

**IMPACT OF LEARNING RESOURCES ON PERFORMANCE IN KENYA
CERTIFICATE OF PRIMARY EDUCATION: A CASE OF NYAMIRA DISTRICT,
NYAMIRA COUNTY.**

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REG. NO. E55/20123/2010

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF**

MASTER OF EDUCATION OF

KENYATTA UNIVERSITY

DECEMBER, 2012

DECLARATION

This research 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

I dedicate this research project to my husband Daniel Nyamongo, children Fridah, Kevin, Clinton and Racheal for their moral support. I am proud to be your mum.

ACKNOWLEDGEMENTS

First and foremost I give glory to the Lord God who gave me good health, sound mind, and all I needed to complete this research work.

I most sincerely express heartfelt gratitude to my supervisors, Dr. Norbert Ogeta and Dr. T. Ogola Rugar, who despite their many responsibilities provided guidance and constructive criticism which have assisted me to shape this research work. I also acknowledge the support accorded me by other department academic staff- Dr. Onyango, Dr Mary Otieno, Dr. Riechi, Dr. Libese, Sister Itorondo and Dr Nyerere.

Special thanks go to my husband, Daniel Nyamongo, who tirelessly encouraged me to go back to school, besides working to raise funds for this course.

I also extend my appreciation to my colleague students with whose group-work's undertakings I would not have managed the rigors of postgraduate studies. Thanks to the District Education Officer of Nyamira District granting permission to carryout field work. I wish to acknowledge all the head teachers who gave permission to carry out research in their schools.

I thank you all and pray that God's richest blessings be with you always.

ABSTRACT

Primary Education is the foundation for literacy and the acquisition of basic skills, social attitudes and values that make life important in society. Although some studies have shown that facilities and teaching/learning resources and teacher ratios are contributing factors for educational performances in primary schools, the impact of learning resources on performance remains unclear. The purpose of this study was therefore, to investigate the influence of learning resources on performance in Kenya Certificate of Primary Education in public schools in Nyamira County using Production Function Theory. Specifically, the study aimed to establish impact of teacher-pupil ratio, to determine enrolment-classrooms ratio in Nyamira District. This study is expected to assist policy makers to come up with new policies to improve performance in Kenya Certificate of Primary Education. The study employed a descriptive survey design from randomly selected public primary schools. This design was appropriate in gathering facts, opinions, knowledge and attitude of people. The population comprised all 96 public primary schools in Nyamira District. A sample of 29 schools was used, which was 30 percent of the target population. The questionnaires, observation and checklist were used as research instruments. The questionnaires were delivered to the respondents of the participating schools by the researcher herself. Piloting was conducted in three schools that were not part of the sample to avoid the schools influencing the end product of study. However, the piloting of the three schools determined the reliability and validity of the instruments. Quantitative data collected were tabulated and analyzed using descriptive statistics such as mean, percentages and the results were presented in the form of graphs and tables. Qualitative data was analyzed by organizing data into the major themes according to the research questions. Inferences, recommendations and conclusions were drawn. Study findings indicated that in most of the participating schools, the classes were overcrowded with insufficient learning resources hampering quality teaching leading to a continued general negative trend in performance since 2004. It is evident that school performance is therefore influenced by the learning resources, such as teacher-pupil ratio, infrastructures, and school enrolment classroom ratio. For this reasons the causes of poor performance should be traced and proper channels for improving performance to be accomplished. The study recommends that the active involvement of teachers, parents and other stakeholders enhances the effectiveness of the in-school team. The support of stakeholders has positive and pervasive effects on the child's success in school.

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ABBREVIATIONS AND ACRONYMS

EFA	Education for All
ERS	Economic Recovery Strategy
FPE	Free Primary Education
KCPE	Kenya Certificate of Primary Education
MDGS	Millennium Development Goals
MoES&T	Ministry of Education Science and Technology
PTR	Pupil Teacher Ratio
UNESCO	United Nations Educational Scientific and Cultural Organization
UPE	Universal Primary Education
TSC	Teachers service Commission
MoE	Ministry of Education
NER	Net Enrolment Ratio
CAR	Central African Republic

CHAPTER ONE

1.0. INTRODUCTION

This chapter consists of sections as follows; background to the study, statement of the problem, purpose of the study, objectives, research questions, significance of the study, limitations and delimitations of the study, assumptions, theoretical framework, conceptual framework and definition of key terms.

1.1 Background to the study

Before independence, education was stratified on racial lines in each of the three countries of East Africa. Asians, Europeans, and sometimes Arabs, each had their own system of education as the principle underlying colonial education was to distinguish between the education of the ruled and that of their rulers. The education provided to Africans was meant to work as local clerk and a junior official to facilitate and reinforce the functioning of the colonial administration and to teach his kid and kin. The majority of the Africans had to serve as manual labourers to boost the colonial economy. The system of education was meant to make Africans to be submissive and subservient, to feel inferior and to accept the superiority of the arrival of the new masters. African's education consisted mainly of basic skills in handicrafts, agriculture, carpentry, tailoring, masonry, shoemaking, road construction and simple hygiene; all of which were meant to reduce Africans into pawns of colonialism as well as to restrict them to their reserves (Bogonko, 1992a). Due to restrictions to acquire the education from the colonialism, a small number of Africans children went to school and the rate of attrition was high, while

European children were enjoying the universal education provided to them. Africans in their struggle to attain independence, they had promised the wananchi free and universal primary education once the political goal was achieved. These African aspirations originated from the recommendations of United Nations Educational Scientific and Cultural Organization's (UNESCO) Addis Ababa Conference of 1961 which set 1980 as the year when all African countries were to attain Universal Primary Education. Since attainment of their independence from colonial rule, several African countries have introduced the Free Primary Education (FPE) policy in line with both Education for All (EFA) and Millennium Development Goals (MDGs) international agendas. Efforts have been made to expand access to education ever in the early part of the 1960s, (Bogonko, 1992a). Education is seen as a priority for the poor and as a means of combating ignorance and giving the poor a voice. Low education levels negate any attempts and ability to make wise decisions about education in terms of access to education, child bearing and rearing, therefore affecting not only the present but also the future generations (Nafula et al paper number 49, 2005). Primary education is the foundation for literacy and the acquisition of basic skills, social attitudes and values that make life important in the present society (Bogonko, 1992b). Its goal is to attain Universal Primary Education (UPE) and ultimately Education for All (EFA) and Millennium Development Goals (MDGs) by 2015. This is in line with the Government of Kenya's central objective is providing educational opportunities to all Kenyan children per the country's plan for Economic Recovery Strategy (ERS) and Poverty Reduction Strategy Paper (PRSP), which states that Government's highest priority in the medium and long term will be to

ensure affordable and equitable access to education through several strategies including “collaborating with private sector, NGO’s and development partners to provide additional educational facilities”. This culminated in the introduction of Free Primary Education (FPE) also further overstretched the demands for primary school subsector. In Kenya, the government realized that education was the key to national development and therefore appointed various commissions to look into entire education system, which have changed the 7-4-2-3 system to the present new 8-4-4 system with free primary education, (MOES&T, 2005). Education, it is said, is the best gift a parent/guardian and a nation can give a child. But owing to certain limitations, not every child gets the education they deserve. These led the nations of the world to come up with the EFA initiative, launched in Jomtien, Thailand, in 1990 to bring the benefits of education to every citizen in every society. Pupil/teacher ratios in many countries exceed 40:1 and many primary teachers lack adequate qualifications (Ongwae, 2010). The Government introduced the current FPE in January 2003, which resulted in an increased enrolment of 18 percent children, from 5.9 million in 2002 to 7.2 million in formal public schools alone, (Republic of Kenya, 2005).The present enrolment is 9.4 million in primary and 1.7 million in secondary schools due to the Free Primary and Free Day Secondary programmes. The Teachers Services Commission and the Kenya National Union of Teachers say the country has a shortage of 75,000 teachers in public schools (Ngirachu, 2011). The new policy curriculum for primary school has experienced serious shortages or lack of essential resources and facilities with cost implication on the many teachers, classroom constructions, furniture or lack of essential resources including trained technical and

vocational subjects teachers and local craftsmen. Further, the initial projections on space and facilities requirements rarely took into consideration the overwhelming enrolment i.e. 2-3 times more than the initial enrolment, as a result of implementing the 8-4-4 policy especially shortage of space in school compounds for recreation, teaching agriculture, crafts and other technical and vocational subjects, (Eisemon, 1988; Kerre, 1997; Simiyu, 2001). Amutabi (2003) noted that the implementation of this system was done without adequate preparations. It should have waited until all the necessary infrastructures were set up such as sufficient classrooms and workshops for the extra class in standard VIII prior to implementing the new policy (Amutabi, 2003). Furthermore, the Kenya Shilling 1,020 allocated for each child in primary school under Free Education Program that was passed by the Government in 2003 is far much less what it can purchase at present time, (Muindi, 3rd December, 2011).

1.2. Statement of the problem

Education is an important variable in any country as a vehicle of social change. That is why the Kenya Government policy on primary education is to attain Universal Primary Education (UPE) and Education for All (EFA) by year 2015. However, inability to perform well in KCPE is not only for parents concern but also a nation-wide problem. The selection of form ones is done every year and comments of lamentation on the newspapers that a big percentage of those who sit for KCPE hardly get a chance in form one (Rukwaru, 2009).

Following the 2010 KCPE results, the Minister for Education, in an article by Daily Nation, accepted that whereas the enrolment into primary schools has been on the

increase, many public schools have been recording declining performance in KCPE results, (Onyango, 29th December, 2010). He went on to say that there has been a continuous drop in the highest marks attained by the best candidate- 2003 we had highest attaining 482, 461 in 2005, 456 in 2007, 460 in 2008, 438 in 2009 and the recent 434 in 2010! This leaves Kenyan people and policy makers wondering what the cause of this decline is and how long the trend is to continue!

The Nyamira District statistics further highlights the continuing decline experienced nationally. The best overall student in 2004 had 374; 442 in 2005, 441 in 2006, 437 in 2007, 423 in 2008, 421 in 2009 and in the 2010 were 400! Worse still is the fact that the 2011 KCPE results showed that of all public primary schools in Kenya, Nyakemincha that actually is within Nyamira County and ironic for 'Tail', was last nationally! Hence, the study results in Nyamira County can be used to assist in explaining gaps leading to the continuing decline in KCPE results in the country, (Republic of Kenya, MOEST 2011).

1.3. Purpose of the Study

The purpose of this study was to investigate effects of learning resources on KCPE performance in public primary schools in Nyamira District, Nyamira County.

1.4. Objectives of the Study

- i. To determine the teacher-pupil ratio in primary schools in Nyamira District, Nyamira County

- ii. To establish the school enrolment-classrooms ratio in primary schools in Nyamira District, Nyamira County.
- iii. To establish the trend of Kenya Certificate of Primary Education in primary schools in Nyamira District, Nyamira County.
- iv. To determine the impact of the learning resources on performance in Kenya Certificate of Education in Nyamira District, Nyamira County.

1.5. Research Questions

- i. What is the teacher-pupil ratio in primary schools in Nyamira District, Nyamira County?
- ii. What is the school enrolment-classrooms ratio in primary schools in Nyamira District, Nyamira County?
- iii. How is the existing learning resources affecting poor performance in KCPE results in Nyamira District, Nyamira County?
- iv. What is the institutional response in staffing capacity to cater for needs of the pupils in Nyamira District, Nyamira County?

