# SCHOOL-BASED FACTORS INFLUENCING PUPILS' ACADEMIC PERFORMANCE IN KENYA CERTIFICATE OF PRIMARY EDUCATION IN TETU DISTRICT, NYERI COUNTY, KENYA.

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A Research Project Submitted in Partial Fulfillment of the Requirement for

the Award of Master of Education Degree in Educational Administration

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#### DECLARATION

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

.....

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This research project has been submitted for examination with our approval as university supervisors.

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# DEDICATION

I dedicate this work to almighty God and my family members; my husband Wilson Mwangi and all my children.

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# ACRONYMS AND ABBREVIATIONS

ASALS	:	Arid and Semi-Arid Areas		
DEO	:	District Education Officer		
DPE	:	Department of Primary Education		
EFA	:	Education For All		
ERS	:	Economic Recovery Strategy		
FPE	:	Free Primary Education		
KCPE	:	Kenya Certificate of Primary Education		
MDGs	:	Millennium Development Goals		
MOEST	:	Ministry of Education Science and Technology		
NARC	:	National Rainbow Coalition		
SPSS	:	Statistical Package for Social Sciences		
TIQET	:	Totally Integrated Quality Education and Training		
UNESCO	:	United Nations Educational, Scientific and Cultural		
		Organization		

#### ABSTRACT

The purpose of the study was to investigate the school based factors that influenced pupils' academic performance in KCPE in Tetu district. The study sought to determine the influence of head teachers' professional support, teachers' professional qualifications, pupil-teacher ratio, physical facilities, teaching and learning resources on pupils' academic performance. The study was based on systems theory which was proposed by Ludwig L. Von Bertalanffy in the year 1969. Using Descriptive survey design, the study targeted 59 primary school head teachers, 295 teachers and 2151 standard eight candidates. Head teachers and teachers were selected using stratified sampling that captured 30 percent of target population. This translated to 18 head teachers and 89 teachers.

Proportionate stratified sampling that captured 10 percent of the target population (2151 pupils) was used to select 215 standard eight pupils. Questionnaires were used as data collection instrument for head teachers, teachers and pupils. Data was analysed using Statistical Package for Social Sciences. The findings revealed that there were school based factors that influenced pupils' academic performance in KCPE. They included: inadequate teachers as was reported by 54 percent of head teachers, 55 percent of teachers and 53 percent of pupils. Physical facilities like libraries were inadequate as was reported by 72 percent of head teachers. Teaching and learning resources such as revision books were inadequate as was reported by 71 percent of teachers. Head teachers' professional support was inadequate as was reported by 53 percent of the teachers. There were many teachers with lowest professional qualification as was indicated by 31 percent of head teachers. It was recommended that the government should provide more teachers to needy schools in order to minimize teachers' workload. Head teachers, school committees and parents should organize how to raise funds to help in building and equipping libraries which act as resource centres. Head teachers should buy enough teaching and learning resources as they facilitate learning. Head teachers should carry out their professional role regularly and in-service programmes should be provided to both head teachers and teachers through provision of funds by the ministry of education. It was suggested that similar study be carried out in other districts in the country for comparison purposes. Another study should be done to establish the challenges facing primary school head teachers in curriculum implementation.

#### **CHAPTER ONE**

#### **INTRODUCTION**

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

Education is an important catalyst in any country's social, economic and political development. Globally it is recognised as a basic human right, thus a form of investment that contributes to the development of both an individual and society. Basic education strengthens individuals' capacity, families and communities to access health, higher education, economic and cultural opportunities and services (UNESCO, 2007).

According to Education For All (EFA) global monitoring report released 2008, primary school enrolment rose from 647 to 688 million worldwide between 1999 and 2005, increasing by 36 percent in Sub Saharan Africa and 22 percent South and West Asia. The Global Net Enrolment Ration (NER) rose from 83 percent to 87 percent between 1999 and 2005. Participation levels increased most rapidly in Sub Saharan Africa (23%), South West Asia (11%) (UNESCO, 2007). National Institute for Education Research (NIER, 1995) while focusing on education performance among Asian countries found that education performance was still low in Indonesia and Philippines. This was attributed to poor allocation of resources and poor management. The research revealed that though Government had done a lot to provide physical facilities, there was shortage of teaching and learning resources and qualified teachers.

A study in India which sampled 59 schools found out that, only 49 schools had buildings and of these, 25 had toilets, 20 had electricity, 10 had school library and 4 had television. Schools which were well equipped performed better than schools which had insufficient physical facilities. It was concluded that the quality of learning environment is strongly correlated with pupils' achievement (Carron & Chau, 1996). They also noted that neither a good number of teachers in China, Guinea, India and Mexico mastered the subject matter they taught nor the pedagogical skills required for good presentation of the subject content which highly affected pupils' performance.

IRIN (2009) from the Department of Primary Education (DPE) in Bangladesh found that 70 percent of primary school graduates were unable to read, write or count properly. The situation was worse in rural areas where English teachers were few and predominant in religious schools (Madras) where English was not taught. There was weak organizational structure and institutional framework. The teachers were inadequate and not committed to their work. Lack of classrooms resulted in double shifts in learning. Due to low teacher pupil ratio, contact hours were not enough. There were too many holidays which reduced contact hours such as; Ramadhan (20 days), Summer (5 days), Eid (5days) Bangladesh had about 200,000 teachers to take care of 19million students.

A study survey in Uganda on the analysis of factors influencing learning achievement in grade six in Uganda, found out that pupils' age, language spoken, time spent on a subject, class size, text book and pupil desk ratio are significant factors influencing learning achievement. The study also revealed that teachers' qualifications, experience and in-service training affect pupils' performance. It was also found out that school administration was another significant factor influencing learning achievement in grade six in Uganda (Nannyonjo, 2007).

Gebregeorgis (2010) noted that libraries play a supportive role in education as live long learning centres. Public and Institutional libraries have a responsibility to promote literacy among all members of their community. Village libraries in Uganda enhance education by developing a reading culture. They help students to expand knowledge of world beyond their villages. Norag News (February, 2010) noted that Ugandan national statistics indicate that 83 percent are trained teachers while 17 percent are untrained. 62 percent of the qualified teachers possess the lowest teaching qualifications which lead to low educational achievements.

According to Nebraska Synod (2009), the Tanzania textbook project seeks to equip Tanzania classrooms with necessary up to date textbooks to contribute towards improved learning outcomes in Rwanda, the U.S embassy and USAID in consultation with the Ministry of Education, funded a container holding 22,000 textbooks to provide resources to aid in the transition to English in order to improve literacy and expand reading opportunities to Rwandan schools. Ambassador Symington urged students to read the books for academic excellence. Lack of textbooks and opportunity to practice hinders ability of students to speak English. Togo experienced a substantial decrease in primary Pupil Teacher Ratio (PTR) between 1998 and 2001 from 41:1 to35:1 while its Net Enrolment Rate (NER) rose from 90 percent to 92 percent. One fourth of all new teachers were placed on short term contracts and paid significantly less than the permanent teachers. Though PTR was reduced, a study conducted in Togo suggests that contract teachers were less effective than other teachers (Kigotho, 2004).

Huebler (2008) found out that the countries with lowest pupil teacher ratio (PTR) were Sam Marino (6:3) and Bermuda (8:3). Most developed countries in Eastern Europe had PTR ranging from ten to nineteen pupils per teacher. Asia had PTR of between twenty to twenty nine in Britain, the PTR by 2000 had gone down to 17:1. In Bangladesh the ratio is 90:1 in arid and semi–arid areas the PTR is 25:1 and in densely populated areas the PTR can raise to 70:1 or 90:1. In Kenya the PTR increased from 39:1 to 45:1 in 2003. The worst affected areas include ASAL districts and areas affected by insecurity. Where the number of pupils is large per teacher, it has been found that the performance in the school is poor as in the case of Bangladesh.

Poor performance of Kenya Education System as well as in other developing countries is due to weak managerial capabilities in those systems (Eshiwani1993). It is the duty of head teachers to ensure that staff is adequate, teachers attend to seminars and workshops to enable them acquire new skills and teaching methods which would help improve education performance (Olembo, Wanga, Karangu, 1992).

According to Hoerr (2008) head teachers effectiveness can have a positive effect on students' academic achievement, organizational management and staff development. Their leadership can promote human relations, school improvement and collaboration with stake holders including students, teachers, support staff, parents and community. The head teacher should be able to supervise students, teachers and support staff in order for the mission of the school to be accomplished. The head teacher should ensure that teachers conform to their professional ethics. The head teacher should supervise them in such areas as class attendance, testing of students, keeping and using professional documents such as lesson plans, schemes of work, progressive records, records of work and lesson notes (Khaemba, 2009).

Kenya is a signatory to various international declarations and conventions in education and is committed to ensuring the right to every citizen to access quality education as enshrined in the world declaration of Education For All (Jomtein Thailand, 1990). Dakar Framework For Action on Education For All (Dakar, Senegal, 2000). The Government of Kenya overall development strategy is to provide basic quality education and training to all Kenyans which include two years of pre-primary, eight years of primary and four years of secondary/technical education. Kenya aims at achieving Education For All (EFA) and Millennium Developments (MDGs) by 2015 in tandem with national and international conventions.

Since independence, Kenya has addressed challenges facing the education sector through commissions, committees and task forces. Some to the reports include; Report of the national committee of education objectives and policies, the presidential working party on the second university, which led to the removal of the advanced (A) level of secondary education and expansion of other postsecondary training institutions.

