

**TEACHER QUALITY AND LEARNERS' ACHIEVEMENT IN
MATHEMATICS IN KIKUMINI PRIMARY SCHOOL IN
NZAUI DISTRICT, EASTERN PROVINCE OF KENYA**

BY

MUTISO RICHARD KIOKO

BED/18284/71/DF

**A RESEARCH REPORT SUBMITTED TO THE INSTITUTE OF
OPEN AND DISTANCE LEARNING IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR
DEGREE IN EDUCATION SCIENCE OF KAMPALA
INTERNATIONAL UNIVERSITY**

APRIL, 2010

DECLARATION

I declare that this research report is my original work and has not been previously presented for the award of a degree in any university.



DATE 23/4/10

MUTISO RICHARD KIOKO

APPROVAL

This research report has been submitted for examination with my approval as University Supervisor.



DATE 23/04/10

MR. GULEBYO MUZAMIR

DATE

DEDICATION

I wish to dedicate this research report to my lovely wife Penina and son
Dennis

ACKNOWLEDGMENTS

My first and foremost gratitude and appreciation goes to my supervisor Mr. Gulebyo for his encouragement, support and professional guidance throughout the research study and all others who helped me during this research.

TABLE OF CONTENT

DECLARATION	i
APPROVAL.....	ii
DEDICATION	iii
ACKNOWLEDGMENTS.....	iv
TABLE OF CONTENT	v
ABSTRACT.....	vii
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background of the study	1
1.2 Statement of the problem	1
1.3 Purpose of the study	2
1.4 Objectives of the study	2
1.4 Research questions	2
1.5 Significance of the study	3
CHAPTER TWO	4
REVIEW OF RELATED LITERATURE.....	4
2.0 Introduction.....	4
2.1 Teachers' motivation and performance of students in physics.....	4
2.2 Teacher qualification and pupils' achievement.....	5
2.3 Facilities in schools and performance of learners.....	6
CHAPTER THREE	8
METHODOLOGY	8
3.1 Research Design	8
3.2 Research Population/ Target population	8
3.3 Sample and Sampling Procedure	8

3.4 Research instruments	8
3.5 Research Procedure	9
3.6 Data Analysis.....	9
3.7 Ethical Consideration.....	9
3.8 Limitations of the study	10
CHAPTER FOUR	11
FINDINGS AND INTERPRETATIONS.....	11
4.0 Introduction.....	11
4.2 Teacher motivation and academic performance of students	13
CHAPTER FIVE.....	30
SUMMARY OF THE FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND AREAS OF FURE RESEARCH.....	30
5.0 Introduction.....	30
5.1. Summary.....	30
5.1.1 Teacher motivation and academic performance of learners	30
5.1.2 Teacher’s qualification and student’s achievement.....	30
5.1.3 School facilities and academic performance.....	31
5.2 Conclusion.....	31
5.3 Recommendations.....	31
5.4 Areas of further research.....	32
REFERENCES.....	33
APPENDIX A	35
QUESTIONNAIRE TO THE TEACHERS	35

ABSTRACT

The study was to establish the effects of teacher quality and learners' achievement in mathematics in Kikumini primary school in Nzau district, eastern province of Kenya and the research was guided by the following objectives; to determine if teachers' motivation affects academic performance of students in mathematics in Kikumini primary school, determine if teacher qualification affects academic achievement of students in mathematics in Kikumini primary school, determine if facilities at school affects academic performance of students in mathematics in Kikumini primary school.

The findings from the study indicated that motivation affects teachers performance, schools with motivated teachers performed better than those that did not motivate teachers, teachers who are not qualified do not teach well because they are not trained to teach which leads to poor performance of pupils, schools that did not have enough learning and teaching materials did not perform well compared to those with enough learning and teaching.

The ways to reduce absenteeism included improving the competence of teachers, improve school facilities, improve educator -learner relationship, introduce regular 'spot checks' for specific lesson truancy, rewards for pupils or classes with regular attendance, and Penalize students who are persistently late.

The research concluded that there was there is need to stop absenteeism decreases performance and therefore deserves attention.

Based on research findings the research recommended that government should make sure that all schools employ trained teachers who can teach mathematics with required methodology and mastery of the subject matter, rewards pupils or classes with regular attendance to encourage other people to do the same so that they can also get a reward next time, penalize pupils who are persistently late, include absence data on teacher record to make the teachers fear absenting themselves unnecessarily, put in place incentives programs that will help to improve attendance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Kenya Educational system has expanded significantly since independence, secondary education has played a significant role in supplying man power needed for economic growth and development in Kenya by creating a class of educated leaders, planners expect secondary schools and institutions of higher learning to produce the critically needed middle and higher level man power for enhancement of socio-economic development Herbison and Myers (1964)

The Education office noted that while performance in other subjects was above average, that of mathematics and sciences was much below the average. The quality of the teaching force, alongside the completion rates and transition rates, are some of the key determinants of efficiency and effectiveness at any level of Education. Ministry of education science and technology (2000)

According to UNESCO (1964), whatever the pattern of teaching may be, the teachers' part in it is the most important single factor. Given these views, the researcher intends to examine whether there exists a relationship between teacher factors such as experience, qualification, motivations, altitude and contact hours with the students performance in at Kenya Certificate of secondary Education in Nguu Division.