1.6. Significance of the study

The study is important for the government to establish effect of availability of learning resources in the performance on KCPE results in Nyamira district and institute appropriate action in attaining Vision 2030's Education for All strategy. The study will be of significance to the head teachers, teachers, and the school committees as well as the

parents' associations, in public primary schools, in the sense that it will highlight the effects of various types of resources on the performance of schools they manage. The study will be useful to the parents, as it will enlighten them on their role towards improving the performance of their children in the national examinations. Further the study will provide the benefit to the Teachers Service Commission (TSC) and the Ministry of Education (MOE) in obtaining educational goals aimed at making the learner to advance. The findings will assist the researchers to continue to further their knowledge as regards to examinations in the entire country, Kenya. It will assist the policy makers to come with new policy to improve the Kenya certificate of primary education.

1.7. Limitations of the study

Limitations are anticipated constraints that hinder the effective data collection process of any study and which also reduce the scope, sample and the extent to which generalizations are made from the findings (Mugenda and Mugenda, 1999).

This study was limited itself to Nyamira district which belongs to Nyamira county. The district has two divisions that were studied. The researcher is a self sponsored student; therefore financial implications can not be avoided. The number of schools was few whose findings can represent whole population.

1.8. Delimitations

Delimitation is a process of reducing the study population and area of study to a size that will be manageable among other variables (Mugenda and Mugenda, 1999).

The study sought to confine itself to two divisions. There are many factors affecting education but this study only focused on performance in KCPE among the learners in public schools. The study used research questionnaires, observation schedule, and other documents found in schools were studied.

1.9. Assumptions of the study

The researcher assumed that all the respondents would be honest to provide reliable and accurate information that would be useful. The respondents were not hindered by the language of communication used in questionnaires.

1.10. Theoretical Framework

Kombo and Tromp (2006) defined a theoretical framework as a collection of interrelated ideas based on theories. This study used the production function theory, for education that is advanced by Psacharopoulos and Woodhall (1985) that is described as any process where certain elements are combined, through a certain technology to produce outputs (Psacharopoulos and Woodhall, 1985). The combined elements are referred to inputs. However, in education physical and human resources are regarded as inputs to a production process while the outputs are the results, which include the behavioral and academic performance of the pupils. As regards to this study the inputs includes the teachers, pupils and the physical resources, however, the output includes performance in examinations. Education resources, both human and physical if well utilized will produce high achievement in performance of examinations. Further in the findings of the

production function theory by Psacharopoulos and Woodhall (1985) shows the following ways:

$$A = f(B, C, D, E, H, T, U)$$

Where initials stands for,

A = Achievements of the pupils in examinations

F = A given function

E = Equipment and other facilities such as classrooms, workshops, libraries, and
Playgrounds

H = Head teacher's skills, and abilities in administrative duties as well as their academic and professional qualifications, as well as the pupil-teacher ratios

U = any other input which affect pupils' performance or achievement, such as pupils' intellectual ability and pupils' background.

The theory was important in this study since it provided a basis that shows how the inputs affect the outputs. It also provided a theoretical means of how to link up the independent variables and the dependent variables of the study.

1.11. Conceptual Framework

Orodho (2009), defines a conceptual framework as a model which diagrammatically shows the relationship between variables in the study. The conceptual framework showed the variables that influence performance in public primary schools, in KCPE examinations. The independent variables were those that the researcher assessed, and they included, Teacher-pupil ratio, school enrolment classroom ratio and facilities, while

the dependent variables were those variables, which the study used to measure the impact of the independent variables, and these included the national examinations. *However, if* the independent variables are varied, then they will affect the dependent variables. The conceptual framework below indicates that if the factors that affect performance are improved, then the performance will be better. This implies that if there are adequate resources, qualified teachers, and low teacher/pupil ratios, then performance in KCPE may improve. On the other hand, if the physical facilities and teaching/learning resources are inadequate, unqualified teachers, high teacher/pupil ratios, then performance in KCPE may end up being poor.

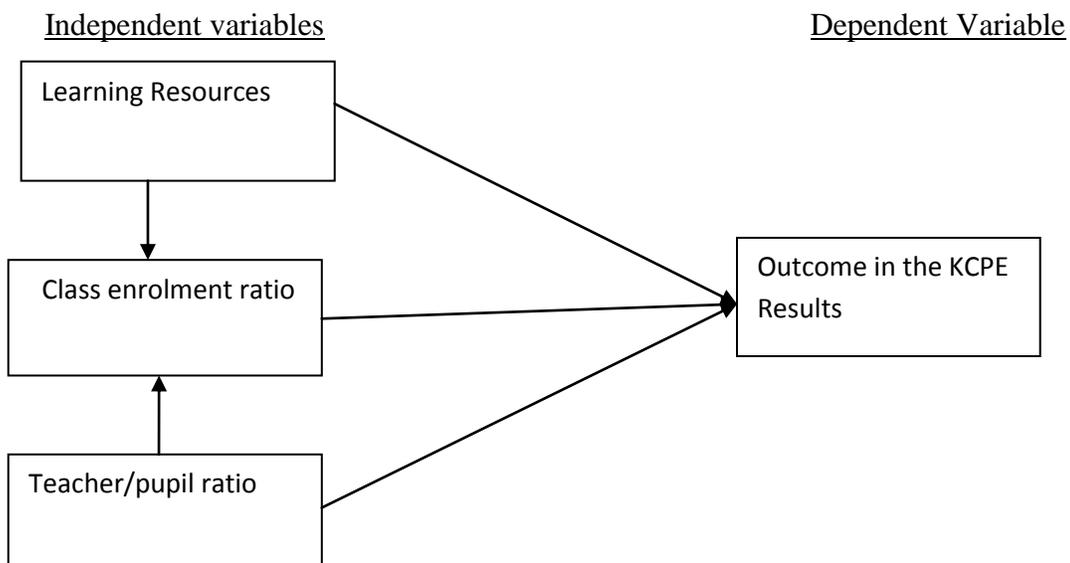


Figure 1: Conceptual Framework.

1.12. Operational definition of terms

The following terms would be used in the study and should be understood as defined below:

Class-size- Is the average number of students per class, calculated by dividing the number of students enrolled by the number of classes. In order to ensure comparability between countries, special needs programmes have been excluded.

Teacher-Pupil ratio- This refers to the number of learners enrolled in a primary school divided by the number of primary school teachers (regardless of their teaching assignment).

Performance- Can be expressed as the output of the school, which in turn is measured in terms of the average achievement of the pupils at the end of a period of formal school.

Learning Resources- Anything that one can use to support the learning process or any Resource With educational value. Further it refers to teachers, books, infrastructures and Information Communication Technology (ICT).

Teacher- Is a person who provides education for pupils (children) and students (adults).

Pupil- A person who is usually young, learning under the close supervision of a teacher, at school or a private tutor.

Learning- Is the act, process or experience of gaining knowledge or skill that that has permanent change in behavior.

Universal- Means all children of target population have access to a school and secondly, participate.

Primary Education- denotes and implies that this is the first level of education leading on to higher levels of education.

Education- The act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgment, and generally of preparing oneself or others intellectually for mature life.

CHAPTER TWO

2.0. LITERATURE REVIEW

2.1. Introduction

This chapter was reviewed literature according to related to performance in Kenya Certificate of Primary Education in Kenya and in Nyamira district. The researcher sought to look for the causes of poor performance in public schools under study.

This chapter is categorized into seven sections:- Teacher-Pupil Ratio, Teacher staffing Levels, School Enrolment-Classrooms ratio, Infrastructure, Primary school performance, impact of Free Primary Education on performance in Kenya Certificate of Primary Education and summary of literature review.

2.2. Teacher-Pupil Ratio

Education system in United Kingdom has pupils taught as from the number ranging from 55 pupils and above per class instead of required 30 per class (<http://uk.international>, 2011). The pupil-teacher ratio according to a World Bank report, published in 2010 is 1:3(www.tradingeconomics.com/south-africa/pupil-teacher-ratio-primary-wb-data.html).

However, despite the fact of the report by World Bank, the official pupil: teacher is 1:40 in primary schools. In practice, there is still overcrowding and a high pupil: teacher ratios particularly in rural schools in South Africa (Crouch and Perry, 2003). The system in Namibia and Zambia has a seven, three and two Education model (i.e. 7-3-2). In Namibia, basic education has ten years of schooling with no leaving examination at end of grade seven for admission to grade eight. The article 20 of the Namibian constitution

provides clear guidelines; that the primary education shall be compulsory and the state shall provide reasonable facilities to render effective learning for every resident within Namibia, by establishing and maintaining State schools at which primary education will be provided free of charge. The class size in Namibia is 1:30 which is manageable for a teacher to handle. The same pupil ratio in Zambia is 1:56 but here they sit for a national selection examination at grade seven for progression to grade eight, (Mostert, 2006).

Free primary education in Uganda was as a result of the transition to democratic politics. Political demand rather than rational planning seemingly triggered Universal Primary Education (UPE) in Uganda and the policy was consequently implemented without time detailed planning and in the absence of sufficient data. Skepticism was prevalent and pointed to potential problems of finance, sustainability, and educational quality. There was little time to mobilize funding and make adequate budgetary preparations or to undertake necessary structural and make organizational reforms to develop capacity for massive expansion (Stasavage, 2005). The teacher pupil ratio especially in Acholi, the pupils are forced to learn under the sun, at a 'learning Center', where the teacher-to-pupil ratio is 1:200, while in town it may be 1:50 or even 1:25. Yet the poor pupils sit the same exam like their peers in town. They face the same completion for 'equal' opportunities. This is not the best way to create "one country" ([http://Ugandan satheart.org/2010/06/08 education-system-in-uganda-is dividing-ugandans/](http://Ugandan%20satheart.org/2010/06/08/education-system-in-uganda-is-dividing-ugandans/)). In Uganda teacher pupil ratio is one of the highest in East Africa, over 1:80 in most of the parts of the country, with

recommended of 1:55 whereas Tanzania has average of 1:55 teacher pupil ratio, (Bogonko, S. 1992a)

In Tanzania the standard teacher-pupil ratio is 1:45 (one teacher to 45 pupils). In remote areas like Shinyanga the average teacher-pupil ratio is 1:66, 'the worst in the country. Some teachers now have to content with class sizes of 100 pupils. However, there is more to be done to improve the quality of education; specifically regarding teachers, training facilities and the school environment

(www.oxfam.org/en/programs/development/ceafrika/tanzania-education)

In Malawi, for example in the Nkhata Bay District, the average teacher-pupil ratio for primary schools is 1:96, when the government of Malawi recommends 1:60 (and even this is very high). The shortage of teachers in Malawi is due to two main reasons. Firstly, there are not enough trained teachers who completed all their necessary qualifications to go around and, secondly, primary schools in Malawi must provide teachers' houses to attract good teachers to their school (www.rippleafrica.org/education---/general-education-in-malawi-africa-2012).