It recommended the changes of the education system to the current 8.4.4 system of education and highlighted the importance of maintaining education standards through supervision and inspection. The report of the presidential working party on education and manpower training for the next decade and beyond, which focused on improving education financing, quality and relevance. The report of the commission of inquiry into education system of Kenya, which recommended Totally Integrated Quality Education (TIQET). Free primary education is part of this vision 2030. Enrolment has increased by nearly 3 million pupils (a 46% increase), while the number of primary schools grew by 7000 (a 38% increase). Thirty percent of children entering standard one drop out before they reach the last grade of primary education. According to Analytical Report of Education (2003), the dropout rate in primary school cycle is 3.2 percent, ranging from 2 percent for standard one to 5.2 percent for standard seven. Reasons for dropping out include parental ignorance of the importance of formal education (19%), poverty (13%), poor academic performance (6.5%) and pregnancy or early marriage(13.5%), (Njenga & Kabiru, 2001).

Although there has been marked progress towards realisation of UPE, through the government's high budgetary allocations of 30 percent annually, the education sector faces some challenges. They include high pupil to teacher ratio, weakness in management, deployment and development of teachers, a shortage of experienced teachers, overcrowded classrooms and inadequacies of provision of education infrastructure especially in arid and semi-arid lands Task Force Report (February 2012). These challenges may contribute to poor Kenya Certificate of Primary Education (KCPE) performance in some regions of our country. Since factors differ in different regions, there is need to carry out studies in every region to ascertain the actual cause of poor KCPE performance in the region (Morumbwa, 2006).

Table 1.1 shows KCPE performance for Nyeri County for the past four years.

Position	District	2009	2010	2011	2012
1	Municipality	259.02	261.22	256.61	263.09
2	Othaya	255.68	258.27	256.42	259.42
3	Mukurweini	237.96	248.38	244.49	256.53
4	Tetu	242.86	240.37	235.52	245.15

**Table 1.1 Nyeri County Primary Schools KCPE Performance** 

#### **Source District Education Office (DEO)**

The KCPE analysis done for the past four years indicate that Tetu district has not performed well when compared to other districts in Nyeri County.

#### **1.2. Statement of the problem**

The Government of Kenya and other development partners have put concerted effort over the years to improve the quality of education by financing tuition and providing capital for development of schools. Public examinations are used as a realistic basis of evaluation for gauging the education system and also making important decisions about the learner. Performance of schools in national examination across regions has however varied significantly with certain regions posting better results than others. This study therefore sought to investigate the school based factors influencing pupils' performance in Kenya Certificate of Primary Education, Tetu District, Nyeri County.

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

The purpose of this study was to investigate the school based factors influencing pupils' performance in KCPE examination in Tetu District.

#### 1.4. Objectives of the study

The study was guided by the following objectives:

- a) To determine the extent to which headteachers' professional support influence pupils' performance in Kenya Certificate of Primary Education in Tetu District, Nyeri county.
- b) To determine how teachers' professional qualification influence pupils' academic performance in Kenya Certificate of Primary Education in Tetu District, Nyeri county.
- c) To determine how pupil teacher ratio influence pupils' performance in Kenya Certificate of Primary Education in Tetu District Nyeri county.
- d) To determine how the physical facilities influence pupils' performance in Kenya Certificate of Primary Education in Tetu District, Nyeri county.
- e) To establish the effects of provision of teaching and learning resources on pupils' performance in Kenya Certificate of Primary Education in Tetu District. Nyeri county.

#### **1.5 Research questions**

The study was guided by the following research questions:

- a) To what extent do headteachers' professional support influence pupils' performance in Kenya Certificate of Primary Education in Tetu District, Nyeri county?
- b) How does teacher's level of professional qualification influence pupils' academic performance in Kenya Certificate of Primary Education in Tetu District, Nyeri county?
- c) How does the pupil teacher ratio influence pupils' performance in Kenya Certificate of Primary Education in Tetu District, Nyeri county?
- d) How do the physical facilities influence pupils' performance in Kenya Certificate of Primary Education in Tetu District, Nyeri county?
- e) To what extent does availability of teaching and learning resources influence pupils' academic performance in Kenya Certificate of Primary Education in Tetu District, Nyeri county?

#### 1.6 Significance of the study

The findings would help the head teachers to re-examine their administrative style in order to improve their pupils' performance. The teachers would also be able to re-examine their teaching methodologies in order to improve the pupils' academic performance. The findings from the study would be useful in helping the government, Ministry of Education, head teachers, teachers and parents in Tetu District to come up with interventions that can help to improve the academic performance which would enable the government in achieving EFA by 2015. The Ministry of Education in conjunction with the Teachers Service Commission would be enlightened to employ and post more teachers to needy schools in order to improve pupils' academic performance.

#### **1.7 Limitations of the study**

It was anticipated that collection of reliable data would be difficult due to respondents' fear of victimization. This would be counteracted by assuring the respondents beforehand that the data was meant for academic purposes only and no names of respondents or institutions interviewed would be needed. It was also anticipated that availability of respondents would be difficult due to their busy teaching and learning schedule. This would be overcome by early booking of appointments and adjustment of time for data collection where necessary.

#### **1.8 Delimitations of the study**

The study was confined to Tetu District only, therefore findings from the study would not be generalised to the whole country. Although school management committees, parents and sponsors would be able to identify administrative factors that would influence KCPE performance, the respondents of this study were delimited to head teachers, standard eight subject teachers and standard eight pupils because they would be in close contact with school based factors influencing KCPE performance in Tetu District.

#### **1.9** Assumptions of the study

The study was guided by the following assumptions;

- i. That all respondents would be cooperative, honest and give reliable information.
- ii. That the sampled schools had adequate teaching and learning resources
- iii. That the students in the sampled schools were highly motivated to learn.
- iv. That teachers in the sampled schools were well trained and dedicated to their job.

#### **1.10 Definition of significant terms**

Academic performance refers to grade representing the sample of student's achievement with respect to attained academic skills or knowledge for example KCPE.

**Contact hours** refers to the period (in hours) over which the teachers and pupils interact, usually during formal learning sessions in the class.

**Head teacher**: Refers to any person appointed by the TSC as an administrative head in the day to day management of a primary school.

**Mean score** refers to an average point showing individual or group achievement in KCPE examination performance.

**Public school** refers to an institution of learning where pupils learn and is owned and run by the government in conjunction with parents.

**Pupil teacher ratio** refers to average number of pupils per teacher at a specific level of education in a given school year.

**School based factors** refer to the factors found within the school environment that influences academic performance in KCPE.

**Teaching learning materials** refers to the resources which aid in teaching and learning such as exercise books and text books.

**Workload** refers to the number of teaching lessons assigned to a teacher every week.

#### **1.11 Organisation of the study**

The study was organised into five chapters.

Chapter one contains background to the study, statement of the problem, purpose of the study, limitations of the study, delimitations of the study, assumptions of the study, definitions of significant terms and organisation of the study. Chapter two focuses on school based factors influencing KCPE performance in Tetu District which includes; to determine how the head teachers management practices influence academic performance, to investigate how school environment influence academic performance, to establish the effects of provision of teaching and learning resources on academic performance, to identify how pupil teacher ratio influence performance and to determine how teachers professional qualification affect pupils academic performance in KCPE. It also focuses on a summary of literature review, theoretical and conceptual framework. Chapter three covers research design, target population, sample size and sampling procedure research instruments, instrument validity, instrument reliability, data collection procedures and data analysis techniques. Chapter four covers presentation, analysis and interpretation of data and discussion of results. Chapter five consists of summary of findings, conclusions, recommendations of the findings and suggestions for further research.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **2.1 Introduction**

This chapter focuses on review of related literature with specific emphasis on school based factors influencing pupils' academic performance in KCPE. This chapter was organised into five subtopics which include; influence of head teachers' professional support and academic performance, teachers' professional qualification and pupils' performance, teacher pupil ratio and pupil's performance, physical facilities and pupils' performance, teaching and learning resources and pupils' performance. It also included summary of literature review, theoretical framework and conceptual framework.

#### 2.2 Overview of elements of academic achievement

Schiefelbein and Summons (1995) identifies determinants of academic achievement in developing countries which include size of the class, textbooks, library, teachers' qualifications, and pupil teacher ratio and school administration. Duignan (1986) cites factors that will influence pupils' performance such as leadership styles, school culture and climate, teacher and student behaviour among others. All the above factors may influence academic achievement of pupils though there may be other determinants and therefore it is difficult to generalize the factors.

#### 2.3 Head teachers' professional support and academic performance.

The school administration is a crucial factor in the success of a school. The head teacher should be in a position to set the right decisions in order to improve learning in their schools through working with parents, encouraging students, motivating teachers in order to improve the quality of learning in our schools Uwezo (2011). According to Estyn, Court and Keen (2001), effective management by headteachers is the key factor in providing high standards of pupil achievement, school improvement and ultimately improve performance.

Good management and good leadership create an effective and high performing school. Good school managers give priority to the needs of learners. Lorna (2003) notes that the headteacher has the role of guiding and leading teachers as they perform their duties in order to realize good examination results. The headteacher should check schemes of work, student exercise books and supervise actual classroom teaching.

Duignan (1986) concurs with Eshiwani (1983) that school administration is a crucial factor in the success of a school. The qualities expected of a head teacher includes setting an atmosphere of order, creating a climate of high expectations for staff and collaborative leadership and building commitment among students and staff to the school goals. In Tanzania the head teacher is expected to have high levels of transparency and accountability in dealing with teachers. Their leadership

style and effectiveness at supervision are critical factors to achieving quality education (Tanzania Ministry of Education and Vocational Training 2005).

Kimsop (2002) concurred with Kamindo (1998) in a study aimed at finding out the role of head teachers as instructional supervisors in Kabarnet and Salawa Divisions of Baringo district. The research findings showed that most head teachers do not perform their instructional supervisory duties such as classroom observation, checking students and teaching notes of the teachers frequently hence poor performance. Musungu and Nasongo (2008) in a study of the head teachers' instructional role in academic achievement found that the head teachers' supervised the teachers work by checking on the lesson notes, schemes of work, records of work covered, attendance registers and class attendance records. They further noted that the head teachers in high performing schools checked the records frequently compared to those in average and low performing schools.

