

**TEACHER CHARACTERISTIC AND SCHOOLS EFFECTIVENESS IN
RELATION TO KENYA CERTIFICATE OF PRIMARY EDUCATION
PERFORMANCE IN PRIMARY SCHOOLS IN MANDERA WEST
KENYA.**

A Thesis

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In partial Fulfilment of the Requirement for the Degree
Master of Education Management and Administration

By

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DECLARATION A

I ADAN MAALIM HUSSEIN do hereby declare that this thesis on, teacher characteristics and school effectiveness in relation to KCPE performance in selected primary schools in mandera west Kenya, is my own and has never been presented for any academic award in any university or institution of higher learning.

Signed.....
Date.....30/4/11

DECLARATION B

I have confirmed that the work reported in this thesis was carried out by the Candidate under my supervision;

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APPROVAL SHEET

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DEDICATION

I dedicate this thesis to my beloved wife **HABIBA HAJI** and **SONs** and **DAUGHTERS** for being patient for the period I was away for studies

Signed.....

Date.....

ACKNOWLEDGEMENT

I wish to pass my best thanks and gratefulness to Allah who offered me this Golden chance of being alive and get opportunity to study. I also wish to thank my supervisor Dr (Mrs) Anumaka for her encouragement and inspiration. She was strict and demanded for high standards of academic work. Her enriching inputs through regular interaction guided me towards the production of this final work. I convey my appreciation to all the rest of my lectures at Kampala international university (KIU) and the administration for influencing my success.

Above all Glory is to Allah for without him nothing is possible. With Him all is possible.

Abstract

The study investigated the relationship between teacher characteristics and schools effectiveness with respect to pupils academic performance in selected primary schools in mandera west district, Kenya. The study objective include; to determine the teacher characteristics in terms of age, qualification, gender and experience, level of school effectiveness and level of pupils academic performance. The study employed across-sectoral correlation research design using mainly a qualitative approach on sample of 376 subjects selected from ten primary schools in mandera west Kenya. The population in the study included 10 head- teachers and 44 teachers from ten selected school bringing the total number of teachers to 54 and 322 pupils which brings the total number of the respondents to 376. Data was collected using questionnaire scored on five point likert scale. Data collection was processed using SPSS and was analyzed using frequency percentages graphs, correlation analyses. The study found that teacher characteristic and school effectiveness and pupil's academic performance had a significant relationship with pupil's academic performance. The study concluded that teacher characteristics, school effectiveness and academic performance are prerequisites for pupil's performance. The study recommended that to achieve good pupils academic performance in primary education government of Kenya, school administrations, teachers and stakeholders should ensure that there are proper teaching staffs in all primary schools in mandera west district to improve academic performance.

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LIST OF Abbreviations

ATS III-	Approved Teacher Status III
DEO-	District Education Officer
EDM-	Educational Management and Development
EFA-	Education for All
FPE-	Free Primary Education
GHCR-	Geography, History, Civics and Religion
GoK-	Government of Kenya
GPA-	Grade Point Average
IQ-	Intelligence Quotient
KCPE-	Kenya Certificate of Primary Education
KCSE-	Kenya Certificate of Secondary Education
KNEC-	Kenya National Examinations Council
MDG-	Millennium Development Goals
MoE-	Ministry of Education
NAEP-	National Assessment of Educational Progress
OPM-	Organization, Planning and Management
P1-	Primary Teacher Certificate 1
P2-	Primary Teacher Certificate 2
PDL-	Professional Development Programme

PRISM-	Primary School Management
SEN-	Special Education Needs
SES-	Social Economic Status
SFP-	School Feeding Programme
SMC-	School Management Committee
SPRED-	Strengthening of Primary Education
SPSS-	Statistical Packages in Social Sciences
SS-	Social Studies
SSR-	Social Studies and Religion

CHAPTER ONE

THE PROBLEM AND ITS SCOPE

Background Information

Studies examining teacher characteristic and schools effectiveness have been numerous and can be traced back many years. Among the earliest work, is the study by Coleman et al. (1966) who argued that teacher characteristic has more impact on academic achievement than school factors? Later, Heyneman and Loxley (1982 and 1983) studied pupil's achievement on the basis of family backgrounds and the characteristics of schools and reported that, in developing countries, the quality of schools and teachers had far more influences on pupil's academic performance compared to the impact of the family background. They argued that the earlier findings carried out mostly in Europe, North America and Japan about teacher characteristic and the effect on pupil's performance, were generalized to other countries including the developing countries. Yet, the impact of school effectiveness and the teacher quality is widely believed to be stronger in the poorer nations. Consistent with this argument, Fuller (1987) and Fuller and Clarke (1994) point out that in order to improve pupils' performance in developing countries, it is a prerequisite that the quality of school effectiveness be improved. Notwithstanding this, some authors, for example Baker et al (2002) argue that most schools in the developing countries are endowed with adequate resources that help them to performed in academic.

If we may know, considering the argument of Baker et al (2002) that most schools in developing countries have adequate resources, we probably know less, the effect of those resources on pupils academic

performance, and much less, the effect on pupils performance in Mandera west District. Effectiveness could be one aspect of quality of education which influences student's performance in KCPE. But there are other factors that impact academic performance, for example Academic qualification of teachers. This explains the policy changes that have been introduced in most countries including the developing countries to address quality of education (Hanushek, 2005).

Therefore, it can be deduced that multiple factors within and outside the school, affect pupil's performance. It is not possible to discuss all the factors exhaustively. As a result, research study focused on factors associated with teacher characteristic and school effectiveness. These factors are: pupil's academic performance teachers characteristic and school effectiveness.

Statement of the Problem

Regarding the district statistics examinations analysis observed in mandera west district is growing concern among stakeholders that the standard of education has been deteriorating. It is generally believed that formal education brings about economic success in the long run, and subsequent improvement of the quality of life (Nyamongo, 2000). In Mandera west district where majority of the residents have all along been pastoralists, education is now seen as an alternative way of generating economic prosperity partly because of ethnic clashes, competition over pasture and water points and environmental changes that have made livestock keeping a less glamorous economic activity. The study is focused on answering the question; what is the relationship between teacher characteristics and school effectiveness with respect to student academic performance.

Purpose of the Study

The purpose for conducting research on school effectiveness and teacher characteristic in relation to academic performance in KCPE in Mandera west district is informed by government policy papers and its commitment to international declarations on education.

In this regard, if investigation on causes of underperformance is not carried out and the necessary intervention is not applied, the suspected quality of education will continue to decline even further. In this case then, researcher afraid that, the people of Mandera west will be engulfed in the vicious circle of poverty. For this reasons, it is becoming increasingly difficult to ignore the case of poor performance.

Therefore, the study sought to fill this knowledge gap and set precedence for further research in the area. The outcome of these findings will help in planning for educational development in the district. On the other hand, it poses a challenge to the practitioners to be accountable for pupils' performance. Researcher motivated to carry out this research in Mandera west district, firstly, by the virtue of being a resident of the district. Secondly, being an education officer, researcher concerned with the provision of quality education especially when the government has invested so much through FPE. It is disappointing to find a whole generation succumb to academic ruin. Hence there is an urgent need to establish the causes of poor performance and also suggest possible solutions.

Objectives of the Study

The General objective of the study is to examine the relationship between teacher characteristics and school effectiveness with respect to pupils academic performance.

Research objectives.

In order to comprehensively investigate Teacher characteristic and schools effectiveness in terms of performance in KCPE in Mandera west district, the study objectives:

1. to determine the teacher characteristic in term of age, qualification gender and experience.
2. to determine the level of school effectiveness in terms of staffing, seating facilities, and textbooks in selected primary schools in Mandera west Kenya.
3. to determine the level of pupils academic performance.
4. to examine the relationship between teacher characteristic and school effectiveness in respect to pupils performance.

Research Questions

1. What is the characteristic of teachers in terms of age, qualification, gender and experience?
2. What is the level of school effectiveness in terms staffing, seating facilities and textbook in selected primary schools in Mandera west.
3. What is the level of pupils academic performance in Mandera west, Kenya
4. What is the relationship between teacher characteristics and school effectiveness with respect to academic performance of pupil in Mandera west, Kenya?

Hypotheses

There is no significant relationship between teacher characteristic and school effectiveness with respect to academic performance in mandera west Kenya.

Scope of the study

Content scope.

The study will focus on teacher characteristics and school effectiveness with respect to academic performance of Kenya certificate of primary education (KCPE)

Geographical scope.