In Kenya, the issue of teacher-pupil ratio in many public schools was brought about by the directive from the donors who fund the education, therefore it was the government policy to freeze the employment of teachers only remained the case of replacement of the retired, or those left the service or natural death. This brought a big impact on teacher-

pupil ratio in many schools. Equitable distribution of teachers has remained one of the greatest challenges in teacher management. Over the last two years, the Ministry has been rationalizing distribution of teachers by transferring teachers from overstaffed to understaffed schools. As a result of these and other initiatives, the Pupil Teacher Ratio (PTR) in primary schools has improved to 43:1 in some parts of the country. But most parts of the country have the PTR ranging from 1:60 and 1:90. The PTR in primary is higher than the recommended 1:40, implying needs to recruit more teachers (Education Sector Report, 2007). The pupil teacher ratio in 2009 was 46.78 and 46.54 in 2008 according to World Bank report published in 2010 (www.tradingeconomics.com/kenya/pupil-teacher-ratio-primary-wb-data.html-2012)

Further, responses from some teachers interviewed on performance in KCPE give reasons that the non-completion of the syllabus and congestion of pupils in classes hinders effective learning in public schools, (Otieno, 2010). Streaming effect and class size influences achievement in schools (Eshiwani, 1983). The recommended teacher/pupil ratio is 1:40 in a class. Therefore when the size of the class was increased due to free primary education, there was a negative effect in teaching and learning since the teachers were overburdened. According to Duignan (1986), Teacher-Pupil ratio has an effect on performance due to the fact that most pupils' educational needs are not met.

2.3. Teachers Staffing Levels

The world urgently needs to recruit more than 8 million extra teachers, according to UN estimates, warning that a looming shortage of primary school teachers threatens to

undermine global efforts to ensure universal access to primary education by 2015. According to UN, at least 2 million new teaching positions will need to be created by 2015. An addition 6.2 million teachers will need to be recruited to maintain current workforces and replace those expected to retire or leave classrooms due to career changes, illnesses, or death (www.guardian.co.uk/education/teacher-shortages-2012).

In Malawi the government provides paid teachers, there are rarely enough teachers for each primary school, and often not even enough teachers for each school year class (www.rippleafrica.org/education---/general-education-in-malawi-africa-2012).

In Burkina Faso, Eritrea, and Central African Republic (CAR) top the list of countries that will need to amount aggressive recruitment campaigns over the next four years. Burkina Faso will need to increase its teaching workforce by almost 14 percent each year until 2015 to plug the country's shortage of teachers, while workforces in Eritrea and CAR will have to grow by 18 percent and 21 percent respectively (www.guardian.co.uk/education/teacher-shortages-2012).

In Kenya, the teacher resource is an important input in achieving the objectives of the Education Sector. The factors influencing performance of pupils in KCPE correlates with the utilization of teaching resources with performance, and the presence or absence of resources has an effect on performance (Kathuri, 1986).

The number of teachers has remained constant over the years despite growth in enrolments and the number of educational 14 institutions resulting to inequality in distribution of teachers and impacting negatively on quality and access of education. Recruitment of teachers is currently done only to replace those who exit through natural attrition.

The number of teachers employed by TSC has remained constant over the years. Majority of these teachers are primary and secondary teachers constituting 96 percent of all teachers (235,000). The remaining 4 percent of teachers is distributed among special and technical education institutions (Education Sector Report, 2007).

2.4. School Enrolment-classrooms ratio

The role of primary schooling-considering the context of basic learning needs as stated in the Dakar Framework for Action. It is an education geared to tapping each individual's talents and potential and developing learners' personalities, so that they can improve their lives and transform their societies (UNESCO 2000, page 8).

The goal of Primary Education is to attain Universal Primary Education (UPE) and ultimately Education for All (EFA) and Millennium Development Goals (MDGs) by 2015, (ESB, 2003-2007). As a result, Net Enrolment Ratio (NER) increased from 80.4 percent in 2003 to 91.6 percent in 2007 and indication that more children are accessing education at the right school going age of 6-13 years, (Educational Statistics 2003-2007). In an article by the Standard newspaper, the writer referred Free Education as the "Curse" in view of the fact that the introduction of Free Primary Education (FPE) in 2003 had

opened the floodgate for poor children with public schools paying the price of the surge in enrolment in the past eight years of the system, (Otieno, 30th December, 2010).

The total number of primary school classes increased by 9.7 percent from 185,900 in 2002 to 210,528 in 2006. The increase is attributed to the implementation of Free Primary Education (FPE) that resulted in increased new admissions into the public primary schools which led to overstretched and overcrowding in many schools, especially those in urban slums (Republic of Kenya 2007). During the period 2003 to 2007, national total enrolment in both public and private schools increased by 16.4 percent from 7,159,523 to 8,330,148 with the most significant increase recorded between 2006 and 2007. Enrolment in public primary schools increased from 6,906,355 in 2003 to 7,440,956 in 2007, an increase of 7.7 percent. Over the same period, enrolment in private primary schools increased by 251 percent from 253,169 to 889. Regionally, analysis indicates that in 2007, Rift Valley Province registered the highest public schools enrolment of 2,185,052 constituting 26.2 percent followed by Eastern Province 1,480,629 (18.0 percent) and Nyanza Province 1,441,735 (18.0 percent). North Eastern Province recorded the lowest enrolment of 98,629 (1.12 percent), (Republic of Kenya, 2008).

2.5. Infrastructure

Some South African schools have excellent infrastructure, others lack basic services such as water and sanitation. Apartheid policies have left a legacy school infrastructure backlogs in what were formerly black areas while provision in white schools appears relatively lavish, with schools provided with well-equipped laboratories and irrigated sports fields. The Department of Education has developed policies and funding on

backlogs. At the same time, however, the government wishes to ensure that schools with good provision do not deteriorate and that school infrastructure continues to be improved and is up-to-date. ([www.oecd.org/dataoecd/5-x 2012](http://www.oecd.org/dataoecd/5-x/2012)).

In Malawi, most primary schools are very basic, lacking the most fundamental resources such as classrooms although many primary schools have brick classroom blocks, many students learn outside in temporary structures making teaching impossible during rainy season. There are only 25,796 desks in the Nkhata Bay district for its 75,368 pupils meaning that, on average, three students have to share one desk , if they are lucky enough to have desks at all (www.rippleafrica.org/education---/general-education-in-malawi-africa-2012).

Poor primary school infrastructure is a leading barrier to improving access to primary education in Kenya. Empirical data show that physical facilities are an important factor in both school attendance and achievement. Improved primary school infrastructure is a high priority among schools and therefore, communities and parents have, over time, been responsible for and have made substantial investments in school infrastructure, over time. Development partners, churches, Non Governmental Organizations (NGOs) and other organizations and individuals have also made other investments, often in conjunction with communities. However, in Kenya, there is a major backlog of infrastructure provision and a shortage of permanent classrooms, particularly in poor districts. At the same time, existing infrastructures are generally in poor condition, due to lack of investment capital, poor construction standards and inadequate maintenance. With

the significant increase in primary school enrolment following the introduction of Free Primary Education (FPE) in 2003, additional pressure has been put on existing school infrastructure, leading to poor conditions and overcrowding that are un-conducive to good learning environment. In addition, there is limited number of primary schools serving populations in isolated rural areas, those living in low-income areas within large urban centers and in other pockets of poverty with large primary school enrolments, (Owino, 1997). The United Nations Educational, Scientific and Cultural Organization's (UNESCO) report on state of Kenya's primary schools, 40 percent are poorly ventilated, 49 percent are without adequate furniture for pupils, 47 percent are prone to noise and 10 percent have roofs caving in. The matter of absence of critical facilities in schools is so serious in that about 200,000 pupils attend primary schools that have no toilets. Even in schools that have toilets, the number of pupils using each toilet is way above the benchmark set by the Ministry of Education of 30 boys and 25 girls per toilet. He further stated that the condition of school buildings was found to have impact on learning. He further noted that no matter how desperately the Government and parents want children in public primary schools to perform well in the KCPE, they cannot do their best in open-air schools or others in buildings that are literally falling a part. Although the MOE says more than 8 billion shillings have been spent towards building of new classrooms and rehabilitation of dilapidated ones in public schools since the free primary education was introduced, the situation on the ground is different as many schools are still in poor condition and unfit for learning process (Wachira, 2011).

2.6. Primary School performance

In UK, children are assessed at every grade until they are of 16 years whereas in Malaysia, the progress of the pupils from year to year is by automatic promotion without final exams, (Wong, 1972). Evaluating performance according to specific targets may encourage teachers to focus on ‘gaming’ the system –for example by focusing only on particular pupils or ‘teaching to test’-rather than on educating their pupils in the true sense (Koretz, D.M, 2002).

The national focus in Kenya has been on grades and not the evaluation of the curriculum and the pedagogical process to prepare pupils for life challenges.

There is every year an outcry over the performance of private schools in comparison with public schools. For instance the results of 2010, the parents are asking why the best performers came from private schools. This leaves the parents discouraged because the difference between the mean score of public schools is quite big that is 240 points compared to 300 points for private schools. These questions point to one thing; at best the system only encourages competition for marks. The system is termed as an exam-oriented that does not instill the skills necessary to prepare the learners for further education. (Kabaji, 4th January, 2011). The writer goes further to state that the relief that came with the rise in access to education among those once locked out by poverty gave way to another problem of overstretched facilities, unmanageable teacher-pupil ratio, and complications related to striking a balance between quantity and quality.

Since the introduction of the new FPE policy in 2003, the pioneer recipients sat for their KCPE results in 2010. Analysis by the newspaper writer in that year indicated that private primary schools in KCPE results took large slots in the best performance leaving public institutions sagging under the weight of high enrolment that outstrips both facilities and human resources. Further, the article clearly pointed out that the private schools have advantage over public schools in that they have fewer numbers per class, adequate teaching facilities and personnel, and attractive learning environment. Again private schools have freedom to sieve their candidatures that exhibit chances of excelling in standard eight, (Otieno, 2010).

Kenya National Examination Council (KNEC) study reveals that children admitted to class One later than five years fail the KCPE. The report finds pupils who sit for KCPE later than 14 years score below the average marks of less than 200. The study, in recent trends in KCPE Participation and Performance and some implications for Policy 2010, further discourages repeating stating that it has no significant value in pupils' academic progression. The study identifies that pupils aged over 14 years and students above 18 years as 'overage' for KCPE. This means they will take examinations when they are older with statistics showing they will not perform well at national examination report. Citing KCPE 2010 results for instance, the report says an average pupil of age 13, scored 277.46 marks compared to 195.52 marks for 20 year olds. Meanwhile girls tend to perform poorer. Those aged 20 years last year scored 184.77 marks as compared to 271.74 marks for those aged 13 years. Boys aged 13 scored 284.39 marks on average,

compared to 199.39 marks by the 20 year olds (nairobi primary.se.ke/index.php?view=article---kcpe---2012).

2.7. Impact of FPE on Performance in KCPE

Notable in this FPE is the recent upsurge in enrolment that is already putting a lot of pressure on demands provision of adequate teaching and learning materials to the primary school pupils, overstretched facilities; overcrowding in schools, especially those in urban slums; high Pupil-Teacher Ratios (PTRs) in densely populated areas; high cost of special equipment for children with special needs; diminished community support following their misconstrued role vis-à-vis that of the Government under the FPE initiative; gender and regional disparities and increased number of orphans in and out of school as a result of HIV/AIDS. In addition to the above challenges, the sub-sector also experiences problems in the quality of learning. A major factor relates to teacher quality. Other factors relate to poor resource management in primary schools, inadequate in-servicing of teachers, poor learning environment due to overcrowding, inadequate facilities, poor health and sanitation, gender insensitive environments, barriers for those with special needs and inadequacies in quality assurance also contribute to low quality, (Republic of Kenya, MOEST, 2005b). All these is a result of the surging number of pupils with limited recourses.