#### 2.4 Teachers professional qualifications and academic performance

Human resource in education are the people who are directly involved in carrying out all the related activities of teaching and learning. Quality of teachers in terms of qualification and dedication determines largely the quality of education and performance (Republic of Kenya, 1999). A study by Musau (2004) on factors influencing pupils' performance in KCPE in Central Division Machakos District revealed that teachers' academic and professional qualifications contribute to poor performance in the division. Ochanda (1978) cited in Awuonda (2011) agree that the quality of teaching staff is often said to be the main determinant of achievement of students in examinations in Kenya.

Ugandan national statistics indicate that 83 percent are trained teachers while 17 percent are untrained. 62 percent of the qualified teachers possess the lowest teaching qualifications which lead to low education achievement. Togo experienced a substantial decrease in pupil teacher ratio (PTR) between 1998 and 2001 from 41:1 to 35:1 while its net enrolment rate (NER) rose from 90 percent to 92 percent (Norag News, February 2010).

Quarter of all new teachers were put on short term contract and paid significantly less than the permanent teachers. Though PTR was reduced, a study conducted in Togo suggests that contract teachers were less effective than other teachers. In Nigeria, a study by Asikhia (2010) revealed that teachers' believe that students' poor performance is not influenced by teachers' qualification while students perceived that teachers' qualification does affect their academic performance.

#### 2.5 Pupil-teacher ratio and academic performance

According to Uwezo Assessment Report (2011) teachers' shortage is acute and is highly affecting learning. On average every Kenyan school has a shortage of four teachers. Nationally a teacher is in charge of fifty two children except in Western province where a teacher is in charge of 64 children. Counties with worst pupil teacher ratio are also having the worst learning levels.

According to Huebler (2008) the countries with lowest pupil teacher ratio (PTR) were Sam Marino (6:3) and Bermuda (8:3). Most Developed Countries in Eastern Europe had PTR ranging from ten to nineteen pupils per teacher. Asia has PTR of between twenty and twenty nine. In Britain the PTR by 2000 had gone down to 17:1. In Bangladesh the ratio is 90:1. In arid and semi-arid areas the PTR is 25:1 and in the densely populated areas the PTR can raise to 70:1 or 90:1. In Kenya the PTR increased from 39: in 2003 to 45:1 worst affected areas being ASAL districts and areas affected by insecurity. Where the number of pupils is large per teacher, it has been found that the performance in the school is poor as in the case of Bangladesh.

#### 2.6 Physical facilities and academic performance

Motanya (2011) noted that poor learning environment in third world countries has been singled out as one of the major factors that lead to poor performance. This is due to increased enrolment without further expansion of the facilities. This leads to overstretching of resources which in turn affects the effectiveness of the teaching and learning process resulting in poor performance of students. Ayoo (2002) and Eshiwani (1993) agree that school environment such as classrooms, desks and books have a direct impact on good performance among students in developing countries.

A study in India which sampled 59 schools found out that only 49 schools had buildings and of these, 25 had toilets, 20 had electricity, 10 had school library and 4 had television. It was found that schools which had sufficient physical facilities performed better than those which were not well equipped. It was concluded that the quality of learning environment is strongly correlated with pupils' achievement (Carron & Chau, 1996). The presence of school library related the presence of school library related significantly to achievement in Brazil, China, Botswana and Uganda (Heynemann & Loxley, 1993). The library is an essential factor in the teaching-learning process.

The government of Kenya in the Koech Report (1999) noted that congestion within classrooms affects the teaching and learning environment. The quality and adequacy of learning facilities and equipment have a direct bearing on quality education. This is because sufficient quantity and quality resources and facilities determine how effectively the curriculum is implemented. However it is important to note that schools with abundant resources may not always utilise them efficiently to the utmost benefits of raising the students level of performance while those with limited resources would utilise whatever they had efficiently to raise the pupils' level of performance.

#### 2.7 Teaching and learning resources and academic performance

According to Asikhia (2010), adequate well prepared instructional materials determine the amount of learning that can be placed in a learning setting. Good quality materials can motivate interest, maintain concentration and make learning more meaningful. Obonyo (1987) agree with Fuller (1986) that instructional materials such as text books, visual and audio materials not only enhance communication between teachers and learners but also facilities centred learning through discovery. They motivate and encourage participation of the learner in the learning process and help to clarify concepts and meaning of the texts.

According to Nebraska Synod (2009), the Tanzanian text book project sought to equip Tanzanian classrooms with necessary up to date text books to contribute towards improved learning outcomes. Japan Ministry of Education planned to increase elementary textbooks starting year 2011 in order to address deteriorating academic results (Takahiro Fukada, 2010). Katana (2007) recognizes the evaluation done on a textbook programme in Philippines which was introduced to raise the national level of academic achievement among students in the three subjects that is, Philippine, Mathematics, Science. The programme reduced ratio of pupil per book per subject from 10:1 to 2:1 and this marked improvement in performance.

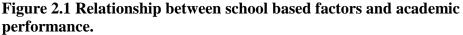
#### 2.8 Summary of literature review

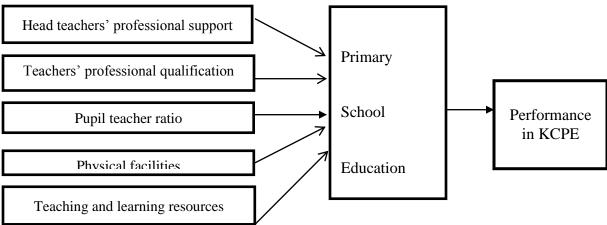
Several scholars Estyn, Court and Keen (2001) Kimsop (2002), agree that headteacher is the key factor in the success of a school. Other scholars, Ayoo (2002) and Motanya (2011) noted that school environment determines pupils' academic achievement. Awuonda and Olaleye (2011) agree with Musau (2004) that teachers' qualification determines academic performance. However, Koech report (1999) disagrees that school resources determine academic achievement. Asikhia (2010) disagrees that teachers' qualification determines academic achievement. The study therefore sought to fill the gap and investigate factors influencing pupils' academic performance in KCPE in Tetu District.

#### **2.9 Theoretical framework**

The study was based on systems theory which is proposed by Ludwig Von Bertalanffy in the year 1969 (Bertalannfy, L. Von, 1969). Systems theory assembles interdependent elements which function together as an entity to yield a product unique to assemblage. Systems theory states that there is direct relationship between education inputs and educational output and the interrelationship with school environment. The school exists as a form of an open system as it receives its inputs from the society who include teachers and pupils. The head teacher performs instructional supervision tasks such as checking teachers' schemes of work and records of work, supervising teaching sessions, checking pupils' notes in order that the schools objectives may be realised. The head teacher ensures that the school environment is conducive to learning through provision of desks, chairs, tables, books and other learning materials. The school is the processing unit where teachers are expected to teach effectively such that the pupils may perform well in the Kenya Certificate of Primary Education examination.

#### 2.10 Conceptual framework





The framework of this study was premised on the concept of school performance being a function of school based factors. The school head teacher may possess various characteristics which can be clustered into specific selected variables such as; provision of a conducive school learning environment through ensuring that there are enough and well equipped classrooms, provision of teaching and learning materials such as text books, charts, exercise books and learning aids which help pupils to retain the taught content. The head teacher should ensure that there are adequate and qualified teachers in the school. The head teacher should supervise teachers in their teaching process and ensure that they have all their teaching professional documents and assist them in areas where they may encounter difficulties. Head teachers' provision of a conducive learning atmosphere results to a high academic achievement in the Kenya Certificate of Primary Education.

#### **CHAPTER THREE**

#### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter deals with research methodology of the study. It include research design, target population, sample size and sampling procedures, research instruments, instrument validity, instrument reliability, data collection procedures and data analysis techniques.

#### 3.2 Research design

The study adopted a descriptive research design. According to Mugenda and Mugenda (1999), a descriptive research is a process of collecting data in order to test hypothesis or answer questions concerning the current status for subjects under study.

#### **3.3 Target population**

The target population for this study was 2505. This included; 59 headteachers, 295 teachers and 2151 pupils in Tetu district, Nyeri county (District Education Office, 2012).

#### **3.4 Sample size and sampling procedure**

According to Mugenda and Mugenda (1999), 10-30 percent can be used as adequate sample for the study. Stratified sampling procedure was used for selecting headteachers and teachers and 30 percent was considered as adequate sample. Stratification helps to cater for various characteristics in the population for example males and females. Proportionate stratified sampling was used to select pupils and 10 percent was considered as adequate sample in large schools while the proportion would differ in small schools. Hence, the study sample was 18 out of 59 schools, 89 out of 295 teachers and 215 out of 2151 pupils.

#### **3.5 Research instruments**

The researcher used questionnaires only. Questionnaires were appropriate for the study since they collected information that was not directly observable as they inquire about feelings, motivation, attitude, accomplishments and experiences of individuals. The questionnaires are easy to administer and analyse. There were three sets of questionnaires; the headteachers' questionnaire (Appendix II) consisted of five parts which were geared towards school based factors influencing performance.

The teacher's questionnaires (Appendix III) had two parts geared towards teaching and learning process while the pupil's questionnaire (Appendix IV) covered general overview of the school based factors influencing performance. Structured and unstructured questions were used to help in collection of both quantitative and qualitative data.

#### **3.6 Instrument validity**

Content validity is determined by expert judgment whereby results obtained can be generalized to the whole or similar population. The instruments were scrutinized by supervisors to determine if they addressed all the possible areas that they should and whether the items in the questionnaire were adequate representation of all areas investigated. The instruments were pilot tested in two primary schools which would not form part of the sample study. Pilot study ensured accuracy, clarity and suitability of the research instrument. Validity refers to the measure of how well a test measures what it is supposed to measure (Kombo & Tromp, 2006).