Mandera west district is located at the Northern part of Kenya bordering Ethiopia. Covering an area of approximant 9749km². At the time this study was conducted, it had an estimated population of 163,000 people according to the most recent report of 2009 census in Kenya(The standard, 2010) This research covers the mandera west district. Livestock keeping is the main economic activity.

Time scope

The Study covers school effectiveness and teacher characteristic in relationship to KCPE performance for the last three years in Mandera west districts.

Significance of the study

The finding will enable educational policy makers to come up with policies to improve academic performance in mandera west district. The researcher may give inputs for further research work on

education especially north-Eastern Province's, which has very few researches on education. This is necessary for the improvement of academic performances in KCPE.

Operational Definition of key terms

School effectiveness is the degree of goal realization ie Attendance attitude and pupils academic achievement.

Teacher characteristics are judgement of his/her capabilities to bring about desired outcome of pupil engagement and learning.

Academic performance; refers to how the pupils deal with their studies and how they cope with or accomplish different task given to them by their teachers in order to achieve the desired learning and teaching performance.

Teacher development means to organized in service training to improve teacher quality and hence pupils academic performance.

KCPE means Kenya certificate of primary education

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

Researcher explored two distinct school-level factors in the following review of the literature; teacher characteristics and school effectiveness in relation to KCPE achievement.

School academic performance

Trends of KCPE performance in mandera west

Teacher characteristics

Factors associated with school effectiveness

School academic performance

According to Stevenson (2001), school performance or academic performance is multidimensional; it involves all the aspects of student's accomplishment in schools which include progress in core academic subjects such as mathematics, sciences and languages, as well as progress in other subjects such as athletics, music, the arts and commerce.

Researcher specific area of focus is level of academic performance. Educational performance is viewed as a discrepancy between a child's Intelligence Quotient (IQ) and his or her score on an academic test (West and Pennell, 2003). Plewis (1991) suggests that the main factors causing poor performance in education is the IQ. However, West and Pennell (2003) disagree with this view, arguing

that IQ tests are designed to measure intellectual capacity and not academic attainment.

Poor performance has been used in various contexts to mean; simply low achievement, definition, in absence of a universally accepted definition of such an important term. Due to the limitations and for the purpose of this research, the researcher interpreted poor performance. Therefore, in this discussion, poor performance is understood as the inability by pupils to attain the average mark of 250 or the inability to achieve individual's full potential.

Covington (2000) suggests that teachers play an influential role in pupil's academic performance goals. Conversely, students feel no obligation to be socially responsible, develop and sustain interest in school as individual or in helping their peers especially when they perceive that teachers have grossly failed to provide the required support to facilitate their learning Dray et al., 1999 cited in (Covington, 2000). Besides, the perception of teachers support of their students, are positively related with good pedagogical instructions and learning goals characterized by positive feedback (Wentzel, 1995). It is worth noting that the quality of teacher-student relationship is determined not only by teacher's personal action but the instructional environment in which learning takes place (Covington, 2000).

In conclusion, Covington (2000) argues that there is an association between achievement goals and academic performance noting that cognitive mechanisms play an important role in this relationship. In addition, performance goals are influenced by the existing classroom incentives. It is important to examine pupils,

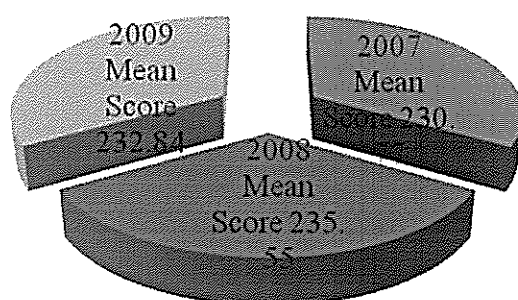
teachers ratio and school characteristics that affect academic performance.

Trends of KCPE Performance in Mandera west District

An analysis of KCPE results for Mandera west district for the last three years reveals some salient patterns that need to be mentioned. As shown in figure 1 , the district mean scores for 2007, 2008 and 2009 were 230.77, 235.55 and 232.84 respectively far below the average mark of 250. It is common knowledge that good quality secondary schools offer a cut point of 400 marks. In fact, even those secondary schools that perform relatively well admit students with 350 marks or if they are lenient, considering students from the marginalized areas, take those with at least 320 marks.

In this regard, a district mean score of less than 250 is to say the least, pathetic because what it essentially means, is that majority of the pupils never proceed to secondary schools and if they do, they join those secondary schools that record less than average performance in Kenya Certificate of Secondary Education (KCSE). Consequently, the chances to proceed to higher institution of learning become limited. From my experience as an EO (Education Officer) there are many students who completed primary education and even secondary education but were unable to join the next level because of poor grades.

Figure 1: Mandera west District KCPE Mean Scores for 2007-2009



Source: District Education Office KCPE analysis 2009

Tables 1 and 2 give a summary of schools performance with special emphasis on the number of schools with mean grade of 250 and also give the performance based on subjects.

Table 1: Number of Schools with Mean Scores of above and below 250 in KCPE.

Year	≥ 250	%	≤ 250	%	Total
2007	8 schools	32	17	68	25 schools
2008	7	28	18	72	25 schools
2009	6	22	21	78	27 schools

Source: District Education Office KCPE analysis 2009

In 2009 as shown in table 1, 21 out of 27 schools, translating into 78% had school mean score of less than 250. An analysis of the historical data on performance based on the subjects indicate that in 2008, only Science had a mean grade of above 50 compared to year

2009 in which three subjects namely, Mathematics, Science and SSR had average of above 50. A closer look at the results however reveals something worth noting. When the academies in the district are excluded (private schools), the mean score in all the subjects fall below 50 as shown in table 2. This is indeed very disturbing. Considering the majority of residents who are pastoralists with a few business people, many of them do not afford to send their children to academies that charge exorbitant tuition fees beyond the reach of many; although the academies, which are private schools, are known to perform better than public schools (Fraine et al., 2003). It is indeed up to the education stakeholders to try to reverse this disturbing trend in Mandera west.

Table 2: Analysis of Performance based on Subjects

Subjects	2008 Subject mean score	2009 subject mean score
English	39.16	46.65
Kiswahili	40.28	39.42
Mathematics	49.77	50.37
Science	51.86	52.15
SSR	49.89	50.37

Source – District Education Office KCPE analysis 2009

Teacher Characteristics

For a long time the question of how teacher characteristics affect pupils' learning has been a concern to economists, educators and parents. Consequently, the interest in teacher characteristics and the effect on pupils' achievement has prompted several studies that examine the effects of teacher characteristics on pupils' test scores (Angrist and Lavy, 2001). The literature below will shed light on the relationship between teachers' characteristics and students' achievement.

Teacher Experience and Education Level

Buddin and Zamarro (2009) find that teacher experience is weakly related to student performance, but teacher education level has no effect on student performance. On the other hand, studies by Jepsen (2005); Goldhaber and Anthony (2007), reveal that teacher's experience has a positive effect on the students' performance. It must be noted that not all studies support the positive association between experience and students' performance. In fact, Rivkin et al. (2005) maintain that the positive effect of test scores is evidenced by substantial improvement during the early years of teaching experience (3-5 years) but tapers off after the fifth year. In view of Rivkin et al.'s proposal, Hanushek (2005) points out that teaching ability is not closely related to the training or the experiences gained. Driven by the desire to establish the effect of experience on student's outcome, Kukla – Acevedo (2009) proposed a model of joint relationship between teacher experience and teacher quality to determine the effect on the students' outcome. The author argues that it is important to consider

teachers knowledge and skills when looking at the teacher input factor on the student achievement.

Clotfelter et al. (2007) report that various teacher credentials influence student performance. They further argue that the effects are particularly greater for mathematics. The distribution of teachers with different qualifications among classrooms and schools indeed matters. In certain circumstances, teachers with weak or low qualifications are assigned lower classes which have academically disadvantaged children. Consequently, the existing academic gaps in schools and in classrooms continue to widen (Clotfelter et al., 2007). From my experience as an EO, most P2 teachers are assigned lower classes where the foundation ought to be well established.

The subject of teachers' effectiveness to be able to impact on the performance of learners has been an issue of concern for a long time. In a study conducted in Gucha district of Kenya, Onderi and Croll (2009) report that teachers were positive about themselves, in terms of being effective practitioners. However, they had a weaker effectiveness in terms of translating their usefulness into good students' academic outcome, especially in the national examinations. In their study in Kenya, Hungi and Thuku (2010) report that those pupils who were taught by teachers who were good readers made subsequent impact on pupils' achievement in reading as opposed to pupils taught by teachers who were poor readers.