2.8. Summary of Literature Review

The literature reviewed looked at various factors affecting performance in KCPE. It revealed that performance in examinations was affected by factors, such as, availability of physical facilities, teacher-pupil ratio, and school enrolment classroom ratio. Schools with inadequate learning resources are ranked least in terms of achievement. There is an outcry countrywide over the performance in KCPE since the introduction of FPE in 2003. The best overall candidate in Kenya had in 2003 had 482 marks, 461 in 2005, 456 in 2007 and 434 in 2010. The same trend is also noted in Nyamira District with the overall candidate attained in year 2004 obtaining 374 marks; 442 in 2005; 441 in 2006; 437 in 2007; 423 in 2008; 421 in 2009 and slipped to 400 marks in 2010! The KCPE results of 2011 made the parents of Nyamira County more worried after none of their pupils listed in the top performers. Their worries were heightened when two primary schools were listed as the worst performers in the country. The school stakeholders should come up with strategies of improving the results of KCPE.

CHAPTER THREE

3.0. METHODOLOGY

3.1. Introduction

The chapter describes research design, variables, location of the study; the study population; study sample and sampling technique; construction of research instruments pilot study; reliability and validity of the instruments; data collection procedures, data analysis; data storage and logistical and ethical considerations.

3.2. Research design

The study employed a descriptive survey design. It is a process of collecting data in order to test hypothesis or answer question concerning the current status of the subject in the study (Gay, 1992). This approach attempted to identify cause-effect relationship among variables that cannot be manipulated experimentally as well as accurately describe a given situation (Ogula, 1999). This design was appropriate for gathering information, summarizing, presenting and interpreting it for the purpose of clarification. He further states that the descriptive design deals with the distribution, incidence and inter relations of educational variables (Orodho, 2009). The design was used to obtain facts, opinions, knowledge and about attitudes of people.

3.3. Variables

The independent variables are those variables whose effect the study will assess, they include teacher/pupil ratio, enrolment-classroom ratio, while the dependent variables will

be those variables, which the study sought to measure the impact of the dependent variables, and these included, the performance in national examination.

3.4. Location of the study

The study was conducted in sampled public primary schools in Nyamira District, Nyamira Country bordering with Counties of Kericho to the North, Bomet and Trans Mara to the South-East, Kisii Central to the West and Rachwonyo to the North-West. It is endowed with fertile soils and rain that supports rich agricultural practices mainly tea growing and subsistence farming being the main cash crop. The county has a population of about six hundred thousand people.

3.5. Target population

The study comprised of 96 public primary schools and 96 head teachers. The sampled schools, the male head teachers were twenty two and female head teachers were only seven. The learning resources and the number of pupils also differed. The respondents were 29 head teachers which were calculated as 30 percent of 96 schools heads.

3.6. Sample and Sampling Techniques

Sampling is a process of selecting a sub-set of cases in order to draw conclusions about the entire set. During the process of sampling, the investigator seeks knowledge or information about a whole population. It is useful in research because one can learn something about a large group by studying a few of its members thus, saving time and money (Orodho, 2009). In sampling, a number of individuals for the study were selected

to represent the larger population from which they were selected. The sample size was determined by randomly sampling 30 percent of each category as this size is recommended for a descriptive survey research (Mugenda and Mugenda, 1999). Kerlinger (1979) argues that the main factor considered in determining the sample size is the need to keep it manageable enough. Borg and Gall (1989), as well as Orodho (2002) agree together that research is intended to produce statistical information about aspects of education.

In this study, it deployed a simple random sampling technique using 30 percent of primary schools in each of the two divisions in Nyamira District (Nyamira and Nyamaiya). A random sample of 29 schools was sampled using a formula developed by Mugenda and Mugenda, (1999) as shown in the matrix table 3.1 below.

Table 3.1. Sampling Matrix Table-

DIVISIONS IN NYAMIRA DISTRICT	PRIMARY PUBLIC SCHOOLS (n)	Sample Size (n)	Percentage	Sampling Technique
Nyamira	66	20	28.79	Simple random Sampling
Nyamaiya	30	9	33.33	Simple random Sampling
TOTAL	96	29	30.21	

3.7. Research Instruments

Research instruments included questionnaires, observation and check list. The researcher used the questionnaires since she was dealing with the literate group (learners and teachers). Key informant interviews as well as interview schedules and observation schedules also were used to collect data. A questionnaire is an instrument used to gather data, which allows measurement for or against a particular viewpoint. A questionnaire is useful in that; it is efficient use of time that is information can be collected from a large number of people and the questions can be easily analyzed, anonymity is possible and everyone gets the same questions that is, it is standardized (Orodho, 2009). These instruments determined or established how learning resources impacted on performance in Kenya Certificate of Primary Education. The questionnaires were delivered to 29 school head teachers and were given a duration of one week to complete them. The observations schedules and check list for each school was done on the time of collecting of questionnaires. The observations schedules and check list were to assist on the findings got from the schools whether they reflected the information from the head teachers.

3.8. Piloting of Research Questions

Mugenda and Mugenda (1999), states that the quality of a research depends to a large extent on the accuracy of the data collection procedures. According to Orodho (2009), the purpose of piloting is to establish whether the questions in the questionnaires are measuring what they are supposed to measure and whether they are clear. To ensure validity and reliability, the questionnaires were piloted with three schools that was a

small representative sample identical but were not included in the target group. The questionnaires were for the first time given to respondents and repeat was done after two weeks. This was to ensure that the questions: Measure what they were supposed to measure, ensure that the wording was clear, ensure that the respondents interpret all the questions in the same way, identify the researcher's biasness and incorrect questions were corrected.

3.8. Reliability of research instruments

Reliability is a measure of degree to which a research instrument yields consistent results, after repeated trials (Mugenda and Mugenda; 2003). Reliability is the degree to which a particular measuring procedure gives equivalent results over a number of repeated trials (Orodho, 2009). A reliable research instrument is one that consistently produces the expected results. Test-retest method was used to assess reliability. This involves administering the same research instrument (questionnaires) twice to the same group of subjects in a given interval of two weeks. Then spearman rank order correlation coefficient was used to estimate the degree to which the same results can be obtained with a repeated measure of the same concept. In establishing the reliability of the research instruments, the procedure was as follows;

- i. The questionnaires were given to three head teachers of three different schools with identical characteristics to those in the study.
- ii. The answered questions were scored manually.

- iii. The study used test/retest method where the same instrument was administered twice to the same respondents after a period of two weeks and the outcome was compared. The more identical the response on the two sets of questionnaires, the higher the reliability.
- iv. The completed questionnaires were scored and analyzed to establish the closeness of the responses from the two sets of questionnaires.

Piloting enabled the study to determine the validity and reliability of the research instruments.

3.9. Validity of the instruments

A research instrument is said to be valid if it measures what it is supposed to measure, or is the accuracy and meaningfulness of inferences which are based on the research results. Validity, therefore, has to do with how accurately the data obtained in the study represents the variables of the study. If such data will be a true reflection of the variable, then inferences based on such data will be accurate and meaningful (Mugenda and Mugenda, 2003). Validity is the degree to which a test measures what it is supposed to measure, therefore it measures the accuracy and the meaningfulness of results obtained from the analysis of data collected by the researcher (Orodho, 2009). In this study the use of observation, questionnaires and document scrutiny and analysis schedules increased

the construct validity. The relevance of what was contained in the questionnaires was assessed by two head teachers randomly selected from the study area. Their recommendations were included in the final research instruments used in the study.

3.12. Data analysis

The study employed a descriptive survey design. The commonly used methods of reporting descriptive survey design are frequency polygons, calculating percentages and tabulating as required (Gay, 1976).

Both qualitative and quantitative data collected was analyzed using the descriptive statistics, such as mean, frequency tables, and percentages. Qualitative data was analyzed by organizing data into the major themes and according to the research questions and objectives. Thereafter inferences, recommendations and conclusions were drawn. Inferential was used to determine the degree of influence of learning resources on performance in Kenya Certificate of Primary Education (KCPE).

3.13. Data collection procedure

The researcher obtained a letter of introduction from Kenyatta University and got permission from other relevant authorities. The researcher had sought permission from the National Council for Science and Technology, the Provincial Director of Education and the District Education Officer (DEO) then visited the sampled schools in order to seek permission from the heads of primary schools and made prior arrangements of collecting data. The researcher then made the visit to the schools. The questionnaires were distributed to the head teachers personally. The questionnaires were left behind for

the respondents to answer them upon the agreed time to come and collect them later. In this case the time line of one week was enough. Observation and other documentary was done in each school when collecting the completed questionnaires.

CHAPTER FOUR

4.2. RESEARCH FINDINGS AND DISCUSSIONS

4.3. Introduction

In this chapter, results of the study are presented in five sections according to the objectives set. The demographic information of the respondents; the teacher-pupils ratio; the school enrolment classroom ratio; the impact of learning resources and the trend of school performance in KCPE were discussed in a sequence.

Using a statistical package for social sciences (SPSS) computer package, the data received from the respondents (29 School heads and the district education officer) was subjected to statistical analysis.

In this chapter, demographic information for instance gender, highest education and professional levels attained by the head teacher respondents and the district Education officer were established.

Higher number of schools that is 22 schools was headed by male teachers while only 7 of the sampled schools were headed by female teachers. This indicated that there was gender imbalance in the headship of schools in this county. It was established that the District education officer was also a male.

Sampled head teachers were in the ages of 36 – 55 years. 15 of 52 percent were 36 – 45 years while the rest 14 of 48 percent were 46 – 55 years of age. The District education officer was himself in the age of 46 – 55 years.

Looking at the highest academic qualification of the head teachers, the study found out that nineteen of 66.7 percent of these head teachers had secondary level of education, ten of 25 percent were University graduates whereas one of 8.3 percent was still undertaking his degree course. The district education officer had a secondary education as well.

The levels of the training achieved by the school heads showed that, twelve of 33.3 percent had Diploma; ten of 33.3 percent had their first degree while 7 of 25 percent had P1 certificates. The District Education Officer had a Diploma education.

A small proportion of head teacher, 7 of 24.1 percent had eleven or more years as school heads, majority 12 of 41.3 percent with 5 years or less and 10 of 34.6 percent having had experience as heads for between six and ten years. The D.E.O had served for ten years in this position.

Table 4.1. The number of lessons taught by the head teachers in a week

Lessons in a week	Frequency	Percentage
0 – 10	5	17.2
11 – 20	15	52.0
21 – 30	5	17.2
31 – 40	4	13.6
Total	29	100%

The head teachers taught all the subjects just like any other teacher in the schools. These are ranging from Mathematics, English, etc mainly in the upper classes. Number of lessons taught by the head teacher per week varied in the schools. In one school, the head teacher had 6 lessons in a week while in another school, the head teacher taught 35 lessons in a week.

Table 4.2: Respondents experience as a head teacher

Experience (Years)	Frequency	Percentage
0 – 5	12	41.3
6 – 10	10	34.6
11 and above	7	24.1
Total	29	100%

In two of the schools, 20 teachers attended subject seminar/in-service courses every year.

In most of the schools, only 6 teachers attended subject seminars every year. The subject areas of these seminars were mainly Mathematics, Science, Kiswahili, English, ECDE and Social science.