#### **3.7 Instrument reliability**

A test retest method was used to estimate the degree to which the same results can be obtained with a repeated measure of accuracy of the same concept in order to determine the reliability of the instruments. The research instruments used were questionnaires for headteachers, teachers and pupils. The researcher administered the instruments to the same respondent in two pilot schools that would not be used in the actual study. Reliability of the research instrument is its degree of consistency after repeated trials (Mugenda & Mugenda, 1999). According to Orodho (2005), Pearson product moment correlation establishes the extent to which content of the instruments are consistent in eliciting the same response every time the instrument is administered. After questionnaires were administered twice, the Pearson's product moment correlation was used and computed using Statistical Package for Social Sciences (SPSS) computer program to determine correlation coefficient (r).

The formulae for determining r is given below

$$\mathbf{r} = \frac{n\Sigma xy - (\Sigma x) (\Sigma y)}{\sqrt{n\Sigma x^2 - (\Sigma x)^2 \sqrt{n\Sigma xy^2 - (\Sigma y)^2}}}$$

Where x is the score on test 1

#### y is the score on test 2

The correlation coefficient obtained from the three sets of questionnaires was 0.8412 for headteachers', 0.7321 for teachers' and 0.7411 for the pupils. Any research instrument with correlation coefficient between 0.7 and 1.0 would be accepted as reliable enough Gay (1992). The instruments were therefore deemed reliable since they had a high coefficient of above 0.7.

#### **3.8 Data collection procedures**

A letter of clearance was obtained from Department of Education Administration and Planning of the University of Nairobi. The researcher then sought for a research permit from the National Council of Science, Technology and Innovation (NACOSTI). A courtesy call to the D.E.O, Tetu District who wrote a letter to headteachers seeking permission to conduct a study in their schools. The researcher informed them of the intended study and booked appointment for administering of questionnaires to the respondents.

## **3.9 Data analysis techniques**

After data collection, the researcher cross examined the data to ascertain accuracy, completeness and uniformity. The data way analyzed and interpreted to provide meaningful final results. The data was analyzed using descriptive statistics. The data was presented in frequency tables, bar graphs and pie charts in order to answer the research objectives and questions. Statistical Package for Social Sciences (SPSS) computer software was used to analyze the data.

#### **CHAPTER FOUR**

#### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

#### **4.1 Introduction**

This chapter covers data presentation which was collected from 18 primary schools, the analysis and presentation. The results were presented based on the objectives of the study which were aimed at investigating school based factors influencing pupils' performance in KCPE in Tetu district, Nyeri County. The chapter begins with questionnaire return rate, demographic information of head teachers, teachers and pupils, followed by presentation and discussions of research findings based on the research question.

#### 4.2 Questionnaire return rate

Completion rate is the proportion of the sample that participated as intended in all the research procedures. All the 18 head teachers sampled returned the questionnaire marking a 100 percent return rate. Out of the 89 teachers sampled 85 returned the questionnaire marking a 95 percent return rate. Out of the 215 pupils sampled only 187 returned the questionnaire giving a return rate of 87 percent.

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

#### 4.3 Demographic data of head teachers and teachers

#### **4.3.1 Demographic information of the Head teachers**

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

The head teachers and teachers were requested to tick on their respective genders in order to find out whether gender could affect KCPE performance. The data was as represented in Table 4.1.

Gender			Teachers	
			Frequency	Percentage
Males	14	78	24	28
Females	4	22	61	72
Total	18	100	85	100

Table 4.1 Gender of head teachers and teachers

Data on the gender of head teachers indicated that there were more male head teachers than females as indicated by 78 percent and 28 percent respectively. The female teachers were either not willing to take the leadership position or had not been promoted to those positions. This could affect the girl child's effort to excel and hold top positions and this could affect KCPE performance. The data shows that there were more female teachers as indicated by 72 percent than males 28

percent. This means that boys do not have enough male teachers that they can look upto. It is imperative to have both genders of teachers well-presented so that pupils can benefit from their strengths.

#### 4.3.2 Age distribution of the head teachers and teachers

The age of both head teachers and teachers was considered an important factor which could affect KCPE performance. The study sought to find out the extent to which age could affect pupils' results.

Age (years)	Head teach	Head teachers		Teachers	
	Frequency Percentage		Frequency	Percentage	
20-30	1	6	19	23	
31-40	2	11	27	31	
41-50	12	67	23`	27	
51-60	3	16	16	19	
Total	18	100	85	100	

Table 4.2 Age distribution of head teachers and teachers

Majority of the head teachers were in the age bracket of 41-50 which represented 67 percent of the sample. The data indicated that age is an important factor for one to be promoted to be a headteacher. Many teachers were between 31 and 50 years of age. Both headteachers and teachers in those age groups are energetic and active and could influence KCPE performance. This concurs with Wamahiu (1995) who observed that the age of teachers in most schools form an important input variable which can have tremendous impact on school outcomes.

#### 4.3.3 Teaching experience of teachers and head teachers

The teaching experience of head teachers and teachers was considered as an important factor which could affect KCPE performance.

The information from the analysis was represented in Table 4.3

Number of years	Head teachers		Teachers		
	Frequency Percentage		Frequency	Percentage	
0-5	-	-	29	34	
6-10	4	22	12	14	
11-15	3	17	8	9	
16>	11	61	36	43	
Total	18	100	85	100	

Table 4.3 Teaching experience of Head teachers and teachers

The data in the table above revealed that majority of head teachers 61 percent and teachers 43 percent had a teaching experience of 16 and above years. This was a good indication that most schools had experienced headteachers and teachers who could understand the issues which might contribute to KCPE performance.

#### 4.3.4 Head teachers and teachers' responses on professional qualification

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

Qualification	Head teachers		Teachers		
	Frequency Percentage		Frequency	ncy Percentage	
B .Ed degree	8	45	8	9	
Diploma	6	33	21	25	
ATS	-	-	20	24	
SI	-	-	10	11	
PI	4	22	26	31	
Total	18	100	85	100	

Table 4.4 Head teachers' professional qualification

Findings indicated that majority of headteachers 8 (45%) had a bachelors of education degree while 6 (33%) had diplomas. This revealed that majority of headteachers were aware of the importance of high professional qualifications as they are key curriculum implementers in school. Their qualifications could affect KCPE performance. Some schools headed by graduate headteachers performed very well in KCPE. This is in line with Okumbe (1998) who identifies that professional qualification is important to head teachers as they are the implementers of the school curriculum and without appropriate academic qualification, such implementation may prove difficult.

The teachers' data indicated that 31 percent of the teachers had attained minimum qualification. Quality of teachers in terms of qualification and dedication could affect pupils' performance. Ochanda (1978) cited in Awuonda (2011) pointed out that quality of teaching staff is the main determinant of pupils' achievement in examinations. Chinelo (2010) observed that graduate teachers performed significantly better than non-graduate science teachers.

## 4.4 The influence of head teachers' professional support of teaching and learning processes on students in KCPE performance

Headteachers as the key curriculum implementers are expected to supervise the teachers' professional documents and follow up their teaching activities.

#### 4.4.1 Head teacher follow up on teachers professional documents

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

Rate of head teachers	Frequency	Percentage	
inspection			
Once a week	40	47	
Once a term	45	53	
Total	85	100	

Table 4.5 Frequency of headteachers' follow-up of teachers' work

The data revealed that majority of the head teachers checked teachers professional documents. Majority of teachers (53%) indicated that their documents were checked once a term. This showed that the head teachers did not check the teachers' documents as they ought to. The reluctance by head teachers' on checking professional documents of teachers may cause failure of teachers preparing the documents regularly. This would make teachers to teach unprepared which could ultimately contribute to poor performance.

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

#### 4.4.2 Teachers' response on frequency of supervision while teaching

Response	Frequency	percentage	
Yes	37	44	
No	48	56	
Total	85	100	

Table 4.6 Headteachers' supervision during teaching

The results that majority of the teachers were not supervised at any one time during the course of their teaching. When headteachers do not supervise teachers regularly, it may encourage lack of preparation which may affect teaching and ultimately affect performance. The schools where headteachers supervised teachers frequently performed better in KCPE than those which were not supervised frequently. Gold berry (2009) found out that supervision benefited teachers in their teaching duties and it helped them to improve on their performance.

#### 4.4.3 Teacher's preparation of professional documents

Teachers should conform to their professional ethics. The researcher therefore found it necessary that teachers should show the frequency with which they prepared their professional documents. Table 4.7 indicates their responses.

Documents	Always		Most times		Rarely	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Schemes	69	81	15	18	1	1
for work						
Lesson	40	47	29	34	16	19
plans						
Records	37	44	27	32	21	24
for work						
covered						
Lesson	41	48	26	31	18	21
notes						
Pupils	50	59	24	28	11	13
progress						
reports						

#### Table 4.7 Teachers' preparation of professional documents

Findings revealed that most teachers prepared schemes of work as represented by 81 percent of the teachers. Schemes of work guide teachers by showing the content to be covered within a specific time. Lesson plans were not prepared regularly as only 47 percent of the teachers prepared daily lesson plans, 34 percent prepared most times and 19 percent prepared lesson notes rarely. Failure to prepare lesson plans daily could cause poor KCPE performance as lesson plans enable teachers to

teach effectively and efficiently. Preparation of records of work was not well observed as only 44 percent of the teachers prepared daily, 32 percent prepared most times while 24 percent of the teachers rarely prepared the records. This indicated that for most of the teachers, it was not possible to make a follow up of covered work which could affect pupil's academic performance. Majority of teachers prepared lessons notes. However, 21 percent of the teachers rarely prepared notes. This meant that they went to class unprepared and this could affect pupils' academic performance. Preparation of progress reports was observed by most teachers as represented by 59 percent and 28 percent respectively. Some teachers 13 percent rarely prepared the records. The progress reports help teachers to make pupils' follow up and this could affect performance.

#### 4.4.4 Teachers' Frequency of giving tests

The role of the teachers in schools is to teach and give tests to pupils in order to assess their progress. The researcher wanted to find out how often the teachers ensure that teaching and learning is taking place in the school. This could be done through giving pupils tests. The analysis was presented in figure 4.1.