The role of a teacher cannot be under estimated. According to Hanushek (2005), a good teacher has the capability to increase the performance of a typical student, at least four percentiles in the overall distribution in one academic year. In addition, he notes that a team of

good teachers can remove deficits associated with poor performance in a school.

Teacher Development

Several studies have examined the relationship between teacher development and academic achievement of pupils. Rivkin et al. (2005) investigated the impact of schools and teachers in influencing achievement. They find that teachers significantly influence achievement in reading and mathematics. Hanushek (1995) suggests that various pedagogical factors such as time allocated to the pedagogical instruction and the application of written assignments influence students' academic performance.

Hanushek (2005) further argues that there is substantial evidence indicating that quality improvement, can be achieved and sustained from hiring and retaining better teachers instead of retraining the existing teachers. He does not disapprove the significance of in-service courses, but only points out past studies that, in-service courses have generally disappointed because they failed to make positive impact. In Kenya, a study by Ackers et al. (2001) indicate that teacher development programmes such as Strengthening of Primary Education project three (SPRED III) in Kenya had substantial positive impact on school achievement since it was supported by the school governance training and textbook provision. According to Villegas-Reimers, (2003), teacher development through in-service training improves teacher quality and hence, pupils academic performance. In addition, Herriot et al. (2002) examined Primary School Management course (PRISM), a programme for training head teachers on leadership and management

in Kenya in 1997. The results were positive towards effective school management.

Factors associated with school effectiveness

Effectiveness can be defined as the degree of goal realization. The definition of school effectiveness differs from one research to the next. Some researchers have focused on academic achievement in terms of basic skills in reading, mathematics or test results. Schools effectiveness poses the following qualities- Safe and orderly environment, Clear and focused mission, Climate of high expectation, Opportunity to learn and student time on task, Frequent monitoring of student progress, Positive home school relation, Strong instruction leadership.

The student academic achievement has been determined according to their scores taken from Kenya National examination council exams. Student achievements should and ought to be the basic products of effective schools.

Pupil Characteristics

For a long time, several researchers have identified pupil-level characteristics as predictor of achievement. In this relation, some of the literatures are examined below.

Prior Experience

Nurmi and Aunola (2001) conducted a study which focused on the psychological mechanisms that influence individual differences in an academic setting, and strategies associated with academic performance. They found that student's prior classroom experiences to

a greater extent influence their beliefs and feelings about themselves and their abilities and subsequently influences how they progress academically. They argue that an individual's prior success in an academic climate greatly influences the kinds of academic strategies they employ. For example, low academic performance and dissatisfaction subsequently leads to students' attitude of avoiding tasks. The task avoidance could be related to the assignments pupils are given and their reluctance to either complete it or not doing it seriously.

The significance of prior achievement is observed in Kenya where schools organize for comprehensive tests before they admit students; particularly in prestigious schools that have a record of good academic performance in KCPE (Hungu and Thuku, 2010). The same opinion is echoed by Fraine et al. (2003) who reveal that there are differential effectiveness in performance, between classes with higher performance and those with lower performance. The latter reflected lower performance. However, some studies report that the class level is far more important than the school level (Hill & Rowe, 1996; Scheerens et al., 1989). Once admitted, pupils are regularly facilitated through varied activities to enhance their performance. One of the methods is through homework.

Pupils' homework

Hungu and Thuku (2010) argue that pupils who were given more homework and had their home work corrected did better. In a recent report released by the Kenya National Examinations Council (KNEC) on monitoring of learner achievement for class 3 in literacy and numeracy in Kenya; it was reported that the overall percentage of pupils assisted with their homework at home averaged 51% (KNEC, 2010). Regular

homework is thought to boost pupil's achievement and avoid them repeat grades.

Age and Sex of Pupils

Pupils' characteristics such as age, sex and Social-Economic Status (SES) are believed to be predictors of performance. At the group level, pupil-teacher ratio, pupils' behaviour and SES are seen as predictors of performance (Hungu and Thuku, 2010). It is worth noting that being older in class six is a disadvantage especially in mathematics and in reading (Hungu and Thuku, 2010; Glewwe et al., 2004; Onsomu et al., 2005). In the neighbouring country of Uganda with similar social and economic conditions as that of Kenya; older pupils were reported to be engaged in household activities or work, hence had less time devoted to study at home (Nannyonjo, 2007). In addition, older pupils feel out of place, de-motivated and consequently dropped out of school.

A study of grade six pupils in Kenya by Hungu and Thuku (2010) reveals that boys perform better in mathematics compared to girls across all the provinces in Kenya. This is attributed to the teaching of mathematics in Kenyan primary schools; which is characterized by deficient instructional materials in class and culture of seeing mathematics and sciences as a male domain (Lloyd et al., 1998). These experiences and the perception, consequently, have effect on pupils' academic performance in Kenyan schools.

The main predictors of mathematics performance among stand eight pupils in Kenya are age, pupil's sex, pupil-teacher ratio, pupils' behaviour problems and average Social Economic Status (SES) at the class level (Hungu and Thuku, 2010). According to Heyneman and

Loxley (1983), the key predictors of student performance at the individual level are pupil-teacher ratio, age and SES. In addition, it was revealed that SES did not have significant impact on achievement compared to the teacher- pupil ratio and pupils' behaviour problems.

Jones and Myhill (2004) report that there is evidence of girls registering better achievement than boys in the UK. Similarly, in Kenya except in North Eastern province, girls achieved better than boys in literacy. The boys had minimal overall lead in Numeracy. Even then, girls in Central, Nairobi, Eastern, and Western provinces achieved more than boys in Numeracy (KNEC, 2010).

In terms of the group composition at the class level, Fraine et al. (2003) report that in classes with a high average initial cognitive ability or a class with the highest proportion of girls, the language achievement is higher. Their analysis indicates that the characteristics of a group of learners are important in reflecting differences in language achievement. Therefore, with whom one is taught has significant impact on how one is taught and the achievement obtained. It is generally believed that learners' perception of their ability is important in determining their academic attainment as well as other desirable outcomes in education (Githua and Mwangi, 2003).

Jones and Byrnes (2006) sought to examine the characteristics of students who took advantage to learn Algebra II from highly qualified teacher, it is reported that those students who felt frustrated when they learned Algebra II performed more poorly on the final assessment. This finding is consistent with the report made by WigWeld & Meece, (1988) who indicate that frustration overlaps with ability perception. Jones and Byrnes (2006) suggest that interventions in school should complement with intervention of outside school. For

example a 6 year old who is joining high quality class one environment should acquire relevant knowledge and skills and self-regulatory behaviour in pre-school. This reduces frustration as they join new environment.

School Resources

A study by Hanushek (2005) reveals that school resources are very important in influencing acquisition of cognitive skills. The absence of basic resources such as adequate facilities and textbooks has significant impact on performance. He further argues that spending more resources for the sake of it may not have the desired effect on students' performance, if those resources are not properly utilized. Dewey et al. (2000) find that teacher education, teacher salary, teacher-pupil ratio, and expenditure per pupil each have significant positive effect on test scores in the set of studies reviewed.

Consequently, inequalities are observed in terms of parent's socio-economic status, poor infrastructure and poorly qualified teachers, leading to poor quality of education. As a result, the KCPE performance ranking of the provinces have always put the provinces in the last positions. However, in terms of the availability of the physical facilities, the argument by Alwy and Schech is inconsistent with a recent report on literacy and numeracy achievement in Kenya, which concludes that 85% of the schools had permanent classrooms, while permanent toilets were 71.4% (KNEC, 2010).

The KCPE performances of the provinces have always put the provinces in the last positions. The KNEC report further concludes that 85% of the schools had permanent classrooms.

Jepsen (2005) suggests that teaching and learning materials are predictors of performance. Teachers who report that they had adequate teaching materials, were associated with remarkable gains in mathematics achievement. In this relation, Hanushek (1995), argues that a study carried out in Brazil and Egypt have revealed that it is important to have enough books and writing materials, because they tend to have significant impacts on student performance. In addition, a recent study on literacy and numeracy performance in Kenya, reports that teaching and learning facilities were inadequate; desks were found to be 45%; geometric sets 48.4%; rulers 47.2 %; wall maps 47.5% and library books 41.9% (KNEC, 2010). Of interest is the report teachers gave where nearly half of the teachers indicated that pupil's textbooks and teaching aids were adequate. The same survey in Kenya reports that according to nearly half of the teachers, the book-pupil ratio was 1:3 for mathematics (50.3%) and English (50.8 %) (KNEC, 2010). It also reveals that with exception of schools in Nairobi which had electricity connection, most of other primary schools in Kenya do not have electric lighting KNEC (2010). Perhaps this may partially explain why in Kenya, schools in urban areas tend to outperform those in the rural areas.