1.2 Statement of the problem

In spite of the efforts being put by various people and disciplines to ensure good performance in physics, there is still great foul to cry over the same The study therefore investigated teacher quality, and

motivation on academic performance of students in selected secondary schools of Kikumini primary school, Nzau district, Eastern province , Kenya. From the researchers personal teaching experience few schools motivate teachers even experienced, because they do not take it as something very serious and yet it is the most serious factor that can help improve the academic performance of students.

1.3 Purpose of the study

The purpose of the study is to investigate the effect of the mathematics teacher quality on the academic achievement of pupils of Kikumini primary school, Nzau district, Eastern province of Kenya.

1.4 Objectives of the study

The study seeks to investigate the following;

1. To determine if teachers motivation affects academic performance of students in mathematics in Kikumini primary
2. Determine if teacher qualification affects academic achievement of students in mathematics in Kikumini primary.
3. Determine if facilities at school affects academic performance of students in mathematics in Kikumini primary.

1.4 Research questions

The questions that directed this study were;

1. How do teachers' motivations affect the academic performance of students in mathematics in Kikumini primary school?

2. How does teacher qualification affect the achievement of students in mathematics in Kikumini primary school?
3. How do facilities at school affect the academic performance of students in mathematics in Kikumini primary school?

1.5 Significance of the study

The study will benefit the following disciplines;

Provide information that will be used by the ministry of education policy makers to improve the quality of teachers in order to ensure the academic achievement of students.

Increase awareness of the head teachers, board of governors and parents teachers association on the need to retrain teachers whose qualifications do not march the standards that are set for the teaching of physics.

It will also contribute to the existing literature about the need to have qualified teachers who are competent enough to teach pupils mathematics.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter reviews literature as an account of the knowledge and ideas that have been established by accredited scholars and experts in the field of study. It is guided by the objectives of the study outlined in chapter one

2.1 Teachers' motivation and performance of students in physics

Motivation in this context means; the act of using all the noble means possible to give somebody (teacher) heart to do what he/she is doing (teaching). Otieno (1997).

Teachers who spend time preparing lessons and marking homework and class work tend to achieve better result than those who don't. Colloids (1989).

Government need lift the teachers morale though most cannot afford monetary incentives, but by improving in rewards, career opportunities, initiatives and in service preparations, status and prestige by attracting high quality recruits and retaining talented practitioners in teaching and leadership posts UNESCO (1994)

But teachers hardly spend any time preparing their lessons, they often don't use schemes of work nor do they keep records of work covered by students s. Discipline relies too heavily on punishment. International Form of Education Development (2001)

Otieno (1997) studying the role — overload among secondary school teachers in Nairobi found a significant relationship between role — overload and achievements of students. He asserts that job stress is a

major factor in a teacher's morale, poor performance, absenteeism and high job turnover. Teachers experiencing job stress have low morale and are not in a position to provide quality teaching. Both Female and male workers in human service fields may experience same amount of stress but do cope differently, Malach and Jackson (1978).

This calls for the investigation on how much the teacher of mathematics is motivated to participate in subject panels, external examination marking, co-curriculum activities, regular teaching, frequent testing, lesson preparation and remedial teaching which facilitate high achievement in examination and consequently quality outputs. Cited in Otieno (1999)

2.2 Teacher qualification and pupils' achievement

Teachers should have high mastery of subject content by going through formal education, which is beyond the level of his students. Psacharopolous (1985). This is supported by Caillods (1989) who found teachers with more post secondary education to achieve more with their students than teachers with less post secondary education.

The economist is much more interested in the relationship between input and output of the school systems as a measure of its productivity and efficiency Beeby, (1966).

School quality can be seen at the level of materials inputs allocated per each school students and the level efficiency with which material inputs are organized to raise pupils' performance (Eshiwani 1993). The teacher is therefore a central input in the school system whose role on determining achievement needs investigation. Teacher certification and academic qualification are particularly important at upper primary level Alexander & Simmon, (1980).

This view is supported by Husein (1978) who says that there is a positive association between teacher training variables and standard learning. They are convinced that training teachers do make a difference and that teacher's qualifications, experience and amount of Education and knowledge are truly related to students' achievements. Maundu (1986), Twoli (1986) Sifuna (1989) and Ojwang (1995) found significant effect of teacher qualification on achievement of students.

But Thias and Corney (1972) on the other hand revealed zero correlation between teacher qualification and students examination scores in Kenya, Egypt and Paraguay. Psacharopoulos (1985) also points out that student do almost as well when studying under untrained teacher as they do when studying under trained graduate from University.

Jones (1997) studied the effect of trained and untrained teacher in classroom performance in Barbados and established that trained teachers do not have advantage over untrained teachers in classrooms performance. Therefore, there is need to confirm the effect of training on student's achievement which will help the government to justify the huge expenditure on teachers training. The past studies stress education on qualification but even after achieving almost 100% teacher training for primary level, the achievement in mathematics has remained low deteriorated to the detriments of girls.