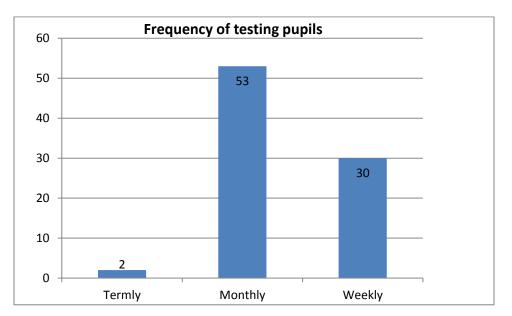


Figure 4.1 Teachers' response on frequency of testing pupils

It was evident that majority of the teachers gave examinations monthly as indicated by 53 teachers. Those that did weekly were 30 and 2 teachers said that they gave exams once a term. Examinations are very important in gauging pupils and help to identify their areas of weakness. Teachers said that they had a heavy work load. They said they could not give many tests due to lack of time for marking, analyzing and doing corrections. Examinations expose pupils to examination handling techniques and help them to gain confidence in doing examination. Doing few examinations could affect KCPE performance as schools that gave few tests were found to attain mean scores of less than 250marks while those that gave tests weekly scored 250marks and above.

#### 4.4.5 Effects of availability of teachers on KCPE performance

Staffing levels was considered to be a factor that could affect KCPE performance. The study therefore sought to find out the extent to which it could affect pupils' results. The responses were as indicated in figure 4.2

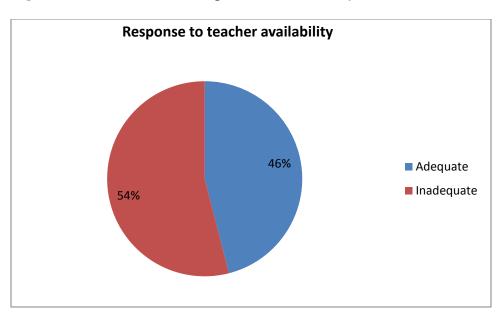


Figure 4.2 Head teachers' response on availability of teachers

The responses indicated that most schools had inadequate teachers as represented by 54 percent of the sample. Those were the schools which had pupil-teacher ratio of 40:1 or higher. Other schools indicated that they had adequate teachers as represented by 46 percent and they had pupil teacher ratio of 39:1 or less. Majority of schools did not have enough teachers which meant that curriculum objectives and activities were not well met and this could cause poor performance in examinations. It was found that some schools with adequate teachers performed very well in KCPE as compared to those which had inadequate teachers. Shiundu and Omulando (1992) assert that teachers facilitate and evaluate learning as professionals capable of rational decision making. Success in any KCPE performance depends largely on the availability of teachers.

#### 4.4.6 Teachers' response on adequacy of teaching staff

Teachers are directly involved with pupils as regards curriculum implementation. It was therefore considered important to enquire from them about their staffing levels. Their responses were as indicated in the Table 4.8

Adequacy of teachers	Frequency	Percentage
Adequate	38	45
Inadequate	47	55
Total	85	100

**Table 4.8 Teachers' response on staffing levels** 

Data revealed that teachers were not enough as represented by 55 percent of the teachers. Under staffing could result to heavy work load to the teachers leaving very little time for pupils' assignments which could contribute to poor performance in examinations. Nyatuka (2002) found out that many schools were understaffed which resulted to poor quality of education in those schools.

#### 4.4.7 Pupils' response on adequacy of staffing

Pupils are the ones that receive education from teachers. They were requested to respond to questions related to staffing levels. The responses were as indicated in figure 4.3.

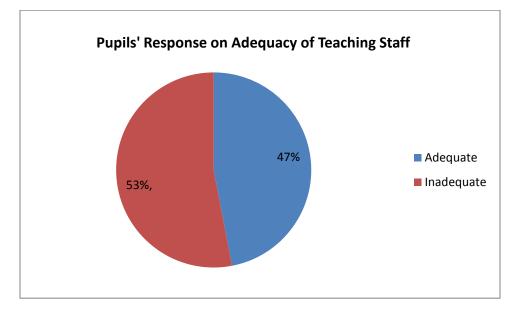


Figure 4.3 Pupils' response on adequacy of teaching staff

The pupils concurred with teachers and head teachers that they did not have enough teachers as reported by 53 percent of the pupils. This could influence KCPE performance due to lack of time for individual pupil's attention. Huebler (2008) found out that shortage of teachers contributed to poor performance in Bangladesh.

### 4.5 Head teachers' and teachers' response to work load

This was a very important variable to consider based on the assumption that it could affect KCPE performance in Tetu district.

Work load	Head teacher Frequency Percentage		Teacher		
			Frequency	Percentage	
Heavy	12	66.67	46	55	
Moderate	6	33.33	39	45	
Total	18	100	85	100	

Table 4.9 Head teachers' and teachers' response on working load

The data indicated that majority of head teachers and teachers concurred that the work load was heavy. Heavy workload denies teachers ample time to attend to individual needs. When work is moderate, teachers have sufficient time to attend to individual pupils. Both heavy and moderate workloads could affect performance.

#### 4.5.1 Relation of work load and lesson preparation by teachers

Heavy work load was expected to have an impact on lesson preparation. The researcher therefore found it necessary to request teachers to indicate whether they had ample time for lesson preparation. The response was presented in Table 4.10.

Table 4.10 Teachers	' rating of adequacy	of time for lesson	preparation
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Response	Frequency	Percentage	
Yes	31	36	
No	54	64	
Total	85	100	

The data revealed that the majority of teachers 64 percent had inadequate time for lesson preparation. Many teachers were not able to prepare lessons daily. Lack of time to prepare lessons could make teachers to teach unprepared and could affect pupils' performance.

#### 4.5.2 The teachers' responses on the effect of work load on syllabus coverage.

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

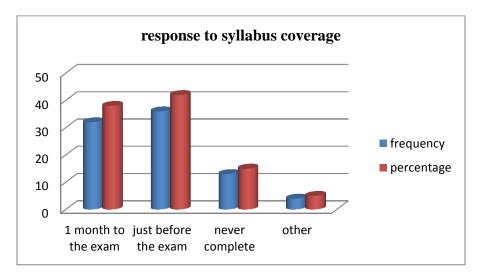


Figure 4.4 Teachers' response on syllabus coverage

It was observed that 42 percent of the teachers completed the syllabus just before the exams, while 38 percent completed one month before KCPE examination. Some teachers 15 percent never completed the syllabus. The results indicated that there wasn't enough time to do revision which is necessary before pupils do the final examination. Revision prepares learners with tactics to handle examination. This could affect KCPE performance.

#### 4.6 The effect of physical facilities on students' academic performance

Physical facilities were considered as important variables which could affect pupil's KCPE performance. The responses were as interpreted in Table 4.11

Facility	Adequate		Inadequate	e	Not availal	Not available	
	frequency	Percentage	Frequency	Percentage	Frequency	Percentage	
Classrooms	17	94	1	6		_	
Desk	14	78	4	22			
Libraries	_		13	72	5	28	
Toilets	13	72	5	28			
Play fields	6	33	12	67	_		

Table 4.11 Head teachers' response on facilities/equipment

The above data indicates that most schools had enough classrooms and desks. This was indicated by 94 percent and 78 percent of the head teachers respectively. However, 67 percent of the head teachers indicated that they had inadequate play fields which are very essential for pupils' co-curricular activities and this could

affect KCPE performance. Libraries were not available in several schools as represented by 28 percent of the head teachers' responses. Libraries are essential resource centres which help pupils to access a lot of educational information and lack of this facility could contribute to poor performance.

Heynemann and Loxley (1993) in their study on the effect of availability of physical facilities on academic performance found out that the presence of a school library, related significantly to achievement in Brazil, China and Botswana. Gebregeorgis (2010) also pointed out that libraries play a supportive role in education as lifelong learning centers. Village libraries in Uganda enhanced education by developing reading culture.

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

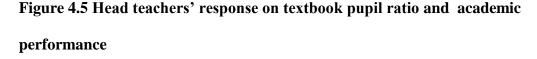
The teaching and learning resources could have an impact on KCPE performance. The resources include text books, revision books, exercise books, reference books and teaching aids like maps and charts.

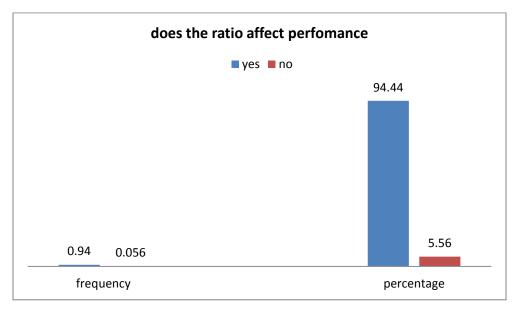
# Table 4.12 Teachers' response on adequacy of teaching and learning

#### resources

Response	Adequate		Inadequate	
	Frequency	Percentage	Frequency	Percentage
Class 8 text books	59	69	26	31
Teachers reference	53	62	32	38
books				
Revision books	25	29	60	71
Teaching aids	35	41	50	59

Findings from the teachers indicated that class eight text books were adequate as represented by 69 percent of the teachers. Textbooks help learners to access information easily. Teachers' reference books were also adequate as represented by 62 percent. However revision books and teaching aids were inadequate as represented by 71 percent and 59 percent respectively. Revision books help pupils to practice handling many exercises and teaching aids help to observe what is learnt. Shortage of revision books and teaching aids could contribute to poor performance in most schools in Tetu district. Fuller (1986) observed that institutional materials especially text books and library activity, are related significantly to achievement. Eshiwani (1988) pointed out that most schools which perform poorly spend less money on the purchase of teaching resources.





