Secondary (…….)

   University (……)

   Other institutions …….

4. Do your children in primary school have school textbooks?

   Yes (…….) No (……) (Tick one)

   If No, have you bought for them any books? ……

   Specify……

5. Do your children bring homework at home for every subject?

   Yes (…….) No (……) (Tick one)

   If yes, how often? (Tick where appropriate)

   Everyday (……..…..)

   Twice a week (…….)

   Thrice a week (…….)

6. Do you assist your children in doing their homework in any way?

   Yes (…….) No (……) (Tick one)

7. How many exams do your children sit per term? (Tick one)

   One ……. Two…… Three……

8. Do your children carry drinking water to school?

   Yes (…….) No (……) (Tick one)

   If yes, how often? (Tick one) Daily (……) Sometimes (……)

   Why do you think they carry water from home?.....

   ……

9. In your own view, what measures do you think are necessary for your child/children to get good marks in KCPE?
   (i) ……
   (ii) ……
   (iii)……

Thank you and God bless you.

APPENDIX 6

OBSERVATION SCHEDULE ON SCHOOL INFRASTRUCTURE AND LEARNING MATERIALS

Location:……

Number of streams:……..……..

Learning resources and physical facilities:

a) Classrooms (Tick where necessary)

Type	**Number**
Mud	
Timber	
Stone	

b) Special rooms and amenities (Tick where necessary)

Facility	**Available**	**Good**	**Fair**	**Poor**	**Not available**
Library					
School hall					
Typewriter					
Duplicating machine					
Playing field					
Toilets – Boys					
Toilets – Girls					
Water source					

c) Inside the class (Tick where appropriate)

Walls	**Mud**		**Stone**			
Furniture						
Roofing						
Floor						
Ventilation						
Space						
Wall charts						
chalkboard						

APPENDIX 7

BUDGET

ITEM	**TOTAL COST (KSHS)**
Production of research instruments	

• Typing 20 pages of research instruments @30/= per page (20 x 30) • Photocopying research instruments @2/= per page for 612 respondents (2 x 20 x 612) • Transport and systems - Public transport to the field for 18 days @300/= per day (18 x 300) - Meals during field work @500/= per day for 18 days (18 x 500) • Data coding, computing and report preparation • Stationery • Miscellaneous	600/= 24,480/= 5,400/= 9,000/= 10,000/= 2,000/= 2,500/= 3,000/=
Grand total	**56,980/=**

APPENDIX 8

Work Plan

Time	**Activity**	**Action taken by**
April – July 2010	-Develop proposal	Researcher
August – September 2010	-Field work study -Pilot study - Production of research permit	Researcher
October – December 2010	-Data collection -Data Analysis	Researcher
January 2011	-Report writing	Researcher
February 2011	-Submit project for examination	Researcher
March 2011	-Make corrections -Submit final copy for examination	Researcher
June 2011	-Graduation	Researcher/School

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THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Mrs./Miss.....SAMSON.....

.....WANJA JANE.....

of (Address) ..KENYATTA UNIVERSITY.....

.....P.O. BOX 43844, NBI.....

has been permitted to conduct research in .....

.....Location,

.....MACHAKOS.....District,

.....EASTERN.....Province,

on the topic.AN EVALUATION OF THE.....

.....QUALITY OF FREE PRIMARY EDUCATION

IN PUBLIC PRIMARY SCHOOLS IN.....

MACHAKOS MUNICIPALITY.....

.....

for a period ending...31ST DECEMBER,20..10...

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Research Permit No.NCST/RRI/12/1/SS/839

Date of issue.20/09/2010

Fee received.SHS 1,000

Applicant's Signature

Secretary National Council for Science and Technology

CONDITIONS

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

HARAMBEE

REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT

GPK6055t3mt10/2009

(CONDITIONS— see back page)