2.3 Facilities in schools and performance of learners

The success or failure of primary schools is measured against the presence or absence of structures and facilities provision and management. Nsubuga (1977) holds the view that an important element of a good school is that of facilities. He emphasizes that a good school should have adequate facilities which help with teachers and students to effectively teach and effectively learn in a convenient and comfortable environment.

According to Kochhar (2001) physical facilities contribute a lot to the general atmosphere of the school. He suggests that healthy surroundings, good sanitary arrangement leave little scope for irritation. Adequate library and reading room facilities, special room for different subjects, common room and so will keep the children busy and away from indiscipline.

Musaazi (1982) and Ssekamwa (2000) agree that most programmes of instruction and pupils services require some physical facilities such as school building, school grounds, enough desks, chairs, teaching materials and laboratories needed in instruction and incidental to institution. The possession of adequate facilities in the school for studying is a characteristic of an effective school.

CHAPTER THREE

METHODOLOGY

3.1 Research Design

In this study, the design that was used consists of both qualitative and quantitative methods. Fieldwork was undertaken and this comprised of direct observation and questionnaires for the respondents.

3.2 Research Population/ Target population

The study comprised of 100 teachers and 90 students in Kikumini primary school, Nzau district, Eastern province, Kenya

3.3 Sample and Sampling Procedure

A total of one hundred and ninety respondents were used from the total population of the schools. A total of 160 respondents were picked to participate in this study. The teachers were picked using purposive sampling while the pupils were selected using random sampling.

3.4 Research instruments

- **Questionnaires**

These were used to collect information from teachers who were used for this study

- **Focus group discussions**

Discussions were carried on with the students.

3.5 Research Procedure

In carrying out research the researcher first got a release letter from the course administrators, which the researcher took to the schools under study. The researcher was then given permission by the authority to access information from the school.

3.6 Data Analysis

The study used both primary and secondary data Primary data was collected using Questionnaires which were given to teachers who participated in this study. Secondary data was through Document analysis in the form of reports, training manual, news papers, and journals for the period under study

Qualitative data involved three sets of activities; they included editing, coding and frequency tabulations. Editing was done by looking through each of the field responses from questionnaires and interview guides ascertaining that every applicable question has an answer and all errors eliminated for the completeness, accuracy and uniformity.

The researcher then proceeded on to coding the various responses given to particular questions that lack coding frames, he then established how many times each alternative response category will be given an answer using tally marks which were later added up. Data was then presented in frequency tabulations rendering it ready for interpretation. Quotations and field notes made were also included.

3.7 Ethical Consideration

In ensuring that the respondents give the required information with out fear of disclosing their opinions to the authorities, they were assured that the research was purposely for academic reasons only and it was not meant to evaluate their qualities to school authorities.

3.8 Limitations of the study

Some of the respondents were not willing to share with the researcher some of the information that they may consider as confidential to them but the researcher promised to keep the information got as confidential and only for academic purpose.

Language barrier is expected as a problem where some of the respondents cannot express themselves well and some of the questions are likely to be misunderstood, but the researcher helped interpret the questions to the respondents.

Limited literature on information technology and quality service delivery in libraries around shall make the study to be restricted to use a few literature materials that researcher shall manage to access.

CHAPTER FOUR

FINDINGS AND INTERPRETATIONS

4.0 Introduction

The chapter is a presentation; interpretation and discussion of the findings. The results are presented in form of tables and frequency counts and percentage. It focuses on Teacher quality on academic achievement in mathematics in Kikumini primary school, Nzau district, Eastern province Kenya.

4.1 Profile of the respondents

Table 4.1: Shows the profile of the respondents

Respondents	Frequency	Percentage
Sex		
Male	50	56
Female	40	44
Total	90	100
Age		
19-24 yrs	25	28
25-30 yrs	30	33
31 and above	35	39
Total	90	100
Academic level		
Certificate	20	24
Diploma	40	44
Degree	30	32
Total	90	100

Source: Primary data 2009

One hundred 100 questionnaires were distributed to the teachers and 90 were filled and returned .This therefore represents 90 % of the total number of questionnaires that were distributed.

The study covered 90 randomly selected students of whom 50 (46%) were male and 40 (44%) were female

The age category of the respondents was divided in three groups that is 19- 24 years were 25 which was 28%, 25-30 yrs were 30 (33%) and 31 and above were 35 representing(39%) of the respondents.

The academic level of the respondents was divided in three categories that are certificate, diploma and degree. 20 (24%) of the respondents, 40 (44%) had diploma and 30 (32%) had degrees.