In Kenya, performance in science subjects has often been dismal (Ndirangu et al., 2003). This poor performance is partly blamed on the increasing school enrolment, without a corresponding increase in teaching resources. When teaching and learning resources are not available or adequate, there is the provision for improvisation. Teacher-pupil ratio refers to the number of pupils taught by one teacher. According to Hungi and Thuku (2010), schools that have low teacher-pupil ratio perform better compared to schools with large

teacher-pupil ratio. A recent study on literacy and numeracy achievement in Kenya indicates that none of the schools in Kenya have the required number of teachers, as per the staffing norm with exception of Nairobi. In all other provinces, the shortfall of teachers was reported to range from about 12 and above (KNEC, 2010). The implication of these findings is that, teachers in most schools continue to manage large number of pupils per class. Consequently effective teaching and learning may be hampered.

Conclusion

The review of the literature in this chapter reveals that pupil's academic performance is affected by several factors. They include: pupil's, teacher's characteristics and school's effectiveness.

Teaching and learning resources are inevitably vital for improving and sustaining pupils' academic performance. It is recommended that these resources should be mobilized and utilized appropriately. This can be reinforced through regular monitoring. Additionally, adequate teaching staff with gender consideration should be employed, or a method devised to fill the gap in the shortage of teachers. This reduces teacher's workload for effective service delivery. In addition, there should be proper time management.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

In this chapter, the researcher present a description of the various methods used in carrying out the study. The researcher organized them under the following viz;

Research Design

Population

Sample and sampling techniques

Research instrument

Data collection and procedures

Research Design

The research design used in this study was descriptive survey. It is also correlation. The study is used an ex post facto as it will examine staffing, textbook and performance associated with teacher characteristic such as qualification gender and experience of teachers.

Population

The target population of study was 25 primary schools which had presented candidates for KCPE for the last 3 years (2007, 2008 and 2009) in Mandera west district. These 25 primary have 25 headteachers 110 teachers and about 3200 pupils.

Targeted population

schools	no of teachers	no of pupils	No of male teachers	No of female teachers	Teacher pupil ratio
Banisa primary	8	600	5	3	1:75
Eymole primary	7	450	6	1	1:64
Derkale primary	6	400	5	1	1:67
Takaba primary	9	620	6	3	1:69
Lulis primary	5	250	5	-----	1:50
Guba primary	5	260	5	-----	1:52
Tarama primary	6	275	5	-----	1:46
Kiliwehiri primary	7	470	5	2	1:69
Cheracha primary	4	230	4	-----	1:58
Roqa primary	5	245	5	-----	1:49
Total	64	3035	54	10	1:49

Source: Primary data

Sample and sampling technique

Cluster sampling was used to classify the schools into urban, and rural; with five schools selected from each category bringing the total number to ten schools which were then used in descriptive servery. The participants in the study included 10 head- teachers and 44 teachers from ten selected school bringing the total number of teachers to 54 and 322 pupils which brings the total number of the respondents to 376.

Sampling is a process of selecting a number of individual for the study in such away that the individual will represent the larger group from which they are selected (Gay 1976). For this study both probability and non-probability sampling were used. According to Denscombe (2003) and Kombo and Tromp (2006), probability sampling involves random selection of samples in a population. They argue that each unit in a population has equal chance of being selected. In this study, The researcher employed stratified random sampling technique by categorizing all the public primary schools with class eight candidates into urban and rural schools. Stratified random sampling involves grouping the sample into homogenous subgroups (Kombo and Tromp, 2006). From each category five schools were selected randomly by assigning numbers to each unit in the respective category and randomly drawing from a cap. This process of sampling respectively provided each school in the two categories an equal chance of selection. Thus bias in sampling was avoided. It was anticipated that the mode of selection would produce results that would be generalized to other schools in a similar category.

Table 3: Showing population and sample size

category	population	sample	percentage	reason
school	25	10	40%	Small population
Headteachers	25	10	40%	Small population
Teachers	110	44	40%	Small population
Pupils	3200	322	16%	Larger population

Source; primary data

Research Instruments

There were two research instruments that were used in this research. These were questionnaires, and interview.

A questionnaire is a research instrument that gathers data over a large sample. Researcher used this technique mainly because of confidentiality and time saving. Question were administered to 44 teachers, 10 Head-teachers and 322 pupils and Most of the questions were likert type format with responses ranging from strongly agree to 1, to strongly disagree 5. The question was numbered for easy track them. The questions were also closed ended for easy analysis.

The researcher also interviewed, head-teachers, pupils in the selected primary schools to enable researcher to obtain more information on school effectiveness.

Oral interview technique was used thus case to strengthen the information gathered by the questionnaires. Relevant information that could not be revealed by the questionnaire was obtained through interview technique.

The researcher used the interview information in decision making analysed with result of data analysis.

Validity

The questionnaire was presented for face validity to my supervisor to eliminate questions not related to the work. Content validity was measured using content validity index,

$$CV = \frac{\text{Number of items rated as relevant}}{\text{Total number of all items in the questionnaires.}}$$

A validity index of 0.092 was obtained showing that the instrument and all its content are valid.

Reliability

The questionnaires were first administered to some respondents outside the population sampling to test its reliability. (Pre-test) A post-test was also done and index was calculated

A reliability index of 0.94 gives the researcher the confidence that the consistency was ensured.

Data Gathering

Before the researcher set off to collect data, the ethical approval forms were completed. This was followed by communication to the District Education Officer (DEO) requesting his approval to allow me conduct a research in the selected schools in the District (see appendices 3 and 4). This was confirmed in a telephone conversation

with the DEO granting researcher permission to conduct the study. His office communicated to the schools earmarked for the study. The data was therefore collected during the second week of the school term. With the aid of research assistants, the questionnaires were directly administered to the respondents in schools and respective offices. Each respondent was provided with serialized questionnaire and an envelope. They were given a time-line within which they filled questionnaire and returned in a sealed envelope to the researcher and this ensured confidentiality.

Data Analysis

In this study, the analysis of data is based on research questions. The procedure used were both qualitative and quantitative. The researcher analysed the data using **Spss** (statistical package for social science).

Ethical Consideration.

The information obtained from the respondents will be on voluntary basis. The research study was to generate the data which responded to the research questions and recommended ways for better performance in Kenya certificate of primary education (KCPE). The researcher also maintains the confidentiality of the respondents.

Limitations of the Study

The area is prone to banditry attack and tribal clashes, especially in the rural areas and this effect can easily spill to other areas which will lead to closure of the schools. From researcher experience external aggression which occurs from the neighbouring country (Ethiopia) as they pursue - the Oromo Liberation Front (OLF) rebels across Kenya- Ethiopia border. Evidence from the past indicates

that in such situation, schools were close for security reasons. During the study there was evidence of fear especially among the schools along the border, this posed a major limitation

The distance between the schools was a challenge because there were no reliable public means. This was certainly a constraint on time and meagre financial resource of the researcher.

Either way was a challenge, and this had effect of delay on the feedback obtained. Regarding the documents, the researcher encountered some resistance especially in getting administrative records, out of the suspicion of the head teachers that he might be under investigation.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Introduction

Various techniques were used to collect data on Teacher characteristic and school effectiveness in relationship to academic performance in schools as discussed in chapter three. The responses from the various respondents, documentations and the interview results were analysed and presented under various headings in this chapter. To be specific, the researcher used SPSS (Statistical Packages in Social Science) and Microsoft Office Excel to analyse data. The documentation accessed particularly the attendance register, and the examinations results were used to boost the analysis specifically in categorizing schools as high achievers and low achievers. Earlier in chapter one, the examinations results were used for the purpose of creating an overview of the topic under investigation. Therefore, as much as possible comparison between the high achieving schools by the standard of the District and low achieving schools are discussed and presented below. For ease of data presentation in the analysis, the researcher used abbreviations - head teachers (HTs) and pupils (ppls), B- boys, G-girls and T- total and TB- text books in this section.

Research question one

What is the characteristic of teachers in terms of age, qualification, gender and experience?

The first question of the study asked about age, gender, qualification and experiences. This section gives the characteristics of respondents in using cross tabulations of the characters of teachers

and students using a questionnaire filled by the respondent themselves.