Table 4.3: Number of teachers attending subject seminars in the schools every year

Number of teachers attending subject seminar	Number of schools	Percentage
	N = 29	100%
3 teachers	6	20.7
4 teachers	6	20.7

5 teachers	6	20.7
6 teachers	3	10.3
8 teachers	2	6.9
10 teachers	2	6.9
14 teachers	2	6.9
20 teachers	2	6.9

Six schools 50 percent of the sampled schools had teachers having only KCSE qualifications. One school had 9 teachers with KCSE certificate; 2 schools had 14 teachers having KCSE; one school had 15 teachers, one school had 17 teachers while one school had 30 teachers who have attained KCSE as their highest academic qualification. Four teachers in one of the schools, three teachers in 3 schools and one teacher in 1 school had KACE.

Table 4.4: Teacher respondents' academic qualifications

Teacher academic qualification	Males	Female	Total
KCSE	70	128	198 (86.8%)
KACE/EAACE	16	14	30 (13.2%)
TOTAL	86	142	228 (100%)

Table 4.5: Teacher respondents' professional qualifications

Teachers professional qualification	Male	Female	Total
P1/P2	70	98	168
Dip. in education	42	38	80
Bachelor of education	8	12	20
Others (ATs, GTI)	14	10	24
TOTAL	134	158	292

In three of the schools, one teacher was transferred; in one of the schools, 4 teachers were transferred while in two schools, 6 teachers were transferred in the year 2010. This showed that in the rest of the 6 schools there was no transfer of any teacher. As a district education officer, he had been in Nyamira district for the last 10 years.

The head teachers indicated that the reasons for the transfer of the teachers in the schools were; balancing of teachers, directive from the higher office, normal transfer, transfer on request by the teacher, on promotion, on health problem.

In all the sampled schools there are deputy head teachers. The responsibility of the deputy head teachers were noted as; in-charge of disciplinary section in the schools, carrying out guidance and counseling to pupils in the school, help H/T in administration, responsible for keeping school records and library books, in-charge of examination in the school, responsible for curriculum development, secretary during staff meetings,

Information gathered from head teachers of participating schools indicated that Senior teachers were available in all the schools sampled. Their responsibilities in the schools were; in-charge of text books, instructional materials and stores, librarian, In-charge of games, clubs and societies, guidance and counseling, in-charge of ECDE classes, cleanliness in the school, in-charge of curriculum in the school, in-charge of teachers welfare in the school.

4.6. To determine the teacher-pupil ratio in primary schools in Nyamira District, Nyamira county.

Based on this study the total number of teachers and the total pupils' population in the schools were established. The highest number of teachers recorded in a school was 30 teachers while the highest number of pupils was 777 pupils which were recorded in the school with 30 teachers. The analyzed data shows that the school with the lowest number of teachers had 8 and 491 pupils, see table 4.6 below.

Table 4.6: Total number of teachers and pupils in the schools

School	Total number of teachers	Total number of pupils	Teacher: Pupil ratio
School 1	11	192	1:17.5
School 2	12	303	1:25.3
School 3	11	305	1:27.7
School 4	14	462	1:33.0
School 5	18	553	1:30.7
School 6	20	380	1:19.0
School 7	11	287	1:26.1
School 8	16	295	1:18.4
School 9	20	428	1:21.4
School 10	30	777	1:25.9
School 11	15	620	1:41.3

School 12	19	319	1:16.8
School 13	15	360	1:24.0
School 14	14	300	1:25.0
School 15	18	711	1:39.5
School 16	10	457	1:45.7
School 17	9	516	1:57.3
School 18	22	284	1:12.9
School 19	15	311	1:20.7
School 20	15	520	1:34.7
School 21	12	430	1:35.8
School 22	10	370	1:37.0
School 23	14	345	1:24.6
School 24	11	423	1:38.5
School 25	14	318	1:22.7
School 26	13	245	1:18.4
School 27	8	491	1:61.3
School 28	13	523	1:40.2
School 29	11	398	1:36.2
Mean ratio			1:30.6

The overall average teacher to pupil ratio in the selected schools was therefore 1: 30 (1 teacher to 30 pupils) in the schools, but results show that most schools with fewer teachers have higher pupil to teacher ratio such as school 27.

Due to the big ratio of teacher to pupils in the schools, teachers mainly used continuous Assessment Tests (CATS) and examinations in assessment of their pupils in class performance. This was found to be done mainly monthly by the teachers. 66.7 percent of the teachers assess their pupils monthly, 8.3 percent assess weekly, 8.3 percent assessed after a fortnight while 16.7 percent of the teachers assessed their pupils every term. In all the twenty nine schools, the teachers were found to conduct remedial teachings. However this was done at various times. In nineteen of the schools (66.7%) it was done twice a day, while in 3 school 8.3 percent it was done once a day whereas in seven schools 25.0 percent, remedial teaching was done once a week.

Referring to the findings it shows that the classes were overcrowded, this meant that teachers were not likely to offer quality teaching. Thus the performance of pupils is affected negatively. In agreement with the research conducted by Goods (1999), quoted the findings on conditions of resources of teaching in United States of America, that all teachers interviewed said “unrewarding at work place, lack of incentives and overburdened with work does not allow them to attend the pupils individually or prepare their schemes and lesson plans”.

4.3 School enrolment-classrooms ratio in primary schools Nyamira District, Nyamira County

Enrolment of pupils per class was recorded in this study and the mean number of pupils per class for the twenty nine primary schools was established.

Table 4.7: Mean number of pupils per class in the twenty nine primary schools

Class	Mean number of pupils per class
Standard 1	48.4
Standard 2	48.3
Standard 3	52.3
Standard 4	48.6
Standard 5	51.7
Standard 6	50.7
Standard 7	50.9
Standard 8	39.6

Enrolment to classroom ratio was therefore established as; 48:1 in standard 1, standard 2 and standard 4. In standard 3 and 5, it was in a ratio of 52:1; in standard 6 and 7, the ratio was 51:1 while in standard 8, enrolment to classroom ratio was 40:1.

Analysis from the findings shows that on average pupil class ratio in sampled schools was 49 pupils per class and Ministry of Education recommended pupils per class ratio are 40 meaning that most classes were overcrowded. Past study, (Republic of Kenya, 2003-2007) has ratio of 36 pupils per class in 2007 nationally with Nyanza Province having a low ratio of 34. The higher the pupil class ratio the more it affects quality of learning (Republic of Kenya, 2005).

4.4. To establish the trend of Kenya Certificate of Primary Education in Nyamira District, Nyamira County

In establishing the trend of KCPE results in the public primary schools, the performance in KCPE of the schools as from the year 2003 – 2011 was recorded, see appendix 4. The mean calculated per year in the participating schools is indicated in table 4.8 below and trend analyzed presented in figure 4.1.

Table 4.8: Mean performance in the twenty nine schools over the years

Year	Mean KCPE points
2003	216.66
2004	218.9
2005	216.25
2006	216.23
2007	214.61
2008	217.90
2009	214.46
2010	217.17
2011	229.30

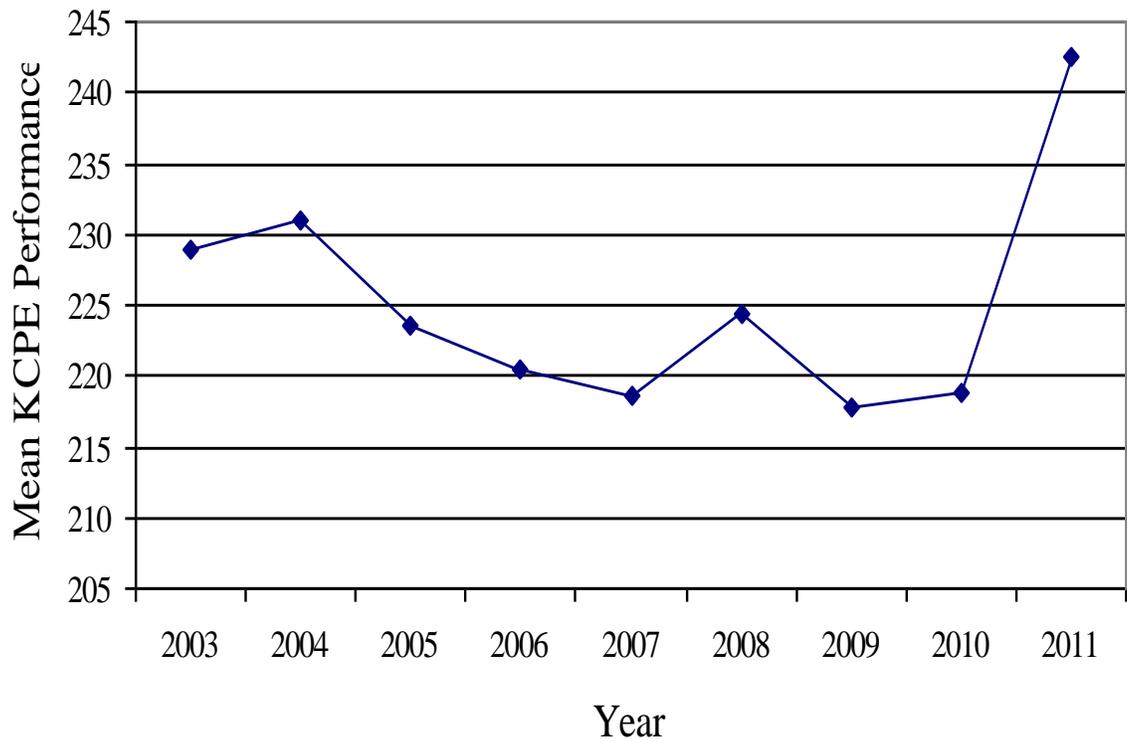


Figure 4.1 : Overall mean KCPE results trend in the twenty nine schools over the
Years

The performance trend KCPE of the participating schools was established to show a slight positive trend ($R^2 = 0.0032$) over the years 2003 – 2011. The overall trend was negative in the year 2003 – 2010. However in the year 2011, the schools performed better. Hence the overall positive trend noted.

The trend of KCPE performance was established to be on a declining trend from 2004 to a worst performance in 2007 when they recorded a low a mean of 219. Although there

was a slight upsurge in 2008 to attain average 224 marks, 2009 – 2010 was yet lower performance of below 220. In the year 2007 to 2010 was when the district recorded the lowest in its mean KCPE grade. In year 2006 the district had its best KCPE mean grade (238.6). The performance however showed an upward trend in the year 2011 from the previous year 2010 with mean grade of 238.6. The performance however showed an upward trend in the year 2011 from the previous year 2010).

The 29 head teachers indicated that the main problems that inhibit improvement of KCPE results in the schools are; uncooperative parents, lack of books, lack of support from school committee, low teacher morale, frequent transfer of teachers, and other problems for example absenteeism of the pupils and lack of support from education office.

Education of the parents of the school was rated as average by 66.7 percent of the head teachers. However, 33.3 percent of the head teachers rate the parents of their schools as illiterate. In all the schools, head teachers award well performing pupils in their schools.

Mean performance in KCPE in the twenty nine sampled schools over the years (2003 – 2011) were therefore summarized as in the figure III. All the head teachers in the sampled schools indicated that they award performing pupils in their schools.