Most head teachers 94.44 percent indicated that text book to pupil ratio affect performance. Some schools with textbook pupil ratio of 2:1 posted good results in KCPE. The numbers of textbooks in a class determine the kind of learning environment. Enough textbooks enhance a comfortable learning atmosphere whereby pupils are able to access information with ease and they can cover more work on their own. These findings are in line with Ayoo (2002) who carried out a study on the factors affecting students' performance in KCSE in public secondary schools in Maseno Division. Majority of the respondents 85 percent indicated that inadequacy of textbooks was noted in schools which recorded poor performance.

# 4.7.1 Teachers' and students' responses on other factors that influence academic performance

The researcher thought that there could be other factors which influenced KCPE performance. Teachers and pupils were requested to name other factors that influenced performance and the responses were indicated in Table 4.13

# Table 4.13 Teachers' and students' responses on other factors influencing academic performance

Other factor	Teachers		Pupils	
	Frequency	Percentage	Frequency	Percentage
Lack of motivation	23	27	52	25
Poor public relations	25	30	30	14
Indiscipline	13	15	45	22
Laziness	45	53	60	29

Lack of motivation to both teachers and pupils could cause laxity and this could affect performance. Poor public relations between headteacher, teachers, pupils and parents could cause communication breakdown which could affect performance. Indiscipline and laziness were other factors that could influence performance. Indisciplined learners may spend most of their time away from school or doing punishment. Lazy learners may not finish assignments and this could affect their performance. All the above mentioned factors reflect on head teachers' role in supporting the whole learning process through staff management and performance management. Eshiwani (1983) pointed out that good performance in schools is relatively equated to good administration.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### **5.1 Introduction**

The study aimed at investigating school-based factors that influenced pupils' performance in KCPE in Tetu District. This chapter therefore highlights summary of the study, conclusions, recommendations and suggestions for further research.

#### 5.2 Summary of the Study

The study was guided by the following objectives; to determine the extent to which head teachers professional support influence pupils' academic performance, to determine how teachers' professional qualification influence pupils' academic performance, to determine how pupil teacher ratio influence pupils' academic performance, to determine how physical facilities influence pupils' academic performance, to establish the effect of provision of teaching and learning resources on pupils' performance.

The significance of the study was that from the findings, the headteachers would be able to re-examine their administrative style in order to improve pupils' performance. The teachers' would be able to re-examine their teaching methodologies in order to improve performance. The findings would be useful to the government, Ministry of Education, head teachers, teachers and parents to come up with interventions that could help to improve pupils' performance. The Ministry of Education in conjunction with teachers Service Commission would be enlightened to employ and post more teachers to the needy schools hence boost pupils' performance.

The study was based on the systems theory which assembles interdependent elements which function together as an entity to yield a product unique to assemblage. The study used descriptive research design which helped to answer questions concerning the status for subjects under study. The target population consisted of 59 primary schools in Tetu district which had 59 head teachers, 295 teachers end 2151 standard eight pupils.

Stratified sampling procedure was used to select 18 out of 59 head teachers and 89 out of 295 teachers. Proportionate stratified sampling was used to select 215 out of 2151 pupils. The research instruments used to collect data from respondents were three sets of self-administered questionnaires. The headteachers' questionnaires consisted of five parts which were geared towards school based factors influencing K.C.P.E. performance. The teachers' questionnaires had two parts geared towards teaching and learning process while the pupils' questionnaire covered general overview of school based factors influencing KCPE performance. Data was analysed by use of statistical package for social sciences computer software programme.

Findings revealed that there were school based factors which were responsible for K.C.P.E. performance in Tetu district. Head teachers' professional support was not adequate. Out of 85 teachers contacted 45(53%) reported that head teachers checked their professional documents only once a term while 40 (47%) reported that their documents were checked once a week. This could make teachers to relax in preparing the documents which guide them during their teaching process. This could contribute to poor K.C.P.E. performance in most schools in Tetu District.

Findings revealed that 31 percent of the teachers have the lowest professional qualification. Quality of teachers in terms of qualification and dedication could affect pupils' KCPE performance. Most schools in the district did not have adequate teachers. This was reported by 50 percent of the head teachers, 55 percent of the teachers and 53 percent of the pupils. This contributed to high pupil teacher ratio which increased teachers' workload leaving very little time for individual pupils' attention and this could affect pupils K.C.P.E. performance.

It was found that libraries were inadequate as was reported by 72 percent of the head teachers. However, 28 percent of headteachers reported that they had no libraries at all. Lack of libraries could affect the pupils' performance as libraries act as resource centre for both pupils and teachers. Findings on teaching and learning resources revealed that there were inadequate revision books as indicated by 71 percent of the teachers.

Teaching aids such as wall maps and charts were inadequate as reported by 51 percent of the teachers. Pupils learn more through revision and reading the displayed teaching aids. This could contribute to poor pupils KCPE performance.

### **5.3 Conclusion**

Based on the findings, it was concluded that:-

Head teachers did not provide enough professional support and this could affect KCPE performance.

Many teachers had minimum professional qualification. Quality of teachers in terms of qualification is essential for quality education and this could affect performance.

Schools did not have adequate teachers. This resulted to heavy teacher's workload which hindered individual attention. This could affect pupils' performance.

Schools did not have adequate physical facilities such as libraries and this could affect K.C.P.E. performance.

Schools did not have enough teaching and learning resources such as revision books, wall maps and charts and this could affect performance.

#### **5.4 Recommendations**

Based on the findings it was recommended that:-

- (a) Head teachers should carry out their professional role in curriculum supervision through checking teachers' professional documents regularly and supervising teachers as they carry out their teaching duties.
- (b) Head teachers and teachers should be provided with opportunity to raise their professionalism grades. This could be organized by providing teachers with in-service programmes through provision of funds by Ministry of Education.
- (c) The government should provide more teachers to needy schools in order to minimize the teaching load. This would enable teachers to work effectively and efficiently.
- (d) The head teachers, school committees and parents should be organized to raise funds for building and equipping libraries in order to improve K.C.P.E. performance.
- (e) The head teachers should ensure that the schools have enough revision books, wall maps and charts as they have the responsibility of buying required teaching materials in the schools.

### **5.5 Suggestions for further Study**

- (a) Since the study was carried out in Tetu District, a similar study should be carried out in other districts in the country for comparison purposes.
- (b) A study to establish the challenges facing primary school head teachers in curriculum implementation.

#### REFERENCES

- Asikhia, O. A. (2010) Students and Teachers Perception on the Cause of Poor Academic Performance in Ogun State Secondary Schools. (Nigeria): Implications for Counseling for National Development. European Journal of Social Sciences Vol. 13. No. 2 (2010)
- Awuonda, J. O. (2011). Determinants of Implementation of Christian Religious Education Curriculum in public Secondary schools in Migori District, Kenya. University of Nairobi. (Unpublished M. Ed Project).
- Ayoo, S. J. (2002). Factors Affecting Students' Performance in Kenya Certificate of Secondary Education in Public secondary Schools in Maseno Division. University of Nairobi. (Unpublished, M. Ed Thesis).
- Bertalanffy, L. Von. (1969). General Systems Theory. Foundations, Development Applications. New York: Braziller.
- Best, J. W. & Kahn, W. (2006) Research in Education. London: Bacon Press.
- Birgen, P. (2009). *Educational Insight: Focus on End in East Africa*: Nairobi. Image Books.Vol.2.
- Borg, W. R., & Gall, M. D. (1997). *Educational Research. An Introduction*. London: Longman Publishers.
- Carron, G., Chau, G., & T.N., (1996). *The Quality of Primary Schools in Different Development Contexts*. Paris: UNESCO.
- Chinelo, O. (2010). *Teachers' Qualification on Instructional Objectives Preference and Performance*. University of Ibadan. (Unpublished Thesis).
- Danesty, A.H. (2004). *Psychological Determinants of Academic Performance and Vocational Learning of Students With Disabilities In Oyo State*. University of Ibadan. (Unpublished PhD. Thesis).

- Duignan, R. (1986). Research on Effective Schooling; Some Implication for Improvement. Journal of Educational Administration. Vol. Xxxiv, No.1. Houghton Miffline: Boston.
- Republic of Kenya (2008). *Realizing Vision 2030 Goals Through Effective and Efficient Public Spending*. Nairobi: MOE.
- Eshiwani, C. S. (1993). *Education in Kenya Since Independence* Nairobi. East African Education Publishers.
- Estyn, B., Court, A. Keen, C. (2001). Good Practice in the Leadership and Management of Primary Schools in Wales. www.estyn.gov.uk/publications/leadership. Accessed 15th May, 2002.
- Fuller, B. (1986). Raising School Quality in Developing Countries. World Bank Discussion Paper. Education and Training Series. Retrieved 20<sup>th</sup> August, 2012.
- Gay, L. R. (1992). *Education Research Competencies for Analysis and Application* New York: Mackmillan Publishers.
- Gebregeorgis, Y. (2010). *Social Entrepreneur*. Retrieved 4<sup>th</sup> May, 2011 from http://www.ethiopiareads.org/program/publishingwikipedia.
- Gikonyo, W. H. (2009). School Based Factors Influence Students Academic Performance in KCSE in Public Secondary Schools in Taita District.. University of Nairobi. (Unpublished M. Ed, Project).
- Goldberry, L. (1997). "Do Teachers Benefit From Supervision? Yes," in Glanz. Neville, R.F. (Eds), Education Supervision: Perspectives, Issues, and Controversies, Christopher Goldon, Norwood.
- Good, T. L. 1989. Using Classroom and School Research to Professionalize Teaching. In School Effectiveness and School Improvement. Amsterdam, The Netherlands: Sweets Zeitlinger.