Focus group discussion were carried out with students both boys and girls

4.2 Teacher motivation and academic performance of students

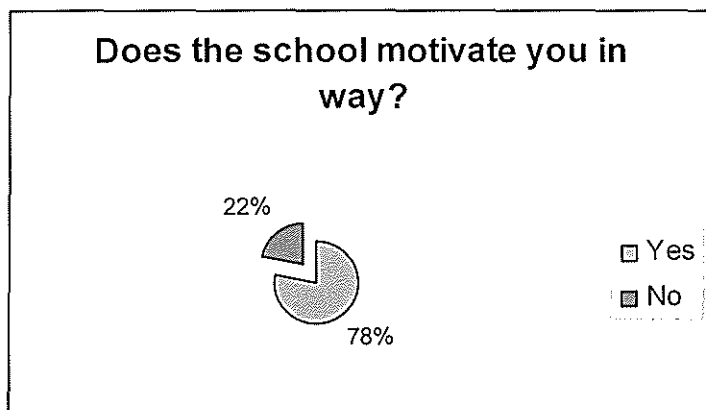
The respondents were asked whether the school motivates them in any way and this was their response

Table 4. 2 Does the school motivate you in anyway?

Response	Frequency	Percentage
Yes	70	78
No	20	22
Total	90	100.

Primary data 2009

Figure 4.1 shows how the school motivate them in way



According to the table and chart, majority-70(78%) of the respondents agreed that the school motivates them in any way while minority-20(22%) disagreed.

It was established that in some schools the teachers were motivated to boost their performance while some schools did not bother at all as long as they paid them their salaries. However the study found out that schools that did not motivate teachers performed poorly compared to schools that motivated them. This agreed with UNESCO (1994)

The respondents revealed that the schools motivated them by giving those allowances like weekend allowances, medical allowances and also prepared good meals for them. In some schools it was revealed that teachers who performed well in all things for example punctuality and teaching well were given prizes.

The respondents were asked whether motivation has affected their performance and this was their response

Table 4. 3 How has motivating you affected your performance?

Response	Frequency	Percentage
Yes	50	56
No	40	44
Total	90	100

Primary data 2009

Majority-50(56%) of the respondents agreed that motivating them has affected their performance while minority-40(44%) disagreed

Pupils from schools where teachers were motivated revealed in focus group discussions that their teachers performed well in class and that they clearly understood what they were taught. This agreed with Otieno (1997).

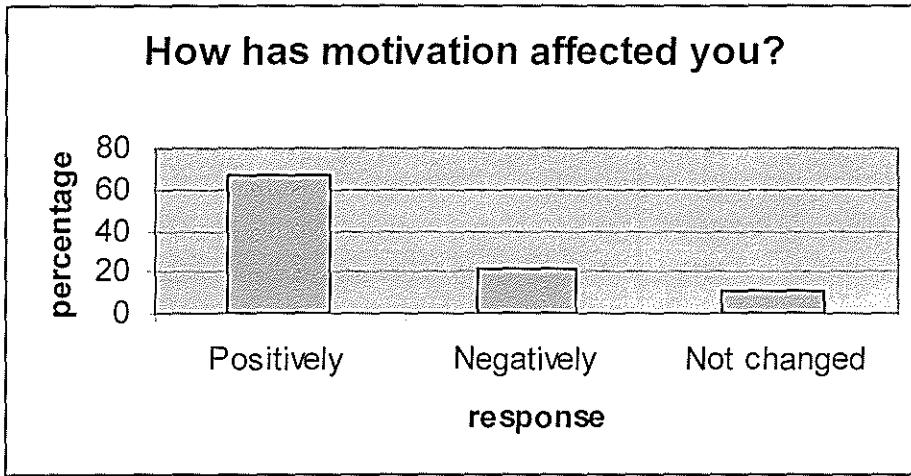
The respondents were asked how motivation has affected them and this was their response

Table 4.4; How has motivation affected you?

Response	Frequency	Percentage
Positively	60	67
Negatively	20	22
Not changed	10	11
Total	90	100

Primary data 2009

Figure 4. 2



According to the table and chart majority-60(67%) of the respondents said that motivation has affected them positively while minority-20(22%) said negatively and 10(11%) said there has been no change

The study found out that in schools where teachers were motivated the comes had been positive and those who said that motivating them yielded no result were mostly from schools where teachers were motivated. In agreement with CoHoids (1989).

Students mentioned that motivation yields positive results because the teacher enjoys teaching which means that children also enjoy and the school benefits because the academic performance of students is improved and this increases retention and enrollment.

The respondents were asked how motivation has affected the performance of students and this was their response

Table4.5; How has motivation affected the performance of students?

Response	Frequency	Percentage
Has improved	65	72
Has deteriorated	15	17
Has not changed	10	11
Total	90	100

Source: Primary data 2009

Majority-65(72%) of the respondents said that motivation has improved the Pupils' performance while minority-15(17%) said it has deteriorated and 10(11%) said that it has not changed the pupils' performance.