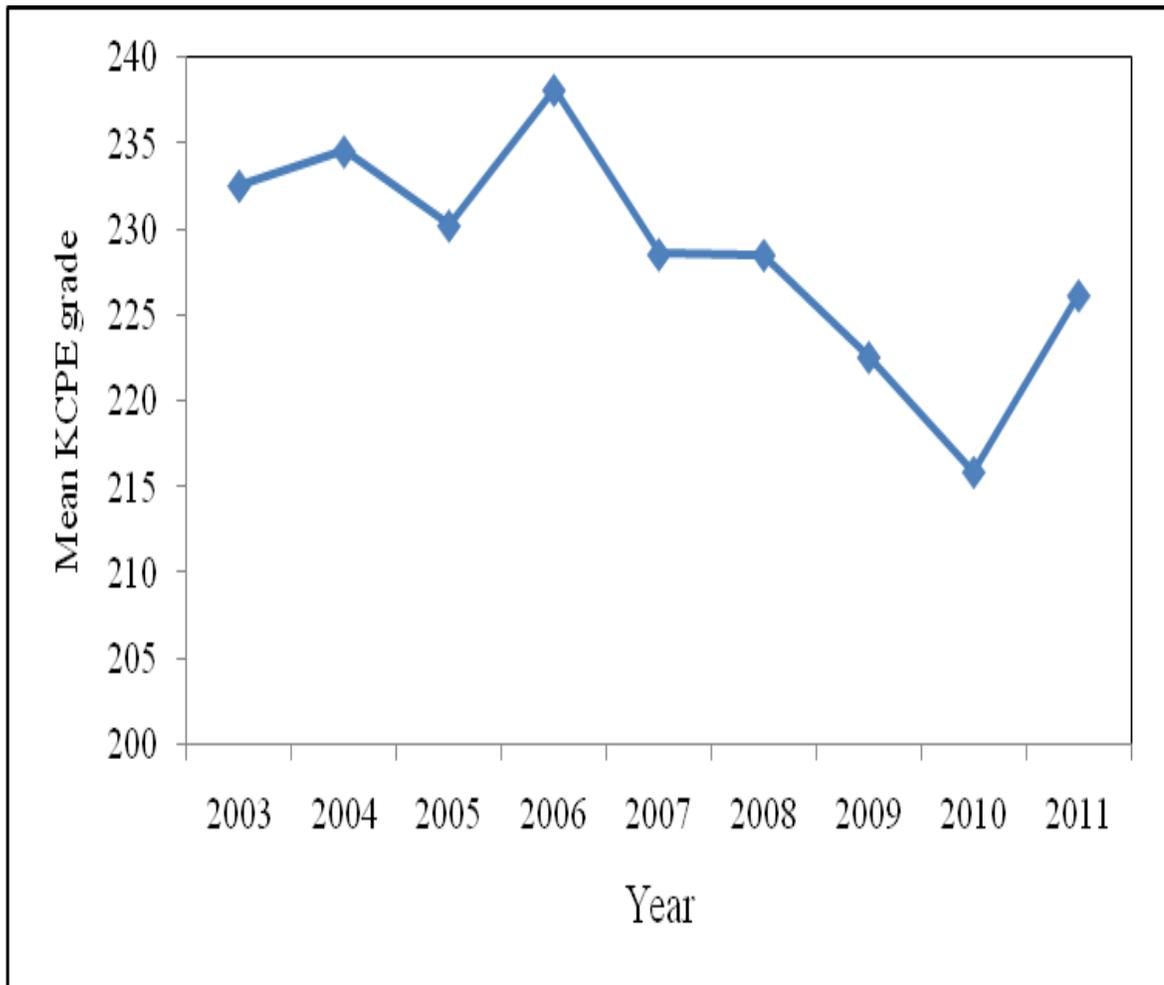


Figure 4.2: Mean KCPE grades in Nyamira County

Head teachers indicated that the main problems that inhibit improvement of KCPE results in the schools are; uncooperative parents, lack of books, lack of support from school committee, low teacher morale, frequent transfer of teachers, and other problems for example absenteeism of the pupils and lack of support from education office.

In the last 9 years, this district had not recorded a steady performance trend. The general KCPE had showed a negative trend.

Table 4.9: Mean district KCPE marks for the last nine years

Year	Mean KCPE marks
2003	232.57
2004	234.57
2005	230.25
2006	238.16
2007	228.57
2008	228.53
2009	222.57
2010	215.87
2011	226.17

District education officer noted that the main problem inhibiting improvement of KCPE results in the public schools were; lack of support from the community, low teacher

morale and many indiscipline cases morale. District education office was noted to reward the best performed school in KCPE result yearly. This award for the best performance during the district prize giving day was found to be provided by parents and the schools themselves.

When rating their teachers commitment levels, nineteen 66.7 percent of the head teachers felt that their teachers were moderately committed while ten of 33.3 percent of the head teachers indicated their teaching staff are highly committed. Result on the commitment levels of the teachers was possibly caused by the incentives given in schools. Eleven of 91.7 percent of the schools gave incentives to the teachers. These incentives include; prizes for example clothing, materials, providing tea, etc.

In all the schools, the teachers are disciplined. In 58.3 percent (17) of the schools, the teachers discipline is satisfactory while in 41.7 percent (12) their disciplines are good. Similarly, the students were disciplined. In 66.7 percent (19) schools, the pupils have satisfactory discipline whereas in 33.3 percent (10) schools, they had good discipline.

In dealing with discipline cases of teachers, the heads were noted to; try to find out the cause of the indiscipline and counsel the teacher, they had open discussion, Carry out guidance and counseling, have dialogue with the teacher, the H/T teams with deputy head teacher and senior teacher and the affected teacher and they discuss the problem and find solution, give warning and refer them to read teachers code of conduct book, advice accordingly.

When the students are found to be undisciplined, the head teachers took the steps of; guiding and counseling them, talk to the pupil and ask the parent to come and they decide on the best way to deal with the cases, the head teacher discipline the pupil The guidance and counseling team handles indiscipline cases, Offering responsibilities to extremely disciplined learners, most difficult cases are handled by guidance and counseling panel.

In 50 percent of the schools, there were 2 staff meetings per term. These meetings however, depended on the urgency to have them. In one of the schools, there were up to 6 staff meetings in one term. In these staff meetings, the agenda of discussions was mainly how to improve performance/standards and discipline in the school. The teachers set the targets and evaluate coverage of the syllabus.

Table 4.10: The number of staff meetings in a school in a term

Number of staff meetings in a term	Number of Schools	Percentage
2 meetings	15	51.7
3 meetings	10	34.5
5 meetings	2	6.9
6 meetings	2	6.9
Total	29	100%

Parents and teachers' meetings are held mainly held seven times in a year in 58.3 percent of the schools. In the PTA meetings, the main agendas were established to be; How to

improve standards in the school, School performance, School development, children welfare and school infrastructure.

Table 4.11: The number of PTA meetings in a school in a year

Number of PTA meetings in a year	Number of Schools	Percentage
2 meetings	5	17.2
3 meetings	17	58.7
4 meetings	2	6.9
6 meetings	2	6.9
8 meetings	3	10.3
Total	29	100%

Committee meetings are held in these schools, mainly 3 times in a year. In 58.3 percent of the schools, the school committee meetings are held three times in a year. When they hold these meetings, the main agenda was found to be; School development and improvement, maintenance of school facilities, pupils' performance, pupils' welfare and discipline.

Table 4.12: The number of school committee meetings in a year

Number of school committee meetings in a year	Number of Schools	Percentage
3 meetings	17	58.6
5 meetings	2	6.9
6 meetings	10	34.5
Total	29	100%

15 of the schools participated frequently in productive public events, such as science displays, debates and drama which are helpful in KCPE performance. At the school, all the head teachers believe they are accessible to teachers, pupils and parents in their offices any time they wish to see them. They did not have visiting hours for the teachers, pupils nor parents. In the school, they frequently attend school assemblies and communicate the expectation of the academic excellence to the whole school.

When making decisions on how to improve KCPE performance, in all 100 percent of the schools, the head teacher allows the teachers and make known the school curriculum goals/objectives, and classroom behavior that can lead to good performance in KCPE to both pupils and teachers. Head teachers do communicate the ideas to pupils through the assembly, by writing on the notice boards, class conferences and seminars in the school. To the teachers, the ideas is communicated in staff meetings both verbally and written.

In their administration, the head teachers frequently visit classrooms to see how teaching and learning is going on. They hold development conferences with teachers and review pupils' performance frequently in order to improve KCPE performance. In their review of the pupils' performance, the head teachers conduct analysis of the results in each examination, compares the performances in the subjects, analyze each pupil's performance, identifies weak areas and advice accordingly.

DEOs office equally distributes funds to all public schools in the district meant for building and renovation of classrooms, libraries and toilets. After provision of the funds, the DEOs office takes the responsibility of auditing the head teachers on the use of funds provided by the government.

4.5. Determining the impact of the learning resources on performance in Kenya Certificate of Primary Education in Nyamira District, Nyamira County

This fourth objective was to identify the learning resources in primary school involved in the study. This was done through filled questionnaires and observation schedules. The results of the findings showed that in 75 percent of 22 of the schools, the head teachers felt they have been receiving adequate supply of text books. This was not the case with 25 percent 7 of the schools. The ratio of the major subjects text books received in the schools was noted to be mainly one text book for two pupils (1:2).

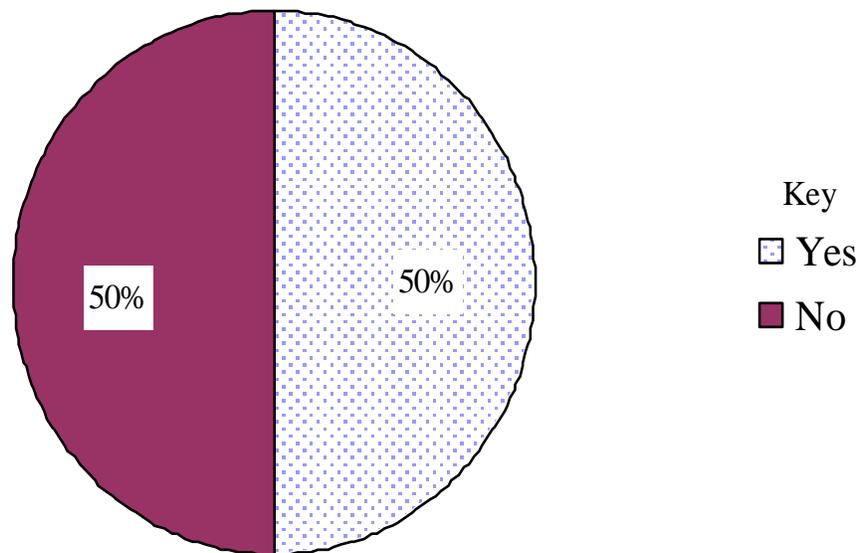


Figure 4.4: Schools having all the books needed by the pupils in their Library

These text books in schools were mainly provided by the government to these schools. In twenty of the schools, it was said that there were school libraries. Only nine of the sampled schools did not have library. In 50 percent of these schools, the so called libraries had all the books needed by the pupils for their reading especially in preparing for Kenya Certificate Primary of Education.

Table 4.13: Ratio of key subjects' text books to pupils in school

Subject	Ratio (Textbooks: Pupils)	Frequency (N = 29)	Percentage
Mathematics	1:2	14	48
	1:3	15	52
English	1:2	12	41.7
	1:3	17	58.3
Kiswahili	1:2	14	48
	1:3	13	43.7
	1:4	2	8.3
Social Studies	1:2	13	45.1
	1:3	12	41.1
	1:4	2	6.9
CRE	1:5	2	6.9
	1:2	12	41.4
	1:3	10	33.4
	1:4	2	6.9

	1:5	5	18.3
Science	1:2	10	33.4
	1:3	10	33.4
	1:4	5	17.2
	1:5	4	16.0

In this district, the learning resources are provided by both the Government and the parents. However, the DEO noted that the classrooms are overcrowded in the public primary schools despite the provision of learning resources.