- Heynemann, S. & Loxley, W. (1993). The Effect of Primary School Quality on Academic Achievement across 29 High School and Low Income Countries. Journal of Social.Vol.88.
- Hoerr, T. P. (2008) Educational Leadership St. Louis: ASCD.
- Huebler, F. (2008). *International Education Statistics*. Huebler: blogspot.com/2008/11/ptr.htm/. Accessed 20<sup>th</sup> June 2009.
- IRIN (2009). Report Blast Primary School Education. Bangladesh: Vikas.
- Khaemba, (2009). *Quality Assurance and Standards in Schools*. Elimu News Journal. Vol. 1.
- Kombo, D. K. & Tromp, D.L.A. (2006). *Proposal and Thesis Writing. An Introduction*. Nairobi: Pauline's Publications Africa.
- Kumar, R. (2005). *Research Methodology: A Step by Step Guide for Beginners, 2<sup>nd</sup> Ed.* London: Sage Publications.
- Lorna, M. E. (2003). Assessment as Learning; Using Classroom Assessment to Maximise Student Learning. Ontario Institute of Education, University of Toronto: Corwin Press.
- Ministry of Education, (2008). *The Development of Education National Report of Kenya*. www.ibe.unesco.org/NationalReports/ICE 2008/Kenya.
- Ministry of Education Vision 2030. Sustainable Development. Report of Task Force. 31 January 2012-February 2012: www.vision2030.go.ke/cms/vds/task\_force\_final\_report\_feb\_20123.pdf
- Morumbwa J. (2006). Factors Influencing Performance on Kenya certificate of Primary Education (KCPE) in Nyamira Division, Nyamira District. University of Nairobi. (M. Ed. Project).
- Motanya J.O.(2011). Factors Affecting Students' Performance in KCSE. Case Study in Mandera East District. M. Ed, project. University of Nairobi.

- Mugenda, O. M. & Mugenda, A. G. (1999). *Research Methods Quantitative and Qualitative Approach Acts*. Nairobi: Nairobi Acts Press.
- Musau, S. M. (2004) Factors Influencing Pupils Performance in Kenya Certificate of Primary Education in Central Division, Machakos District. University of Nairobi. (Unpublished M.Ed. Project).
- Musungu, L. L. & Nasongo, J. W. (2008). "The Headteachers' Instructional Role in Academic Achievement in Secondary Schools in Vihiga District, Kenya." Educational Research and Review Vol. 3.
- Mwamwenda, (1989). *Educational Psychology. An African Perspective*. New York. Butterworths.
- Nannyonyo, H. (2001). Education Input in Uganda. An Analysis of Factors Influencing Learning Achievement in Grade Six. Washington DC: World Bank.
- National Institute for Educational Research, (NIER, 1995). *Re-orienting Secondary Education in Asia and Pacific.* Journal of Education.www.nie.edu.sg.
- Nebraska Synod (2009). *Textbooks for Tanzania*. Retrieval 5.8.2011 from http:books.com/Africa.org.htm/
- Njenga, A.& Kabiru, M. (2001). Early Children Development Practices and Reflections No. 14. Following the Footsteps, in the Web of Cultural Transition. A Tracer Study of Children in Embu District, Kenya. Bernard Van Leer Foundation.
- Norrag News, (2010). A Critical Review of Global Development Report With an Angle of Education Training. Norrag: Edinburgh.
- Nyatuka, B. (2002, July 1). *Challenges that Face School Administration*. Nairobi: The Daily Nation, Pg.21.

- Olaleye, F. O. (2011). Teachers' Characteristics as Predictors of Academic Performance of Students in Secondary Schools in Ogun State, Nigeria In European Journal of Educational Studies.
- Olembo, J., Wanga, P & Karagu, N. (1992). *Management in Education*. Nairob: Education Research and Publication.
- Orodho, J. A. (2005). *Elements of Education and Social sciences*. *Research Methods* Nairobi: Masola Publishers.
- Parry K. (2008). Friends of African Village Libraries. Chalula Library: Kampala.
- Republic of Kenya (1976). Report of the National Committee of Education Objectives of Policies. (Gachathi Report). Nairobi: Government Printer.
- Republic of Kenya (1981). *The Presidential Working Party on the Second University*. (Mackay Report).Nairobi: Government printer.
- Republic of Kenya (1988). A Report of the Presidential Working Party On Education and Man Power Training For The Next Decade And Beyond (Kamunge Report).Nairobi: Government printer.
- Republic of Kenya, (1999). *Report of the Commission of Inquiry into Education System of Kenya. Total Integrated Quality and Training*, (TIQET). (Koech Report). Nairobi: Government Printer.
- Shiundu, J.S. & Omulando, S.J. (1992). *Curriculum Theory and Practice in Kenya*. Nairobi: Oxford University Press
- Takahiro F. (2010, April 21). *Ministry Tries Increasing Page Counts to Halt Academic Slide*. The Japan Times Ltd.
- United Nations Educational Scientific and Cultural Organization, (UNESCO, 2007). Global Monitoring Report Regional Profiles/Child. ChildCareCanada.org/documents.

Uwezo Kenya (2011). Are Our Children Learning Annual Assessment Report.

www.pokot.org/wp-Content/uploads/2012/05/uwezo2011. Access date 15<sup>th</sup> May, 2012

World Bank (1987). School and Classroom Effects on Students' Learning in Thailand. Washington D.C: World Bank. APPENDICES

#### **APPENDIX I**

### **INTRODUCTION LETTER**

Mwangi Alice Wanjiku, University of Nairobi, College of Education, Department of Education Administration, P. O. Box 92, Kikuyu.

The Headteacher, .....Primary School,

Dear Sir / Madam,

#### **RE: PERMISSION TO CONDUCT RESEARCH IN YOUR SCHOOL**

I am a post graduate student undertaking Master of Education Degree at the University of Nairobi.

I am conducting a research study titled School Based Factors Influencing Academic Performance in KCPE in Tetu District. Kindly assist by allowing me to carry out the study in your school. You are assured that your identity will be kept confidential and the information you will give will be used for the research purpose only.

Thank you for your co-operation.

Yours faithfully,

Mwangi Alice Wanjiku

### **APPENDIX II**

#### **HEADTEACHER'S QUESTIONNAIRE**

This questionnaire is designed to gather data on the factors influencing students' academic performance in KCPE in Tetu District. Kindly answer the questions to the best of your ability. Please do not indicate your name or the name of your school anywhere on this questionnaire. Tick( $\sqrt{}$ ) where appropriate.

## Part A

### **Demographic Information**

- 1. Please indicate your gender.
- (a) Male []
- (b) Female []
- 2. Please indicate your age bracket.
- (a) 20 30 years []
- (b) 31 40 years []
- (c) 41 50 years []
- (d) 51 60 years []
- 3. What is your teaching experience?

a)	0-5 years	[]
b)	6 – 10 years	[]
c)	11 – 15 years	[]
(d)	16 years and above	[]
4.	What is your highest	professional qualification?
(a)	Masters	[]
(b)	B.Ed Degree	[]
(c)	Diploma	[]
(d)	Others (specify)	[]

# Part B

## **Academic Information**

- Based on the KCPE results, kindly provide your school's mean grade for the period 2010 – 2012.
  - a) 2010
  - b) 2011
  - c) 2012

7. In your opinion, does the availability of physical facilities influence academic performance?

- a) Yes []
- b) No []

Explain your answer above.....

#### Part C

(c) ATS

## **Teaching Personnel**

8. Indicate in numbers the categories of teachers in your school.

[]

- (a) Graduate teachers [ ]
- (b) Diploma teachers [ ]
- (d)  $S_1$  [] (e)  $P_1$  []

9. In your opinion, does the professional qualification of teachers affect students' performance?

- a) Yes []
- b) No []

10. What is the pupil teacher ratio in your school? .....

11. How do you consider this ratio?

- (a) Very adequate [ ]
- (b) Adequate [ ]
- (c) Inadequate [ ]

12. What is the average number of lessons per teacher per week?

(a) 30 lessons and below	[]
(b) 31 – 35 lessons	[]
(c) 36 – 40 lessons	[]
(d) Over 40 lessons	[]

- 13. How do you rate this workload?
- (a) Heavy [ ]
- (b) Moderate []
- (c) Light []

## Part D

### **Physical Facilities**

14. The table below shows some of the facilities in the school environment. By use of a tick ( $\sqrt{}$ ) indicate their level of availability and adequacy in your school.

	Name of facility	Adequate	Inadequate	Not available
(i)	Classrooms			
(ii)	Desks			
(iii)	Libraries			
(iv)	Toilets			
(v)	Playfields			

## Part E

## **Teaching learning Resources**

- 15. What is the student textbook ratio in your school?
- a) 1:1 []
- b) 2:1 []
- c) 3:1 []
- d) 4:1 []

16. In your opinion, does the above establishment of textbooks contribute to your school performance?

- a) Yes []
- b) No []
- 17. Below is a list of the basic teaching and learning resources that are necessary in a school for its effectiveness. Please tick ( $\sqrt{}$ ) against the statement that best describes their availability in your school.

	Teaching learning resources	Adequate	Inadequate	Not available
(i)	Class 8 text books for pupils			
(ii)	Reference books for teachers			
(iii)	Revision books for pupils			
(iv)	Teaching aids for example			
	charts, wall maps			

Thank you for your cooperation and participation

#### **APPENDIX III**

#### **TEACHER'S QUESTIONNAIRE**

The purpose of this questionnaire is to gather information on the school based factors influencing KCPE performance in Tetu District. Please respond to all items by filling in or ticking ( $\sqrt{}$ ) where appropriate. Do not write your name or that of your school for confidentiality purposes.

### **Demographic Information**

- 1. Please indicate your gender.
- a) Male []
- b) Female []
- 2. Please indicate your age bracket. a) 20-30 years []
- b) 31 40 years []
- c) 41-50 years [ ]
- d) 51 60 years []
- 3. What is your teaching experience?
- a) 0 -5 years []
- b) 6 10 years []
- c) 11 15 years []
- d) 16 years and above [ ]

- 4. What is your highest professional qualification?
- a) Bachelor's degree []
  b) Diploma []
  c) ATS []
  d) SI []
  e) PI []

## General information on academic work

(5) In your opinion, do the teachers level of professional qualification influence academic performance?