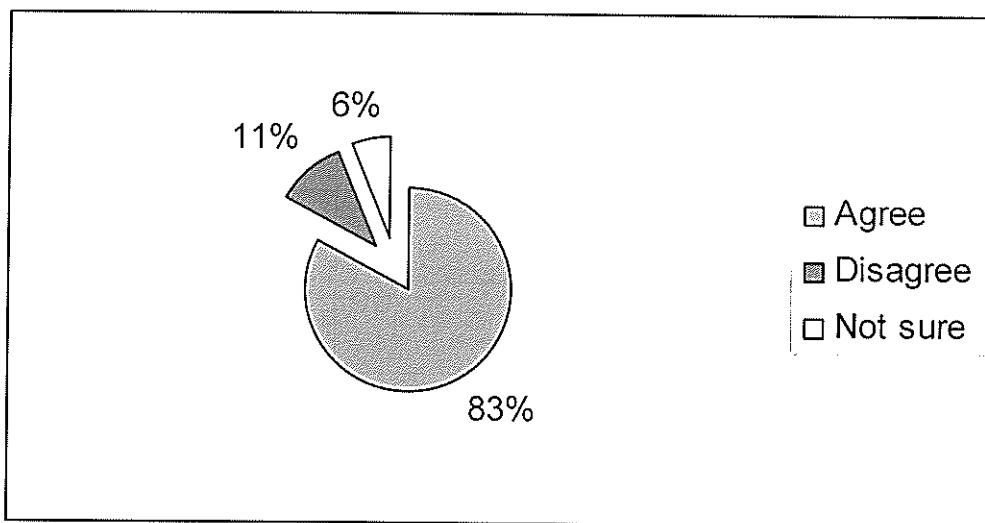
According to the pupils, teachers who are motivated perform well in class and therefore students understand what they are taught which improves their academic performance. In agreement with Malach and Jackson (1978).

The respondents were asked whether Teachers who are not motivated do not work hard and this was their response

Table4. 6; Teachers who are not motivated do not work hard

Response	Frequency	Percentage
Agree	75	83
Disagree	10	11
Not sure	5	6
Total	90	100

Figure4. 3 Shows Teacher’s who are not motivated do not work hard



The table and chart show that majority-75(83%) of the respondents agreed hat teacher’s who are not motivated do not work hard while minority 10(11%) disagreed and 5(6%) were not sure The study revealed that teachers who are not motivated do not feel any obligation to work

hard. However those that are motivated feel that something is urging them to work hard or improve on what they are doing. The respondents were asked whether when teachers are motivated they teach well which leads to good performance of Pupils in class and this was their response

Table 4.7; Do motivated teacher’s teach well ?

Response	Frequency	Percentage
Agree	60	67
Disagree	25	27
Not sure	5	6
Total	90	100

Primary data 2009

Majority-60(67%) of the respondents agreed that when teachers are motivated they teach well which leads to good performance of pupils in class while minority-25(27%) disagreed and 5(6%) were not sure

The respondents were asked whether teachers who are overworked do not perform well and this was their response.

Table 4.8 .Teacher’s that are overworked do not perform well

Response	Frequency	Percentage
Agree	40	44
Disagree	40	44
Not sure	10	11
	90	100

Primary data 2009

Majority of the respondents agreed that teachers who are overworked do not perform well while minority disagreed and 10 (11%) were not sure

According to the pupils, some teachers teach many subjects and therefore over work which makes them tired and therefore do not teach well in agreement with UNESCO (1994)

The respondents were asked whether over worked teachers get stressed and therefore tend to heavily punish pupils which affect them and this was their response

Table 4.9 Do over worked teachers get stressed ?

Response	Frequency	Percentage
Agree	50	56
Disagree	35	39
Not sure	5	5
Total	90	100

Primary data 2009

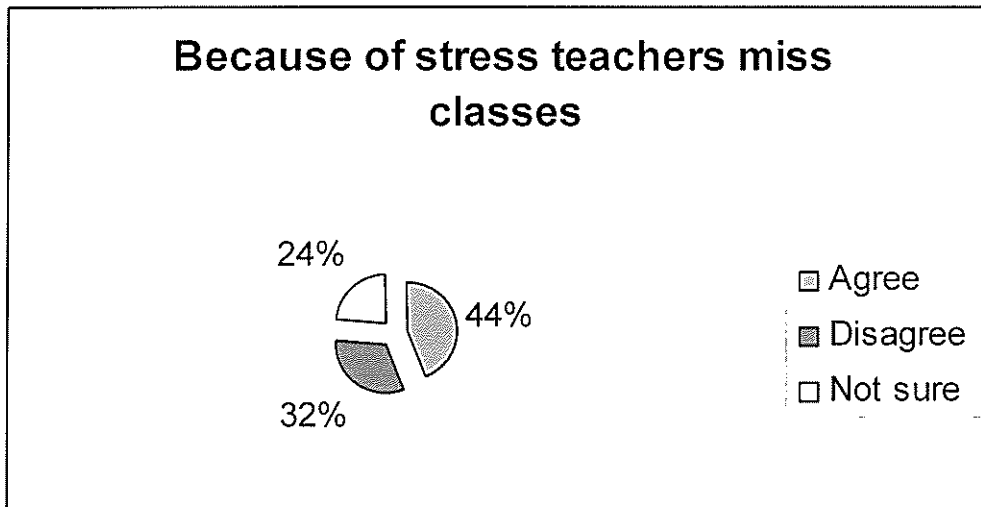
According to the table majority-50(56%) of the respondents agreed that over worked teachers get stressed and therefore tend to heavily punish pupils while minority-35(39%) disagreed and 5(5%) were not sure pupils agreed with this and revealed that sometimes their teachers become moody and punish pupils unnecessarily and this is so because they are sometimes stressed due to working too much. The respondents were asked whether teachers miss classes stress and this was their response