The character of the respondents included aspects of gender, age, marital status, level of education and working experience filled on the questionnaire and the results are presented and analyzed in table 4 below are table four for clear clarification

Table 4: Showing the characteristics of respondent in terms of age, marital status, qualification, gender and experience

Profile	Description	Gender				Total	
Age		Male		Female			
		Freq	%	Freq	%	Frequency	%
	20-30yrs	16	29.6	4	7.4	20	37
	31-40yrs	7	12.9	2	3.7	9	16.7
	41-45yrs	12	22.2	2	3.7	9	25.9
	46-50yrs	9	16.6	2	3.7	6	20.4
	Total	44	81.5	10	18.5	54	100
Marital	Married	32	59.2	6	11	38	70.

status							4
	Single	12	22.2	4	7.4	16	29.6
qualification	Total	44	81.5	10	18.5	54	100
	Diploma	6	11.1	4	7.4	10	18.5
	Certificate	38	70.2	6	11.1	44	81.5
	Total	44	81.5	10	18.5	54	100
Working experience	5 years	15	22.3	4	7.4	19	35.2
	6-9years	6	11.1	3	5.6	9	16.7
	10-15years	12	22.2	2	3.7	14	25.9
	15 and above	12	22.2	1	1.9	13	24.1
	Total	44	81.5	10	18.5	54	100

Source; Primary data

Table 4 above shows that the head- teachers and teachers were mainly male representing 81.4% of the total number of respondents

while the female staff constituted only 18.5%. This finding generally suggests high gender disparity among the primary schools teachers and administrators in favour of male. This has implications in that the female students will have few role models to motivate them to become achieve higher heights in their academic endeavours. Among the male and female respondents, a majority of 35% of them were aged 20-30 years followed by 25.9% who were aged between 41-45 years. A total of 20.3% of the teaching staff were aged between 46-50 years while 16.9% of were aged between 31-40 years. One can conclude that the teaching staffs in primary schools was of a reasonable aged and could be presumed to have experience in pupils achievement.

Table 4 above further shows that among the male and female teaching staff, a majority of 70.2% were married while only 29.6% similarly, a majority of 18.5% of the teaching staff and school administrators had attained diploma education while those who had attained a primary certificate level constituted 81.5% of the total numbers of respondents a finding which revealed that the teaching staff and administrators were of a reasonable education level which will enhanced academic performance of pupils in primary schools in mandera west Kenya.

Research question two

What is the level of school effectiveness in terms of staffing, seating facilities and textbooks in selected primary schools in mandera west Kenya

School effectiveness

For the purpose of clarity, school effectiveness was examined under different headings. A close examination generated the following:

Staffing

A total of 54 teachers in the ten schools filled the questionnaires. Male teachers were 44 translating into 81.5%. In the rural schools, there were 15 male teachers rural (34%) compared to 29 male teachers in the urban schools. In the high achieving schools both in the rural and urban schools, there were more male teachers than female teachers. The data in table 5, give more information on staffing.

Table 5: showing Staffing Situation in schools.

schools	no of teachers	no of pupils	No of male teachers	No of female teachers	Teacher pupil ratio
Banisa primary	8	600	5	3	1:75
Eymole primary	7	450	6	1	1:64
Derkale primary	6	400	5	1	1:67

Takaba primary	9	620	6	3	1:69
Lulis primary	5	250	5	-----	1:50
Guba primary	5	260	5	-----	1:52
Tarama primary	6	275	5	-----	1:46
Kiliwehiri primary	7	470	5	2	1:69
Cheracha primary	4	230	4	-----	1:58
Roqa primary	5	245	5	-----	1:49
Total	64	3035	54	10	1:49

Source: Primary data

From the present study, most of the primary schools in mandera west district are under staffed and teacher pupils ratio in some schools are 1:75, 1:67, 1:64 at average in most of the schools which will make learning difficult in class. Study suggests that among other factors, teacher-pupil ratio has significant effect on test scores. Similarly, this study maintains that shortage of teachers was a significant factor that contributed to underperformance in KCPE.

Textbook Ratio

As shown in table 6 the ratio of text books to pupils in the five Key subjects are given. The cumulative percentage of responses by teachers on text book – pupil ratio of 1:4 and 1:5 were; 71.7%, for Mathematics, Kiswahili and English, Science 50 %, and GHCR 52.6%.

The average ratio of textbooks to pupils was 1:5 in all the ten schools. Regarding the Textbook-pupil, the responses were provided by a total of 44 teachers, 10 head teachers and 322 pupils in relation to the 10 schools.

Table 6: Availability of textbook for use by pupils

Schools	English	Kiswahili	Maths	science	SSR	T/B Ratio
Banisa primary	300	270	305	242	275	1:4
Eymole primary	295	268	315	238	291	1:5
Derkale primary	283	180	302	215	261	1:4
Takaba primary	320	268	321	274	268	1:3
Lulis primary	298	283	296	209	251	1:4
Guba primary	299	274	314	243	265	1:5
Tarama primary.	312	288	313	262	274	1:5
Kiliweheri primary	323	279	312	281	283	1:5
Cheracha primary	311	249	299	251	256	1:4
Roqa primary	298	242	279	256	276	1:5

Total	3039	2601	3056	2471	2700	1:4
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Source: Primary data

Pupils' Access to Text Books

Cumulatively, 75 % of teachers in high achieving schools and 88.9 % of pupils in low achieving schools respectively admitted that text books were available for use by pupils. At the same time there was mixed responses by the head teachers in the two categories of schools. Details of the responses are shown in table 6.

Seating facilities

The present study revealed mixed reactions regarding adequacy of seating facilities as displayed in table 7. Pupils admitted that in the high achieving schools, there were adequate seating facilities. On the other hand 50% of head teachers in high achieving schools indicated that seating facilities were not adequate.

Table 7: Showing adequacy seating facilities

Schools	Number of pupils	Number of desk	Ratio of desk.
Banisa primary	600	120	1:5
Eymole primary	450	94	1:5
Derkale primary	400	90	1:4
Tarama primary	620	125	1:5
Lulis primary	250	52	1:5
Guba primary	260	65	1:11

Tarama primary	275	68	1:4
Kiliwe primary	470	83	1:6
Cheracha pry	230	62	1:4
Roqa primary	245	58	1:4
Total	3800	817	1:5

Source: Primary data.

The study revealed that seating facilities are not adequate in all schools and a desk is shared by five pupils which will make writing difficult for the pupils.

Research Question three

What is the level of pupil's academic performance in mandera west Kenya?

Pupils Examination performance

From the data in table 8, the high achieving schools, boys were more than 60 % of the total number of candidates who sat KCPE in 2009. Between the rural and urban schools, of the total number of candidates who sat KCPE in 2009, boys comprised about 73%. And in terms of performance, table 8 displays the % of candidates who obtained 50 marks and above in KCPE in 2009. The performance of both boys and girls for each school in each category was worked out and the total number of candidates who obtained 50% and above in three key subjects examined. It was revealed that the performance of English in the two categories of schools for both boys and girls and even overall totals was below 50%. In both mathematics and science, boys performed better than girls on the whole in the two categories of

schools. A closer analysis further revealed that in one of the low achieving schools, none of the girls who sat for KCPE attained the average mark of 50%. Details of the analysis is illustrated in table 8.

Table 8: showing examination performance in KCPE per schools in 2009.

schools	English	Kiswahili	maths	science	SSR
Banisa primary	39.16	40.28	49.77	51.86	49.8
Eymole primary	46.65	39.42	50.37	52.15	50.7
Derkele primary	40.32	41.12	51.2	53.14	51.7
Takaba primary	42.31	40.45	50.38	52.0	49.17
Lulis primary	38.49	37.38	49.82	50.34	51.6
Guba primary	39.84	42.74	50.92	49.97	52.3
Tarama primary	36.63	38.58	49.42	50.13	51.4
Kiliwehiri primary	39.53	41.38	36.91	50.63	52.8
Cheracha primary	41.13	41.57	38.36	50.14	54.43
Roqa primary	38.49	36.32	31.82	49.20	49.89

Source: District education office KCPE analysis 2009

it was revealed that the performance of English in the ten categories of

schools for both boys and girls and even overall totals was below 50% which is the average marks scored in KCPE and this show that the performance is not good.

Table 9: showing schools overall mean score in KCPE Performance in 2009, 2008 and 2007 in mandera west district.

Schools	2009	2008	2007
Banisa primary	227.87	234.60	234:03
Eymole primary	239.29	265.59	250:14
Derkale primary	237.48	254.07	230:71
Takaba	233.31	225.31	235:55
Lulis primary	227.63	231.06	232:84
Guba primary	235.75	244.12	238:42
Tarama primary	229.16	231.95	234:12
Kiliwehiri primary	221.25	225.44	230:31
Cheracha primary	225.63	234.19	235:22
Roqa primary	205.72	190.46	214:45

Source: District education office KCPE analysis 2009.