An observation was made on the available teaching and learning resources in the twenty nine schools. All the schools had adequate blackboards and 75 percent of them had enough desks for the pupils. 91.7 percent of the schools indicated that they had adequate teachers guide, 75 percent had adequate students' exercise books, 66.7 percent had adequate maps, 58.3 percent had adequate drawings, 50 percent had adequate text books, and 33.3 percent had adequate charts while 33.3 percent of the schools had adequate globes. But it was noted that no school had a formal library,

In the school compounds, the facilities observed to be not available in most 83.3 percent of the schools was play grounds, administration block in 83.3 percent and Library in 16.7 percent of the schools. Other facilities observed were as shown in table 4.14.

Table 4.14: Facilities available in the 29 school compounds

Facilities	Number of schools with not enough responses (N = 29)	Percentage
Toilets	16	66.7%
Classroom	16	66.7%
Water points	10	41.7%
Play grounds	20	83.3%
Workshops	4	16.7%
Library	4	16.7%
Administration block	20	83.3%

In the head teachers' office, school timetable, register for teachers, teachers' schemes of work, teachers' lesson plans and progress record for students was observed in all the twenty nine sampled schools. Pupils class register and teachers' records of work were observed in eleven out of the twenty nine schools.

Referring to the findings the provision and efficient use of physical facilities, text books, teaching materials and the qualification of teachers determine the quality of education (Bird Sall et al 2006). When there is lack of learning resources, the performance of the

pupils is affected negatively. The presence or absence of resources had an effect on performance (Kathuri, 1986). The findings by PISA (Programme for International Student Assessment) quoted (Portela and Camanho, 2007) that “schools with less resources are required less in terms of achievement than school with more resources”.

CHAPTER 5

5.0 Summary, Conclusions and Recommendations

5.1. Introduction

This chapter presents summary of the findings of the study. The summary is organized according to the research objectives that the study aimed to achieve. The conclusions, implications and recommendations were summarized according to the objectives of the research. This was made under the same general themes as used in the presentations of results in chapter four. The final section outlines suggestions for further findings.

5.2. Summary of Research Findings

The study established that only 24 percent of the participating schools were headed by female teachers against dominant 76 percent male headed schools. This shows the high gender disparity in headship in the study area that concurs with Ministry of Education recommendations in (Republic of Kenya, 2009/10 – 2011/12)' advocacy. Majority of 66.7 percent of the schools' head had only secondary level of education including the District Education Officer and the remaining are pursuing or qualified graduates meaning that few are utilizing Ministry of Education openings for further training in higher institutions of learning. Most of 41.7 percent had diploma qualifications.

The trend is the same with school teachers with majority 86.8 percent with secondary level of education and remaining with either KACE or EAACE education. Likewise, many of the teachers 57.5 percent have either P1 or P2 qualification or a smaller portion

with diploma 27.4 percent, degree 6.94 percent and remaining with ATs and GTI qualifications.

In the study area, results indicated that in half of the participating schools, there was no transfer of teachers at all and that eight schools had at least four transfers per year. Reasons for transfers were either to balance teachers, as a directive from the higher office, normal transfer routines, own request, on promotion or on health problem.

5.3. Teacher-pupil ratio in primary schools in Nyamira District, Nyamira County.

In the past, unplanned teacher recruitment for public schools has affected deployment of teachers and thus distorted their distribution. Many schools with high student enrolment and understaffing continue to suffer with high teacher-pupil ratio for example, school number 27 (1:61.3) as shown by the results of the study. A result, schools are conducting to monthly or weekly pupil assessments instead of daily basis - 66.7 percent assess their pupils monthly, 8.3 percent weekly, 8.3 percent after a fortnight and 16.7 percent once a term. Instead most of the schools of 66.7 percent have resorted to remedial teaching.

5.4. School Enrolment-classrooms ratio in Nyamira District, Nyamira County

Basing on findings, the results of the study indicated that school enrolment classroom ratio in the primary schools was more than 40 per classroom for standards one to seven

and as follows; standard one, two and four was 1:48. The ratio for standard three, five and seven was of 1:52 while for standard six and was 1:52 but at 40 in standard eight.

5.5. Learning resources on performance in Kenya Certificate of Primary

Education

Although twenty of the schools indicated that they had school libraries, observational analysis schedule only identifies small stores converted to lending library. Of the sampled schools, 9 did not have such a structure for lending but usage made of deputy head teachers' offices. In 50 percent of these schools, the so called libraries had all the books needed by the pupils for their reading especially in preparing for KCPE.

More information of relevant facilities for educational performance shows that 83.3 percent of the participating schools had adequate playgrounds and administrative blocks, 16.7 percent stated inadequate library facilities and 66.7 percent toilets. In most schools, the stores were termed as libraries whereas the pupils were allowed to borrow books and read in their classrooms. Workshops for learning were available in only 16.7 percent of the schools and 41.1 percent of them with water points. However, most schools had turned the workshops to be classrooms. Head teachers as well participate in teaching though weekly lessons vary from school to school, about 50 percent taking 11-20 lessons per week.

5.6. The trend of KCPE results in the primary schools in Nyamira District, Nyamira County

After a general negative trend in mean education performance since 2003, the 2010/2011 results showed a positive improvement in conformity to national trend (Siringi, S. 29/12/2011. Daily Nation). The reason cited for improvement was provision of various incentives to subject teachers.

The District Education Officer (D.E.O) noted that the performance in KCPE was worst in the year 2008 to 2010 when the district recorded the lowest in its mean KCPE grade. In 2006 (mean grade of 238.6) was the best in KCPE and upward trend in the year 2011 from the previous year (2010). Although there is slight improvement in the mean grade most schools continuous to perform below average.

The nineteen 66.7 percent head teachers of participating schools rated their teachers as moderately committed whereas ten 33.3 percent were rated as highly committed. In terms of discipline in these participating schools was rated by the head teachers as 19 schools of 66.7 percent had satisfactory discipline and ten 33.3 percent schools had good discipline. The District Education Officer noted that there were indiscipline cases of teachers and pupils in the district. He further noted that lack of support from the community, low teacher morale and many indiscipline cases of pupils hinders the performance in KCPE.

5.7. Conclusions

Based on findings and past studies this study makes the following conclusions; the Government Policy on primary is to achieve UPE by 2005, which is a key strategy towards attaining the overall goal of EFA by 2015. Education is seen as a priority for the poor and as a means of combating ignorance and giving the poor a voice. Low education levels negate any attempts and ability to make wise decisions about education in terms of access to education, child bearing and rearing, therefore affecting not only the present but also the future generations. Therefore, attaining UPE will ensure that all Kenyan children eligible for primary schooling have an opportunity to enroll and remain in school, to learn and acquire quality basic education and skills training .To provide proper education to citizens, all the stakeholders' in education should work as a team to enhance educational success. However, the academic performance of a child is assessed by passing examinations that gives the destiny in terms of success or underachiever in life. The performance is therefore influenced by the learning resources, such as teacher-pupil ratio, infrasctrures, staff levels, and school enrolment classroom ratio. For this reasons the causes of poor performance should be traced and proper channels for improving performance to be accomplished.

5.8. Recommendations

The study recommends that the active involvement of teachers, parents and other stakeholders enhances the effectiveness of the in-school team. The support of

stakeholders has positive and pervasive effects on the child's success in school. The study recommends the following.

1. Government, parents and stakeholders should find means of providing funds for construction of new classes to curb the problem of overcrowding in schools.
2. To solve the problem of lack of teachers, the Government and non-governmental organization groups should provide funds for Teachers Service Commission (TSC) to recruit more teachers and those overstaffed schools with teachers especially in urban areas should be well distributed to those schools that are understaffed.
3. All the stakeholders should be involved in the provision of learning resources. The chiefs and the assistants' chiefs should create awareness that the schooling of their children should not be left entirely for the government but should be involved in purchasing supplementary books especially story books either in English or Kiswahili.
4. The idea of specialization of subjects should be similar like secondary schools since the current policy is that a primary school teacher should be able to teach all the seven subjects in the primary school curriculum. Therefore, the two years of teacher training is not adequate for the teacher trainee to acquire mastery in subject content of pedagogy in all the seven subjects. Teachers having few subjects of choice will improve the performance of most schools.
5. To create teachers' morale, the government should provide incentives in terms of promotions depending on their years of experience without partiality. Again the

salary increment should go hand in hand with current inflations to avoid strikes now and then, since these affects the performance of the pupils.

5.9. SUGGESTIONS FOR FURTHER RESEARCH

This study covered only 29 schools in Nyamira district, in Nyamira County. Due to the limited scope of the study, the researcher proposed the following areas to be conducted especially those have not been covered in this study:

1. This study covered one district and focused only public schools. An extension of the similar study can be done to cover private schools.
2. A similar study covering the whole district, other districts or other parts of Kenya to establish on how the learning resources affect the performance in KCPE on those districts.
3. A study considering other factors than those focused in this research. For instance, effect of learning environment especially those bordering the slums areas, teachers coming from the same locality and the medium of communication is the language found in that community and not English can bring negative impact on performance.

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APPENDICES**APPENDIX 1: QUESTIONNAIRE FOR THE DISTRICT EDUCATION OFFICER-****Dear respondent,**

I -----am a student at Kenyatta University pursuing masters in course requirements. I am conducting research on impact of learning resources on performance in Kenya Certificate of Primary Education in public primary schools in Nyamira County. I will keep everything said in this questionnaire to remain confidential. There is no right or wrong answer; all information given therefore will be useful.

Please tick or provide the information required in the spaces provided.

PART A: Personal Background Information

1. Your gender

Male -----

Female-----

2. Your age group

< 25-----

26-35-----

36-45-----

46-55-----

56 and over-----

3. Level of education

Primary-----

Secondary-----

University-----

Others (Specify) -----

4. What is your educational qualification?

a) Diploma -----

b) Graduate-----

c) Masters -----

d) PHD-----

e) Others (please specify)-----

Part B: Education Information

5. Name of the District

6. For how long have you been the district education officer?

7. Do you have any arrangement for teachers to attend subject seminar/in-service courses yearly?

a) Yes ()

b) No ()

8. Do all the primary public schools in your district have the 1:40 teacher to pupil ratio?

a) Yes ()

b) No ()

9. What is the enrolment of pupils in the district?

10. Do schools in the district have any indiscipline cases in the following categories? Tick where appropriate.

a) Head teachers ()

b) Teachers ()

c) Pupils ()

11. Do the schools in the district have enough learning materials?

a) Yes ()

b) No ()

12. Does your office equally distribute funds to all public schools in your district meant for building and renovating facilities such as classrooms, libraries and toilets?

a) Yes ()

b) No ()

13. Does your office audit the head teachers on the use of funds provided by the government?

a) Yes ()

b) No ()

14. Who provides learning resources in the district? Tick where appropriate.

a) Government ()

b) Parents ()

c) Sponsors ()

15. Are classrooms overcrowded in the public primary schools in the district?

a) Yes ()

b) No ()

16. Have the public primary schools in the district been receiving adequate supply of textbooks?

a) Yes ()

b) No ()

17. Are you accessible to the following in your office any time they wish to see you? Tick where appropriate.

	<u>Yes</u>	<u>no</u>
a) Head teachers	()	()
b) Teachers	()	()
c) Parents	()	()
d) Pupils	()	()

18. List down the mean grades of your district for the last nine years?

- a) 2003
- b) 2004
- c) 2005
- d) 2006
- e) 2007
- f) 2008
- g) 2009
- h) 2010

i) 2011

19. Which problems that inhibit improvement of KCPE results in the public schools in your district has your office identified? Tick where appropriate.