Table 4.10 Due teachers miss classes because of stress

Response	Frequency	Percentage
Agree	40	44
Disagree	30	32
Not sure	20	24
Total	90	100

Primary data 2009

Figure 5



The table and chart shows that majority-40(44%) of the respondents agreed that because of stress, teachers miss classes while minority-30(32%) disagreed

pupils revealed that those teachers who taught many subjects sometimes missed classes and they attributed this to stress. In agreement with UNESCO (1994).

This was also observes in schools where the respondents said they were not motivated teachers were few and students revealed that teachers missed classes to go and have a rest because they taught too much.

The respondents were asked whether teachers who are not motivated are not creative and this was their response

Table 4.11; Teachers who are not motivated are not creative

Response	Frequency	Percentage
Agree	45	50
Disagree	35	39
Not sure	10	11
Total	90	100

Primary data 2009

Majority-45(50%) of the respondents agreed that teachers who are not motivated are not creative while minority-35(39%) disagreed and 10(11%) were not sure.

According to the pupils, teachers who are not motivated teach for the sake of teaching and do not create anything to make pupils understand what they are being taught for example singing or acting.

The respondents were asked whether under paid teachers do not perform well and this was their response

Table 4.12 under paid teachers do not perform well

Response	Frequency	Percentage
Agree	60	66
Disagree	20	23
Not sure	10	11
Total	90	100

Primary data 2009

Majority-60(66%) of the respondents agreed that under paid teachers do not perform well while minority-20(23%) disagreed and 10(11%) were not sure

The pupils revealed that teachers who are under paid feel discouraged and therefore do not teach well. This agreed with Otieno (1997)

4.3 Teacher's qualification and students' achievement.

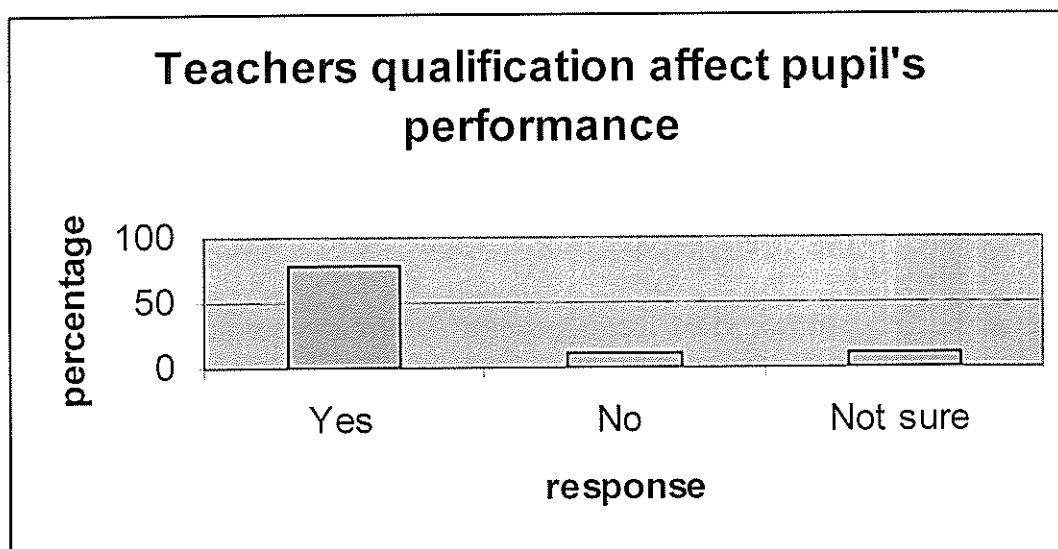
The respondents were asked whether teacher's qualification affect Pupils' performance and this was their response

Table 4.13 teacher's qualifications affect students' performance

Response	Frequency	Percentage
Yes	70	78
No	10	11
Not sure	10	11
Total	90	100

Primary data 2009

Figure 4.5



According to the table, majority-70(78%) of the respondents agreed that teachers qualification affect pupils performance while minority- 10(11%) disagreed and 10 (11%) were not sure. in agreement Otieno (1997).