In both categories of schools, the responses can be compared against KCPE performance of the sampled schools and the District overall mean scores for three consecutive years 2007, 2008 and 2009. Generally the performance has not been impressive. Table 9.

Research Question Four

What is the relationship between teacher characteristics and school effectiveness with respect to academic performance of pupils in mandera west Kenya?

Table 10: showing relationship between teacher characteristics and school effectiveness with respect to academic performance

Correlations

		Teacher Character istics	School Effectiveness	Academic Performance
Teacher Characteristics	Pearson Correlation	1.000	.768**	.337
	Sig. (2-tailed)	.	.009	.342
	N	10	10	10
School Effectiveness	Pearson Correlation	.768**	1.000	.171
	Sig. (2-tailed)	.009	.	.636
	N	10	10	10
Academic Performance	Pearson Correlation	.337	.171	1.000
	Sig. (2-tailed)	.342	.636	.
	N	10	10	10

** . Correlation is significant at the 0.01 level (2-tailed).

From the table above, following the size and direction of the hypothetical line that can be drawn from the data, there is a positive significant relationship between the teacher characteristics and school effectiveness (0.768), academic performance and teacher characteristics (0.337) and a medium significant relationship between school effectiveness and teacher characteristics (0.171).

CHAPTER FIVE

FINDINGS, CONCLUSIONS, AND RECOMENDATION

Findings

Introduction

The findings of the study are discussed in this section in relation to the literature reviewed on the topic under investigation. The essence of this chapter is to make critical links and reflections between primary data collected in the field, the theoretical and the secondary sources of data. This is with view of making relevant, consistent, reliable and valid generalizations on the findings hereof. This is with view of making relevant consistent, reliable and valid generalizations on findings hereof.

Major finding

Teacher characteristic

- The study find that majority of teachers in both high and low performing schools had PI qualification
- The ten schools that were sampled, male teachers comprised about 63% of the total number of teachers and female teachers are few compared to male teachers.

Level of schools effectiveness

- The study found that both high and low performing schools had adequate reference materials for teachers and learners

- Availability of teaching and learning resources do not have significant effect on pupils performance, rather it's the appropriate utilization of these resources that positively impact on academic performance.

Level of pupil's performance

- The study found that majority of the respondent in both high and low performing schools admitted that pupil's spiritual, moral and cultural development and schools attendance have impact on academic performance.
- The performance of the candidates in three key subject, English, mathematics and science revealed that, it was poorly performed, below 50%

Level of relationship between teacher characteristic and school effectiveness in relation to academic performance.

- The study found that there is positive relationship between teacher characteristics and school effectiveness in relation to academic performance

Teacher Characteristics

This investigation found that majority of teachers in both high and low achieving schools had a P1 qualification. According to KNEC (2010) majority of teachers hold P1 which is the minimum qualification for teaching in a primary school in Kenya. In addition, the study revealed that 35% of teachers in high performed schools and 55.6 % of teachers in low performed schools had an experience of more than five years. A P1 qualification and an experience of at least 5 years are

good enough to positively impact pupils' academic performance. But, the positive effect has not been realised in the current study.

Turning now to gender, from the ten schools that were sampled, male teachers comprised about 63 % of the total number of teachers. The male head teachers were 75%. This study conclusively revealed that there were more male teachers than female teachers in schools.

According to Buddin and Zamarro (2009), teacher education level has no effect on pupil's academic performance, while teacher experience is weakly related to pupil's performance. Hitherto, studies by Jepsen (2005); Goldhaber and Anthony (2007), reveal positive effects of teachers experience on pupils' performance. In a different perspective, Rivkin et al. (2005) maintain that positive effect of test scores is evidenced by substantial improvement during the early years of teaching experience 3-5, but tapers off after the fifth year. Going by Rivkin et al.'s argument that, the schools have been registering dismal performance because most teachers had an experience of over 5 years. However, according to Jepsen (2005); Goldhaber and Anthony (2007) this amount of experience should translate into positive academic gains. If researcher weighs the arguments of the two sides, researcher would suggest that consistent with Kukla –Acevedo (2009), it is important to consider teachers' knowledge and skills when determining the effects of teacher qualification and experience on pupils' performance. From the present study, there was no significant effect of teachers' qualification and experience on pupils' academic performance in low achieving schools. However, there was evidence of the high performing schools having more number of teachers with higher qualifications compared to the low achieving and probably had a positive effect on pupils' academic performance.

Regarding teacher characters in; classroom management, subject knowledge, setting good example and student performance in class and in KCPE, majority of the respondents attested to the effectiveness of teachers in the mentioned areas. But it was not positively reflected in pupils' performance in the current study, in both high and low performing schools. This argument is supported by Onderi and Croll (2009) who report that, although teachers were positive about themselves in terms of being effective practitioners, they did not translate this effectiveness into pupils' academic gains.

Level of School effectiveness

The results of this study indicated that in both high and low achieving schools, teachers had adequate reference materials consistent with the report by (KNEC, 2010). In addition Jepsen (2005) argues that teachers who reported they had adequate teaching materials translated this adequacy into proper utilization, culminating into significant gains in mathematics achievement. This study further revealed that overall; pupils had ample seating facilities and favourable book-pupil ratio of between 1:5 and 1:5. Similarly, it was found that pupils had sufficient essential writing materials such as; pens, pencils and geometrical sets. Several studies positively associate availability of these resources with performance for example (Hanushek, 2005; Jepsen, 2005). In contrast to earlier findings, however, this study has been unable to demonstrate significant positive relationship between the availability of resources and pupils' performance in both high and low performing schools, as shown by KCPE results in table 11. Yet the average mean score that schools were required to realize, but not limited to, was 250. Therefore, reasons for their continued poor performance in spite of being endowed with adequate resources

require to be revealed. A possible explanation is the suggestion put forward by Hanushek (2005), that availability of these resources are not in themselves predictors of performance but the appropriate utilization of these resources. Coupled with this finding, and perhaps of significance, was the evidence in the study that in both high and low achieving schools, teaching and learning aids were not adequately used in the classroom. Yet O' Sullivan, (2005) found that the use of such resources raised pupils' performance. Therefore, while making reference to the concept of academic performance;

Additionally, researcher examined the distribution of the male and female teachers and how they impacted pupils' performance. Interestingly, researcher established that the schools with better performance had more male teachers than female teachers. Besides, between the urban and rural schools that posted better pupils' performance, the rural schools had 90% of male teachers. Consequently, going by the analysis of the sampled schools, the implication of these results is that, there was disparity in the distribution of teachers: more female teachers were reported in urban schools more than in rural schools. In terms of performance, schools with more male teachers had better academic performance. Note however, the schools that were regarded as high performance by the standard of the District, were only considered so, because they appeared top in their category in KCPE results of 2009, but not necessarily an exemplary achievement.

The effectiveness of the schools is also revealed that majority of the respondents in both high and low achieving schools, indicated teacher-pupil ratio of 1:60 and over, interpreted in this study as teacher shortage. Suggest that among other factors, teacher-pupil

ratio has significant effect on test scores. Similarly, this study maintains that shortage of teachers was a significant factor that contributed to underperformance. Possibly, the schools regarded as high performed may have employed strategies to overcome teacher shortage. Inadequate teachers would have much workload and would not be able to sufficiently supervise pupils work, or pay special attention to pupil's individual needs. Subsequently, this leads to unsatisfactory service delivery.

Level of Pupils academic performance

Several pupil-level characteristics and their effect on performance were examined. These include; pupil's spiritual, moral and cultural development, school attendance, completion of homework, prior knowledge, examination performance and whether they enjoy being in school as well as their readiness to work in groups more than individually.

Majority of the respondents in both high and low performing schools admitted that pupils' spiritual, moral and cultural development and school attendance was good. This implies good discipline, which is essential for any positive learning. Consequently, good discipline was expected to translate into high academic performance. However, this was not the case in this study as reflected in the KCPE performance over the last three years. A closer analysis of KCPE results indicated that more boys sat for KCPE compared to girls.

In addition , the performance of candidates in the three key subjects; English, Mathematics and Science revealed that English was poorly performed with the % of those who obtained above 50 marks falling below 50% in all schools in the two categories. At the same time

boys performed better than girls overall in Mathematics and Science. This result is consistent with the findings by Hungi and Thuku (2010), that in all the provinces of Kenya, boys performed better than girls in mathematics. Researcher would therefore argue that probably there were circumstances that prohibited girls from adequate participation and any deliberate inconsiderate enforcement in educational participation may not yield any fruit.