- a) Yes []
- b) No []
- 6. Does your school have adequate staffing?
- a) Yes []
- b) No []
- 7. Please tick the number of lessons you teach per week.
- a) 30 lessons and below []
- b) 31 35 lessons []
- c) 36 40 lessons []
- d) Over 40 lessons []

- 8. How do you rate this workload?
- a) Heavy []
- b) Moderate [ ]
- c) Light []

9. Do you have enough time for lesson preparation?

- a) Yes []
- b) No []

10. When do you normally complete the syllabus for your subjects?

- a) A month to examination []
- b) Just in time for examination []
- c) Never complete []
- d) Any other (specify) [ ]

11. Please indicate whether teachers in your school prepare the following documents.

Document	Always	Most times	Sometimes	Rarely	Very
					rarely
a) Schemes of work					
b) Lesson plans					
c) Records of work					
covered					
d) Lesson notes					
e) Pupils progress records					

12. How often does the head teacher makes follow up to ensure that the professional documents are prepared as required?

- a) Once a week []
- b) Once a term []
- c) Once a year []
- d) Not at all []
- 13. Have you ever been supervised in class while teaching by the head teacher?
- a) Yes []
- b) No []
- 14. How often do you test your pupils?
- a) Weekly []
- b) Monthly []
- c) Termly []
- d) Others (specify) []

15. Does regular testing improve academic performance?

- a) Yes []
- b) No []

Briefly explain you answer above.....

.....

16. Please tick against the statement which best describes the availability of the facilities listed below in your school.

Name of facility	Adequate	Inadequate	Not available
(i) Classrooms			
(ii) Desks			
(iii) Libraries			
(iv) Toilets			
(v) Play fields			

17. Given below is a list of teaching and learning resources that are necessary in a school for it to be effective. Please tick ( $\sqrt{}$ ) against the statement that best describes their availability in your school.

Resources	Available and	Available but	Not available
	adequate	inadequate	
(i) Class 8 textbooks			
(ii) Reference books for			
teachers			
(iii) Revision books for pupils			
(iv) Teaching aids for			
example charts, wall maps			

18. In your opinion, does the adequacy of teaching and learning resources influence pupils' academic performance?

Yes [] No []

19. How would you rate the quality of teaching and learning resources used in your school?

- a) Very high quality []
- b) High quality []
- c) Low quality []
- d) Very low quality []

20. In your opinion, which other factors influence academic performance in your school?

Thank you for your co-operation and participation.

#### **APPENDIX IV**

### **PUPIL'S QUESTIONNAIRE**

This questionnaire is designed to gather data about school based factors influencing KCPE performance in Tetu District. Kindly respond to all questions by ticking ( $\sqrt{}$ ) where appropriate. Do not fill in your name or the name of your school.

## **Demographic information**

- 1. What is your gender?
- a) Male []
- b) Female []
- 2. What age brackets do you fall in?
- a) Below 13 years []
- b) 13 15 years []
- c) 15 17 years []
- d) Over 17 years []

#### General information on academic work

- 3. How do you rate your school in terms of performance?
- a) Excellent []
- b) Good [ ]
- c) Average []
- d) Below average []

- 4. Do you have adequate teaching staff on all subjects in your schools?
- a) Yes []
- b) No []
- 5. How many students are you in your class? .....

6. How often do you do examinations?

- a) Weekly []
- b) Monthly []
- c) Once per term []
- d) Others (specify) []

7. Below is a list of basic facilities necessary in a school. Please indicate by ticking

Resource	Sufficient	Insufficient	Not available
i) Classrooms			
ii) Libraries			
iii) Toilets			
iv) Playfields			

( $\sqrt{}$ ) their availability in your school according to level of sufficiency.

8. Below is a table of teaching and learning resources that are necessary in school Please tick ( $\sqrt{}$ ) against the statement that best describes their availability in your school.

Resource	Available a	and	Available	but	Not
	adequate		inadequate		available
i) Class 8 textbooks					
(ii) Revision books for pupils					
(iii) Teaching aids for example charts,					
wall maps					

9. In your opinion, which other factors influence pupils performance in your school?.....

Thank for your participation and co-operation

# APPENDIX V

S/No.	School	Roll	2012	2011	2010	2009
1.	Ihururu Academy	55	351.51	332.28	360.4	366.36
2.	Stann Ihithe	15	346.67	334.83	314.4	340.73
3.	Rosewood	31	336.4	305.77	300.43	299.48
4.	Shama Academy	46	334.43	327.96	339.82	327.58
5.	Mukarara	40	329.13	329.52	341.76	340.73
6.	St. Anthony Academy	30	321.36	297.88	285.16	307.26
7.	Nyeri Steiner	15	311.27	315.33	329.16	305.5
8.	Eucabet	44	297.73	282.18	300.5	293.18
9.	Kiamutiga	21	288.57	247.12	281.97	230.31
10.	Stary	30	283.37	270.18	306.95	286.35
11.	Pcea Kiawaithanji	22	282.04	270.32	287.24	297.5
12.	Thageini Adventist	22	275.12	279.83	315.96	269.97
13.	Gatumbiro	19	271.24	210.88	221.99	247.39
14.	Gaithuri	30	270.76	235.54	249.2	249.52
15.	Miagayuini	25	269.52	242.17	244.46	241.47
16.	Compass	17	260.23	288.15	28.11	290.55
17.	Kiriti	63	259.47	250.49	237.61	238.25
18.	Enhakore	15	252.4	239.05	269.74	257.04
19.	Kahigaini	29	249.97	238.85	254.06	278.38
20	Huhoini	39	244	217.68	238.96	222.6
21.	Gathugo	50	243.94	215.58	220.94	202.89
22.	Kanjora	33	243.79	232.58	256.57	256.14
23.	Bright Star	26	241.85			
24.	Ihururu Primary	63	239.11	237.54	216.58	221.5
25.	Wamagana	136	237.89	229.92	237.85	235.7
26.	Gathathi-Ini	30	237.26	236	228.35	232.27
27.	Kagwathi	52	236.88	230.28	230.47	241.31
28.	Mathakwaini	37	236.27	233.54	256.97	249.52
29.	Wandumbi	24	236.17	245.03	234.51	250.25
30.	Kiandu	62	235.03	225	217.13	218.79

## **TETU DISTRICT KCPE PERFORMANCE 2009-2012**

31.	Nyaithee	17	234.94	195.08	202.38	178.1
32.	Ndugamano	57	233.37	280.17	236.69	259.1
33.	Mirichu	31	232.48	218.83	251.53	213.15
34.	Kaigonde	58	232.33	216.16	263.71	226.21
35.	Njoguini	23	232.22	239.05	223.3	219.34
36.	Githakwa	35	231.14	225.77	240.09	228.1
37.	Kigogoini	44	227.02	221.94	231.44	237.13
38.	Kiaraho	20	221.9	215.58	209.2	238.6
39.	Kihora	31	221.68	216.32	216.23	220.83
40.	Kihingo	15	221.07	211	207.65	254.67
41.	Ngooru	9	221	116.15	203.07	218.07
42.	Karanga	70	219.84	237.25	237.35	226.29
43.	Karo	27	219.74	218.13	217.88	234.44
44.	Gichira	48	217.98	204.39	205.3	196.92
45.	Gondo	19	217.94	210.81	234.4	207.75
46.	Kigwandi	47	216.97	207.26	197.53	203.85
47.	Karunaini	14	216.35	177.43	202.91	238.07
48.	Gathinga	42	216.17	211.42	211.41	226.65
49.	Mutahi-Ini	30	212.6	206.28	197.71	182.26
50.	Ihithe Primary	30	210.8	211.21	226.57	250.78
51.	Kariguini	38	210.63	176.97	178.97	170.43
52.	Gititu	34	210.29	222.83	188.15	182
53.	Gathuthi	44	207.75	212.06	217.18	241.31
54.	Kangaita	70	207.54	206.09	192.71	207.92
55.	Thageini	29	207.17	205.5	209.52	174.74
56.	Kiawaithanje	41	205.56	202.29	185.96	186.05
57.	Hubuini	29	182.68	210.46	230.99	221.5
58.	Kiaigi	43	182.32	195.74	206.69	194.66
59.	Kaiguri	45	169.22	160.67	175.48	179.43
	TOTAL	2151	245.15	235.52	240.37	244.1

# **TETU DISTRICT KCPE PERFORMANCE 2009-2012**

Source: D.E.O's Office Tetu

#### **APPENDIX VI**

#### **RESEARCH AUTHORIZATION LETTER**

REPUBLIC OF KENYA

# NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349, 254-020-2673550 Mobile: 0713 788 787, 0735 404 245 Fax: 254-020-2213215 When replying please quote secretary@ncst.go.ke

P.O. Box 30623-00100 NAIROBI-KENYA Website: www.ncst.go.ke

Date: 2<sup>nd</sup> May, 2013

Our Ref:

NCST/RCD/14/013/626

Alice Wanjiku Mwangi University of Nairobi P.O.Box 30197-00100 Nairobi.

#### **RE: RESEARCH AUTHORIZATION**

Following your application dated 26<sup>th</sup> April, 2013 for authority to carry out research on "School based factors influencing pupils' performance in Kenya Certificate of Primary Education in Tetu District – Nyeri County," I am pleased to inform you that you have been authorized to undertake research in Tetu District for a period ending 31<sup>st</sup> December, 2013.

You are advised to report to the District Commissioner and the District Education Officer, Tetu District before embarking on the research project.

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

## SAID HUSSEIN FOR: SECRETARY/CEO

Copy to:

The District Commissioner The District Education Officer Tetu District.

"The National Council for Science and Technology is Committed to the Promotion of Science and Technology for National Development".

#### **APPENDIX VII**

#### **RESEARCH PERMIT**