Table 4.14 do you have untrained teachers

Response	Frequency	Percentage
Yes	70	78
No	10	11
Not sure	10	11
Total	90	100

Primary data 2009

Majority-70(78%) of the respondents agreed that they have untrained teachers while minority-10(11%) disagreed and 10(11%) were not sure. This agreed with Caillods (1989)

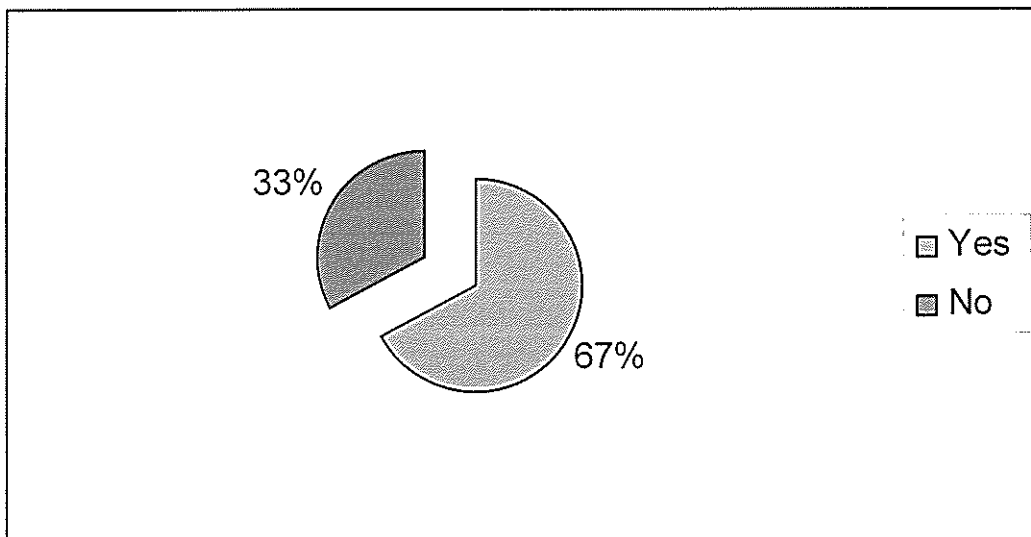
4.4 school facilities and academic performance

Table 4.15 does the school have enough learning facilities

Response	Frequency	Percentage
Yes	60	67
No	30	33
Total	90	100

Source: Primary data 2009

Figure 6



The table and chart shows that 60(67%) of the respondents agreed that they have enough learning facilities while 30(33%) disagreed.

In some schools students raveled that they did not have enough learning materials and this according to them was a hindrance to the education process.

The respondents were asked whether the teachers have enough materials for teaching and this was their response

Table 4.16 do the teachers have enough materials for teaching?

Response	Frequency	Percentage
Yes	45	50
No	45	50
Total	90	100

Primary data 2009

45 (50%) of the respondents agreed that the teachers have enough materials for teaching while 45(50%) disagreed

It was also revealed that in some schools teaching materials were not enough.

The respondents were asked whether the classrooms are conducive for teaching and this was their response

Table 4.17 are the classrooms conducive for teaching?

Response	Frequency	Percentage
Yes	50	56
	40	44
Total	90	100

According to the table, majority-50(56%) of the respondents agreed that the classrooms are conducive for teaching and minority-40(44%) disagreed

Some schools revealed that the classrooms were not conducive for teaching for example the ventilation was poor and the classes were also small for the large numbers of the pupils which led to poor performance because both the teachers and pupils are not comfortable. In agreement with Kochhar(2001) .

The respondents were asked whether Schools without enough materials perform poorly and this was their response

Table 4.18 schools without enough materials perform poorly

Response	Frequency	Percentage
Yes	50	56
No	30	33
Not sure	10	11
Total	90	100

Primary data 2009

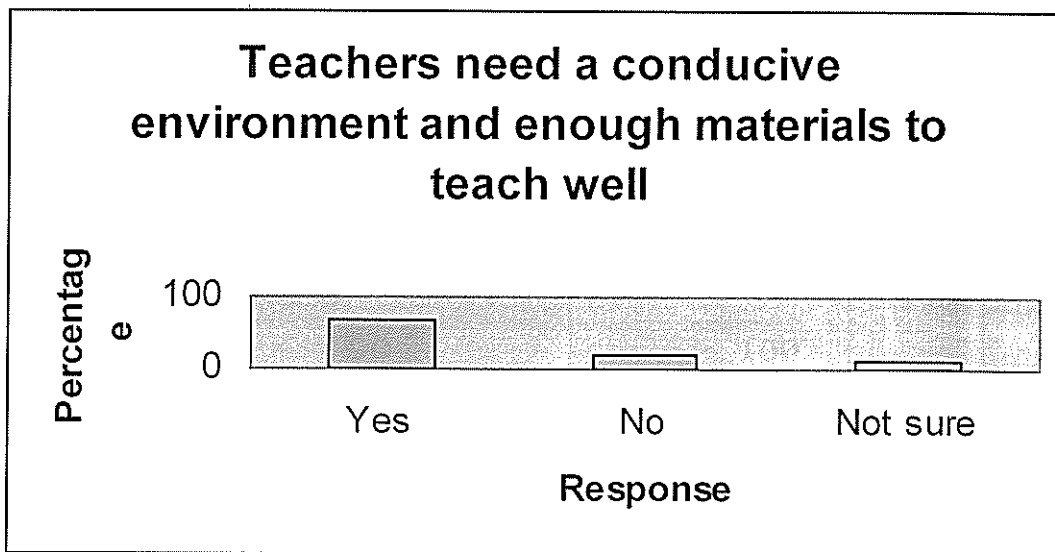
50(56%) of the respondents agreed that schools without enough materials schools perform poorly while 30(33%) disagreed and 10(11%) were not sure In agreement with Khochar(2001).