In conclusion, various pupil characteristics impact their achievement including; their character, school attendance , learning difficulties, prior achievement, homework completion and their readiness to work in groups rather than working individually.

Comparison of high and low achieving schools

Majority of teachers were P1 and more of them were found in low performing schools. On the other hand number of teachers with high qualifications above P1 (ATS IV, Diploma and Graduates), were reported in high performing schools. Pupils' level of learning was reported to be more satisfactory in high performing schools than in low performing schools. More evidence of homework completion was reported in high performing schools than low performing schools.

CONCLUSION

The study sought to investigate teacher characteristic and school effectiveness in relation to KCPE performance in Mandera west District and also suggest possible solutions. Researcher was guided by some research questions developed and answer Research question. Therefore, in summary, the study revealed the following factors to be satisfactory overall towards contributing to academic performance in

the two categories of schools investigated: textbook-pupil ratio; availability of text books for use by pupils; teacher's reference. Seating facilities; utilization of school resources; pupil's spiritual, moral and cultural development; school attendance; teachers, school leadership and SMCs effectiveness in their work and pupils attitude towards learning.

Besides, the study revealed the following factors as less satisfactory towards contributing to pupils performance: supply and distribution of female and male teachers; use of teaching and learning aids in the classroom and utilization of learning time.

In conclusion, researcher have comprehensively discussed factors associated with pupils' performance in KCPE in Mandera wast District. The impeding factors to pupils performance were; inadequate teachers, failure to utilize available resources, failure by pupils to finish homework given, inaccessibility to refresher courses by teachers, improper accountability systems. Researcher want to point out that the interconnectedness of the various factors, significantly influence academic performance. Therefore, interventions in one area cannot independently contribute to overall positive performance. Hence there is need to design a mechanism for consolidated intercession.

This research has contributed to the existing research in many ways and proposed a new knowledge, with a suggestion of further investigation. For example, it has reaffirmed that adequacy and effective utilization of school resources, and effective administration, significantly affect pupils' academic performance. Secondly, the study has contributed to new knowledge by revealing an apparent relationship between teachers' characteristic and school effectiveness

in relationship to academic performance. Researcher would suggest further research on the differential effects of teacher's gender on pupil's academic performance.

Recommendations

- The responsible authority for education should convene a meeting and cultivate in the stakeholders the principle of effective administration at school. This should encompass; review of goals, establishing and reinforcing authority, providing incentives, capacity building, setting targets, monitoring, evaluating and reporting progress and finally, defining and reinforcing consequences.
- Assessment of the current state of knowledge and competence of pupils, teachers and school administrators to establish the areas of strengths and weaknesses and design appropriate remedies. Various teacher development techniques should be employed so as to equip them with pedagogical skills to adopt appropriate teaching and learning strategies. Furthermore the present study revealed positive impact of value added as a result of courses attended by teachers. Diversity in schools should be accommodated and appropriately managed.
- Teaching and learning resources are inevitably vital for improving and sustaining pupils' academic performance. It is recommended that these resources should be mobilized and utilized appropriately. This can be reinforced through regular monitoring. Additionally, adequate teaching staff with gender consideration should be employed, or a method devised to fill the gap in the shortage of teachers. This reduces teacher's

workload for effective service delivery. In addition, there should be proper time management.

- Incentives for all those involved in various school activities are essential. Recognition and appreciation through rewards for those who perform well and encouraging the underperformers, renews the will and the commitment of all those involved with the children.

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APPENDICES

APPENDIX 1: TRANSMITTAL LETTER



Ggaba Road - Kansanga
P.O. Box 20000, Kampala, Uganda
Tel: +256- 41- 266813 / +256- 41-267634
Fax: +256- 41- 501974
E- mail: admin@kiu.ac.ug,
Website: www.kiu.ac.ug

**OFFICE OF THE COORDINATOR, EDUCATION
SCHOOL OF POSTGRADUATE STUDIES AND RESEARCH (SPGSR)**

January 27, 2011

Dear Sir/Madam,

**RE: REQUEST FOR ADAN MAALIM HUSSEIN MED/10022/81/DF
TO CONDUCT RESEARCH IN YOUR ORGANIZATION**

The above mentioned is a bonafide student of Kampala International University pursuing a Master of Educational Management and Administration. He is currently conducting a field research of which the title is **"Teacher Characteristic and Schools Effectiveness in Primary Schools in Mandera West Kenya"** As part of his research work, he has to collect relevant information through questionnaires, interviews and other relevant reading materials.

Your organization has been identified as a valuable source of information pertaining to his thesis. The purpose of this letter is to request you to avail him with the pertinent information he may need.

Any information shared with him will be used for academic purposes only. Rest assured the data you provide shall be treated with utmost confidentiality.

Any assistance rendered to him will be highly appreciated.

Yours truly,


Mrs. Ivy Njeru
Coordinator, Education (SPGSR)

Appendix 11: Research Instrument

You are kindly requested to complete the score sheet. The feedback given will be confidential.

Score sheet for teachers

The characteristics of respondent in terms of age, marital status, qualification, gender and experience

Profile	Description	Gender				Total	
Age		Male		Female			
		Freq	%	Freq	%	Frequency	%
	20-30yrs	16	29.6	4	7.4	20	37
	31-40yrs	7	12.9	2	3.7	9	16.7
	41-45yrs	12	22.2	2	3.7	9	25.9
	46-50yrs	9	16.6	2	3.7	6	20.4
	Total	44	81.5	10	18.5	54	100
Marital status	Married	32	59.2	6	11	38	70.4
	Single	12	22.2	4	7.4	16	29.

							6
qualification	Total	44	81.5	10	18.5	54	100
	Diploma	6	11.1	4	7.4	10	18.5
	Certificate	38	70.2	6	11.1	44	81.5
	Total	44	81.5	10	18.5	54	100
Working experience	5 years	15	22.3	4	7.4	19	35.2
	6-9years	6	11.1	3	5.6	9	16.7
	10-15years	12	22.2	2	3.7	14	25.9
	15 and above	12	22.2	1	1.9	13	24.1
	Total	44	81.5	10	18.5	54	100

Source: from Head-teacher record.

APPENDIX III

SCORE SHEET FOR HEAD TEACHERS

You are kindly requested to complete the score sheet. The feedback given will be confidential.

Staffing Situation in schools.

schools	no of teachers	no of pupils	No of male teachers	No of female teachers	Teacher pupil ratio
Banisa primary	8	600	5	3	1:75
Eymole primary	7	450	6	1	1:64
Derkale primary	6	400	5	1	1:67
Takaba primary	9	620	6	3	1:69
Lulis primary	5	250	5	-----	1:50
Guba primary	5	260	5	-----	1:52
Tarama primary	6	275	5	-----	1:46
Kiliwehiri primary	7	470	5	2	1:69
Cheracha	4	230	4	-----	1:58

primary					
Roqa primary	5	245	5	-----	1:49
Total	64	3035	54	10	1:49

Source: Head-teachers office

Examination performance in KCPE per schools in 2009.

schools	English	Kiswahili	maths	science	SSR
Banisa primary	39.16	40.28	49.77	51.86	49.8
Eymole primary	46.65	39.42	50.37	52.15	50.7
Derkele primary	40.32	41.12	51.2	53.14	51.7
Takaba primary	42.31	40.45	50.38	52.0	49.17
Lulis primary	38.49	37.38	49.82	50.34	51.6
Guba primary	39.84	42.74	50.92	49.97	52.3
Tarama primary	36.63	38.58	49.42	50.13	51.4
Kiliwehiri primary	39.53	41.38	36.91	50.63	52.8
Cheracha primary	41.13	41.57	38.36	50.14	54.43
Roqa	38.49	36.32	31.82	49.20	49.89

primary					
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Source: District education office KCPE analysis 2009.

Schools overall mean score in KCPE Performance in 2009, 2008 and 2007 in mandera west district.

Schools	2009	2008	2007
Banisa primary	227.87	234.60	234:03
Eymole primary	239.29	265.59	250:14
Derkale primary	237.48	254.07	230:71
Takaba	233.31	225.31	235:55
Lulis primary	227.63	231.06	232:84
Guba primary	235.75	244.12	238:42
Tarama primary	229.16	231.95	234:12
Kiliwehiri primary	221.25	225.44	230:31
Cheracha primary	225.63	234.19	235:22
Roqa primary	205.72	190.46	214:45

Source: District education office KCPE analysis 2009.