- a) Uncooperative head teachers ()
- b) Lack of books ()
- c) Lack of support from the community ()
- d) Low teacher morale ()
- e) Many indiscipline cases of pupils ()

20. Does your office reward the best performed school in KCPE yearly?

- a) Yes ()
- b) No ()

21. Who awards the best performers in KCPE in the district during the district prize-giving day? Tick where appropriate.

- e) Parents ()
- f) Schools ()
- g) Sponsor ()
- h) Government ()

THANK YOU VERY MUCH FOR TIME AND GOD BLESS YOU.

APPENDIX 2: QUESTIONNAIRE FOR THE HEAD TEACHER-

Dear respondent,

I -----am a student at Kenyatta University pursuing masters in course requirements. I am conducting research on impact of learning resources on performance in Kenya Certificate of Primary Education in public primary schools in Nyamira County. I will keep everything said in this questionnaire to remain confidential. There is no right or wrong answer; all information given therefore will be useful.

Please tick or provide the information required in the spaces provided.

Part A: Personal Background Information

1. Your gender

Male -----

Female-----

2. Your age group

< 25-----

26-35-----

36-45-----

46-55-----

56 and over-----

3. Level of education

Primary-----

Secondary-----

University-----

Others (Specify) -----

4. What is your educational qualification?

- a) Diploma -----
- b) Graduate-----
- c) Masters -----
- d) PHD-----
- e) Others (please specify)-----

Part B: Educational Information

5. Name of the school

6. For how many years have you been the head teacher?

7. What is your professional qualification?

- a. P1 ()
- b. P2 ()
- c. Graduate ()
- d. Others (please specify) _____

8. a. How many of your teachers attend subject seminar/in-service courses every year?

.....

..

b. Indicate the subject areas

.....

9. How many of your teachers were transferred last year

Give reasons for the transfer

.....

10. Fill in the table below, the academic and the professional qualifications of the teachers in your school;

Academic qualifications	Males	Females	Total	
KCSE				
KACE/EAACE				
Professional qualifications				
P1/P2				
Diploma in education				
Bachelor of education				
Specify any others				

Total				
-------	--	--	--	--

11. What is the enrolment of pupils per class in your school?

- a. Standard 8
- b. Standard 7
- c. Standard 6
- d. Standard 5
- e. Standard 4
- f. Standard 3
- g. Standard 2
- h. Standard 1

12. What is the mode of assessment of pupil's in class performance?

13. How often is assessment of class work done?

- a) Weekly ()
- b) Monthly ()
- c) Fortnightly ()
- d) Termly ()

14. How often do teachers give remedial teaching to pupils? Tick as appropriate

- a) Once a day ()
- b) Once a week ()
- c) Twice a day ()
- d) Twice a week ()

e) Specify any other

List the type of resources mostly used in school

15. Rate the amount of help given to pupils by the teachers

a) Adequate ()

b) Inadequate ()

16. What is the commitment level of your teachers?

a) High ()

b) Moderate ()

c) Low ()

If low, what are the causes?

17. Are there any incentives

a) Yes ()

b) No ()

If yes, list the nature of these incentives.....

18. Do you have a deputy head teacher?

a) Yes ()

b) No ()

If yes, list down the deputy's responsibilities

.....

19. Do you have senior teachers in your school?

a) Yes ()

b) No ()

If yes, list down their responsibilities

20. How would you rate the disciplinary conditions in your school?

a) Teachers -Good ()

-Satisfactory ()

-poor ()

If poor, state the causes

b) Pupils -Good ()

_Satisfactory ()

_Poor ()

If poor, state the causes

21. How do you deal with indiscipline cases?

a) For teachers

b) For students

22. How many times do you have staff meetings per term?

List down the agendas of discussion that are performance oriented

.....

23. How many PTA meetings do you hold in a year?

What are there main agendas?

24. How many committee meetings do you hold in a year?

Specify the main agendas

25. Do you allow teachers to make decisions on how they improve KCPE performance in your school?

a) Yes ()

b) No ()

If yes, how do you facilitate their implementation?

26. Do you make known the school curriculum goals/objectives, and classroom behavior that can lead to good performance in KCPE to both pupils and teachers?

a) Yes ()

b) No ()

If yes, in what way do you communicate your ideas?

27. Do you frequently visit classrooms to see how teaching/learning is going on?

a) Yes ()

b) No ()

28. Do you hold development conferences with teachers, in order to improve KCPE performance?

a) Yes ()

b) No ()

29. Do you review pupils' performances frequently, in order to improve the final KCPE performance?

a) Yes ()

b) No ()

If yes, what process do you use in your review?

30. Has the school been receiving adequate supply of text books?

a) Yes ()

b) No ()

If yes, what is the ratio in the key subjects (examinable subjects)?

i. Mathematics

ii. English

iii. Kiswahili

iv. GHC.....

v. CRE

vi. Science/Agriculture

31. Who provides the books?

a) Government ()

b) Parents ()

c) Sponsor ()

d) Other (Please specify)

32. Does the school have a library?

a) Yes ()

b) No ()

33. If yes, does the library have all the books needed by the pupils for their reading especially in preparing for KCPE?

a) Yes ()

b) No ()

34. Does the school participate frequently in productive public events, such as science displays, debates and drama, which are helpful in KCPE performance?

a) Yes ()

b) No ()

If yes, specify

35. Are you accessible to the following in your office any time they wish to see you?

Tick where appropriate.

	<u>Yes</u>	<u>no</u>
a) Teachers	()	()
b) Parents	()	()
c) Pupils	()	()

If no, do you have visiting hours for each of the group indicated? Specify

.....

36. Do you attend school assemblies frequently?

a) Yes ()

b) No ()

37. If yes, do you communicate the expectation of the academic excellence to the whole school?

a) Yes ()

b) No ()

38. How many lessons do you teach per week?

Specify the classes and the subjects

39. Are the pupils given responsibilities such being prefects, in the school?

a) Yes ()

b) No ()

If yes, list down the duties of the prefects

40. List down the mean grades of your school for the last nine years?

a) 2003.....

b) 2004.....

c) 2005.....

d) 2006.....

e) 2007.....

f) 2008.....

g) 2009.....

h) 2010.....

i) 2011

41. In your opinion, which problems have you identified, that inhibits improvement of KCPE results in your school? Tick them.

a) Uncooperative parents ()

b) Lack of books ()

c) Lack of support form education office ()

d) Lack of support from the school committee ()

- e) Low teacher morale ()
- f) Frequent transfer of teachers ()
- g) Specify any other

42. How do you rate the level of education of the parents in your school? Tick as appropriate

- a) Highly educated ()
- b) Average ()
- c) Illiterates ()

43. Do you award well performing pupils?

- a) Yes ()
- b) No ()

THANK YOU VERY MUCH FOR YOUR TIME AND GOD BLESS YOU.

APPENDIX 3: OBSERVATION SCHEDULE

1) Name of the school

2) Check the enrolment of pupils per class

a) Standard 8.....

b) Standard 7.....

c) Standard 6.....

d) Standard 5.....

e) Standard 4

f) Standard 3.....

g) Standard 2

h) Standard 1.....

3) Check for the following in the classes. Tick as appropriate;

		<u>Adequate</u>	<u>Not adequate</u>	<u>Not available</u>
a) Enough desks	()	()	()	
b) Teachers' guide		()	()	()
c) Blackboards		()	()	()
d) Students' exercise books		()	()	()
e) Text books		()	()	()
f) Charts		()	()	()
g) Globes	()	()	()	
h) Drawings		()	()	()
i) Maps		()	()	()

j) Specify any other additional materials

4) Locate the following facilities in the school compound. Tick where appropriate

	<u>Available</u>	<u>Not available</u>	<u>Not enough</u>
a) Toilets	()	()	()
b) Classrooms	()	()	()
c) Water points	()	()	()
d) Play grounds	()	()	()
e) Workshops	()	()	()
f) Library	()	()	()
g) Administration block	()	()	()

5) Locate the following, in either the head teacher's office or in the staff room. Tick where appropriate.

	<u>Available</u>	<u>Not available</u>
(a) The school timetable	()	()
(b) Register for teachers	()	()
(c) Class registers	()	()
(d) Teacher's schemes of work	()	()
(e) Teacher's records of work	()	()
(f) Teachers' lesson plans	()	()
(g) Progress records for students	()	()
(h) Any other useful document	()	()

APPENDIX 4: Performance of the Schools 2003 – 2011

School	Mean KCPE performance in the year								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
School 1	174.74	193.79	178.28	209.73	194.06	178.94	178.94	168.89	119.03
School 2	259.28	258.23	240.07	230.46	222.07	236.88	210.43	205.22	212.53
School 3	214.83	189.45	211.5	179.91	195.91	179.81	212.88	185.38	330
School 4	234.76	249.55	247.69	253.56	251.4	253.58	263.85	255.43	302.39
School 5	178.73	222.58	196.87	191.21	180.63	194.8	188.38	208.29	246.9
School 6	262.01	230.05	230.25	226.58	230.45	232.15	233.42	219.12	262.15
School 7	183.81	190.03	163.35	173.6	161.69	209.34	185.18	197.4	200.04
School 8	220.39	229.3	224.82	240.23	216.4	217.57	213.16	201.96	231.31
School 9	248.6	256.83	257.11	230.57	211.04	230	208.09	246.06	248.63
School 10	.	.	.	219.87	237.23	245.4	238.25	244.32	254.22
School 11	258.83	258.83	254.08	247.23	273.06	253.17	252.34	262.65	255.86
School 12	283.56	262.95	255.63	242.12	248.12	261.85	229.42	231.62	246.35
School 13	212.04	209.56	230.11	231.04	210.23	232.34	231.21	233.93	234.06
School 14	190.90	200.02	212.05	215.56	217.78	218.02	218.00	218.03	219.0
School 15	216.15	215.56	213.43	215.58	216.05	217.09	218.08	219.0	220.23
School 16	200.00	211.07	211.10	212.11	213.34	214.8	200.08	209.12	223.08
School 17	198.04	199.11	199.99	200.12	204.00	205.09	206.09	211.23	213.00
School 18	175.98	211.21	212.05	213.15	211.23	215.12	200.12	223.21	224.11
School 19	213.22	211.14	197.34	213.22	199.34	197.35	210.23	214.33	220.12

School 20	234.4	214.34	221.87	213.43	218.98	211.89	219.34	211.34	232.32
School 21	198.23	175.45	196.45	187.45	211.48	200.45	198.43	215.68	217.75
School 22	235.38	227.89	237.38	245.78	235.67	236.75	245.45	237.12	239.34
School 23	213.23	213.42	213.52	214.02	214.56	215.00	215.50	216.67	219.14
School 24	200.09	211.23	214.12	222.56	199.09	222.00	217.45	214.00	219.00
School 25	199.0	199.89	199.99	190.00	198.10	189.00	187.67	199.28	200.04
School 26	212.23	214.14	190.56	199.45	199.90	199.78	189.00	199.92	200.45
School 27	211.02	213.09	209.11	216.23	212.56	212.88	213.09	214.05	215.09
School 28	219.00	218.00	217.32	216.78	218.23	216.90	215.67	217.89	222.06
School 29	218.09	219.67	219.06	219.07	221.03	221.01	219.45	216.65	221.43