Seating facilities in schools.

Schools	Number of pupils	Number of desk	Ratio of desk.
Banisa primary	600	120	1:5
Eymole primary	450	94	1:5
Derkale primary	400	90	1:4
Tarama primary	620	125	1:5
Lulis primary	250	52	1:5
Guba primary	260	65	1:11
Tarama primary	275	68	1:4
Kiliwe primary	470	83	1:6
Cheracha pry	230	62	1:4
Roqa primary	245	58	1:4
Total	3800	817	1:5

Source: From Head-teachers office

APPENDIX iv

INTERVIEW SCHEDULE FOR pupil

(i) Name of the school..... (*Optional*)

(ii) Gender: Male ☐ Female ☐

Please respond to the following statements. All questions relate to your overall assessment of schools in the case study.

What is your overall assessment of pupils' personal development and wellbeing in the following areas?

(A) School effectiveness

1. Pupils spiritual, Moral and cultural development.
2. Whether pupils like learning and enjoy being at school.
3. Pupils overall school attendance
4. Discipline among pupils (boys and girls)

(B) academic performance and Standards

5. Overall pupils' academic performance
6. Appropriateness of pupils' level of learning in each class
7. Level of pupils transition rate in each classes
8. Management of homework by pupils

(C) Teaching and learning Resources

9. Ratio of text books to pupils
10. Availability of text books for use by pupils

11. Use of teaching and learning aids in the classroom

12. Adequacy of seating facilities

(D) School leadership and management.

13. Effectiveness of school leadership and SMCs in raising pupils' achievement

14. Absenteeism among pupils, teachers, and head teachers

15. Utilization of school resources to enhance pupils' academic performance

16. Management of learning time towards the end of the term and beginning of the term

C. Overall teachers' characteristic and effectiveness in the following areas

- Class management
- Subject Knowledge
- Pupils performance in class
- Pupils performance in KCPE
- Language communication
- Proper time management
- Good relationships with learners

THANK YOU FOR ACCEPTING TO BE INTERVIEWED

Appendix v

DISTRICT EDUCATION OFFICE BANISA

PO BOX 59 TAKABA

12/3/2011.

The District Education officer Banisa

PO BOX 59 Takaba

12/3/2011

Dear Sir

RE Permission

I am a student in Kampala international university Uganda took a master course in Education administration and management. I wish to conduct a research study in your district on teacher characteristics and school effectiveness in primary schools.

The purpose of this letter is to request for permission to be allowed to visit your schools in the district between February 2nd to 13 March 2011 and interview teachers, Head-teachers and pupils in selected primary schools in the zone.

I will be glad to get the said permission.

Yours faithfully


ADAN MAALIM HUSSEIN

Appendix vi

RESEARCHER'S CURRICULUM VITAE

Name : **Adan Maalim Hussein**
Date of birth : **1970**
Home : **Mandera**
Nationality : **Kenyan**
Home address : **P.O.BOX 38 Takaba**
Tel No. : **0721263034**

ACADEMIC BACKGROUND

2009 – 2011 MED Kampala International University (KIU) -
On going

2002 – 2005 BED Kenyatta University (KU)

1990 – 1992 PTE Kamwenja Teachers College

1986 – 1989 KCSE Wajir High School

1979 – 1985 KCPE Mandera DEB Primary school

WORKING EXPERIENCE

- Deputy DEO Banisa district (2010 to Date)
- Assistant Education Officer (AEO), Golbo Division – Moyale District (2006-2009)
- Headteacher Banisa Boarding Primary Schools (1994 -2001)
- Senior Teacher Takaba Primary school (1992 -1993)

INTERESTS AND HOBBIES

- Reading news papers
- Volley ball
- Participating in conflict resolution

REFEREES

Mr. Enow Gulia

DEO – Mutomo

Tel: 0721 440868

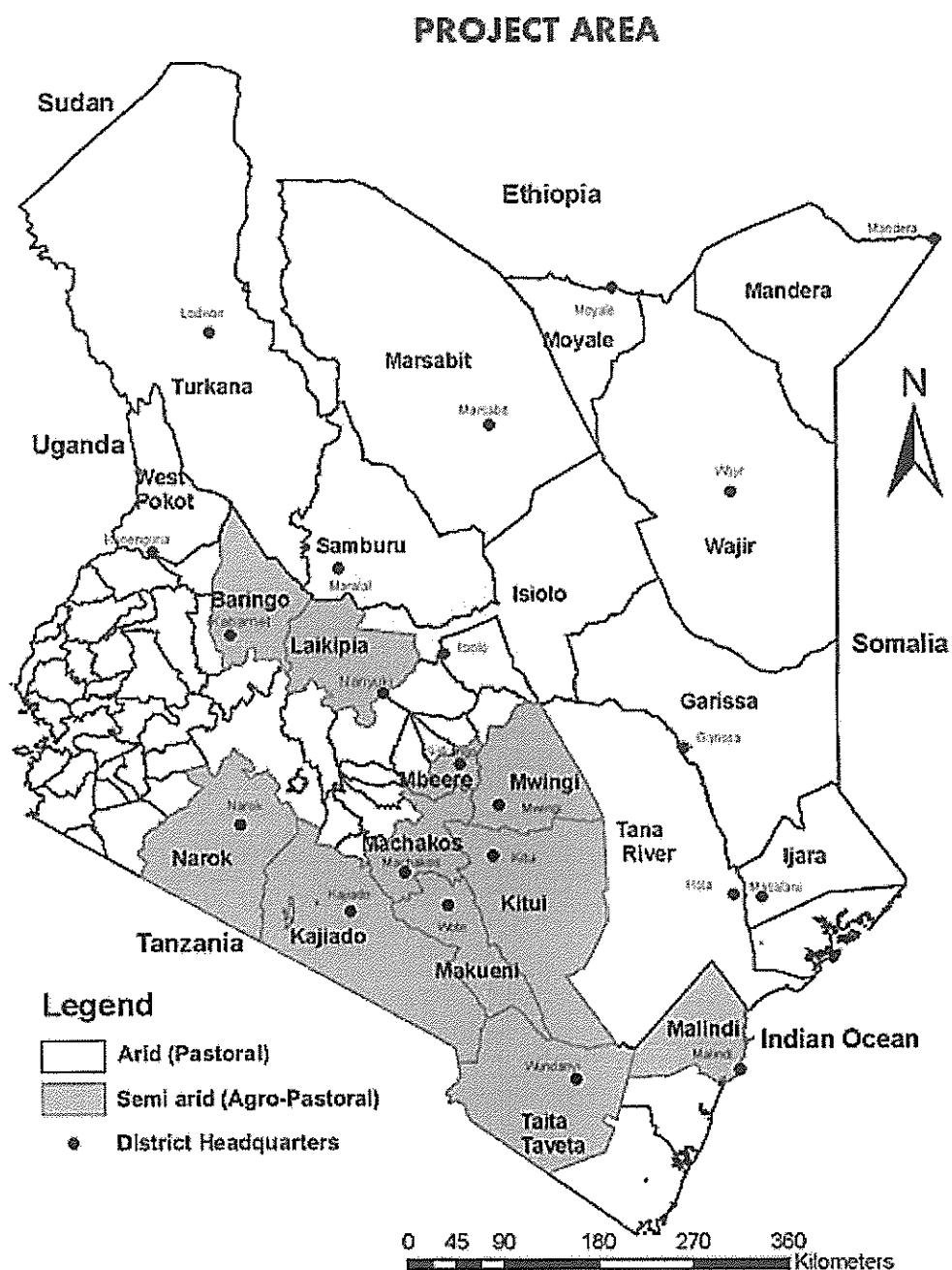
Mrs. Habibah Haji

Tel: 0723 139334

Abdinoor Malim Hussein

Tel: 0722795514

Appendix vii



Source; Aridland Resource Management Mandera.

APPENDICES

Appendix viii, Budget

<i>Items</i>	<i>Quantity</i>	<i>unit-cost</i>	<i>Total-ksh</i>
<i>Writing materials</i>	<i>10 ream</i>	<i>500</i>	<i>5000</i>
<i>Field-trips</i>	<i>21</i>	<i>4000</i>	<i>84000</i>
<i>Pens</i>	<i>23</i>	<i>15</i>	<i>345</i>
<i>Computer accessories</i>	<i>1</i>	<i>6200</i>	<i>6200</i>
<i>Total</i>			<i>95545/=</i>