The respondents were asked whether Teachers need a conducive environment and enough materials to teach well and this was the response

Table 4.19 Do teachers need conducive materials to teach well?

Response	Frequency	Percentage
Yes	60	67
No	20	22
Not sure	10	11
Total	90	100

Figure 4.7



According to the table and chart, majority- 60(67%) of the respondents agreed that teachers need a conducive environment and enough materials to teach well while minority-20(22%) disagreed and 10(11%) were not sure. The study revealed that a conducive environment for learning and teaching and enough learning materials are a key to good academic performance. This agreed with Musaz i(1982).

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND AREAS OF FURE RESEARCH

5.0 Introduction

This chapter looks at summary of the findings, conclusions, recommendations and areas of future research

5.1. Summary

5.1.1 Teacher motivation and academic performance of learners

The findings from the study indicated that teachers who are not motivated perform poorly which means that children do not perform well because they do not understand what they are taught and the teacher does not make any effort to make the children grasp what he/she is teaching. According to the study schools which motivated teachers performed better than those that did not motivate teachers.

5.1.2 Teacher's qualification and student's achievement.

The findings indicated that teachers who are not qualified do not teach well because they are not trained to teach and this therefore leads poor performance of student's. The study established from schools that had untrained teachers that the performance was not good compared to those with trained teachers.

5.1.3 School facilities and academic performance

The findings from the study indicated that schools that did not have enough learning and teaching materials did not perform well compared to those with enough learning and teaching

School authorities should make sure that they motivate teachers so that they work hard and therefore improve academic performance of student's.

5.2 Conclusion

The research findings revealed that that there was a relationship between teacher quality and learners' performance in Kikumini primary school, Nzau district, Eastern province Kenya , as teachers with good quality teach well which enables learners to perform well.

5.3 Recommendations

Based on research findings the research recommends the following:

The government should make sure that all schools employ trained teachers who can teach mathematics with required methodology and mastery of the subject matter.

Rewards for pupils or classes with regular attendance to encourage other people to do the same so that they can also get a reward next time.

Penalize pupils who are persistently late and absentees and truants should be welcomed back to school and efforts should be made to reintegrate them socially and academically.

Include absence data on teacher record to make the teachers fear absenting themselves unnecessarily as it shows poor reputation about them.

Put in place incentives programs that that will help to improve attendance such as good work conditions, time, equipment to enable good performance form both teachers and learners.

5.4 Areas of further research

Further research can be done on absenteeism on academic performance of pupils in mathematics.

Further research can also be done effects of exam malpractices on pupils' academic performance in mathematics.

REFERENCES

- Anderson W.L (1991), *Increasing teacher efficiency*. Paris UNESCO / JIEP.
- Ayot, N.O & Briggs(1992) *Economics of the Education*. Nairobi, Educational Research and Publication.
- Beeby, C E (1966), *The quality of Education in developing Countries*. Massachussets, Harvard University Press.
- Blaug, M (1968) *Economics of Educations*London; Penguin Books
- Blaug, M (1968) *Economics of Education*. London: Pengiun Books Limited.
- Caillods, F (1989),*The prospects for Education Planning*. IIEP. Paris UNESCO.
- Coombs, P.H (1984), *The world crisis in education*. The view from the eighties. New York, Oxford University Press.
- Eshiwani, a.s (1986) *A studies of women's access to higher Education in Kenya with a special reference_To maths and science education* Kenyatta University College.
- Gal, et al (1996) *Educational research*. An Introduction (6th Edition) Long man.
- Guthric J.W (1970) *A survey of school effectiveness*. In do Teachers make a difference? Washington D.C Department of health, Education and Welfare.
- Harbison, F & Myers C (1964) *Education, manpower and economic growth*.

Strategies of Human Resources development. New York, Mc Grow Nih Book Company.

Hopkins, D. (1997) *powerful learning, powerful school.* London Chepman.

Kyriacou, C 1975) *School Teacher Association Study.* Chicago University of Chicago Press. Limited.

Norris, I(199)*Evaluation, economies and performance Indicators.* In J. Elhist (Ed) *Reconstructing teacher education* London, Farmer Press
Moore, G.W (1983) *Developing and evaluating education Research.* Boston Colorado University. Little Brown Company.

Psacharopolons G & Woodhalla, M (1985) *Education for development; an analysis of investment Choice* New York: Oxford University Press.

SahaL.J (1983) *School structures and teacher effects on Academic achievements. A comparativeAnalysis.* In comparative education review

UNESCO, (1964) *Education for International Understanding, Examples and suggestions for classroom use,* Paris UNESCO.

Wamahiu, S.P & Mwiria, K.A (1995), *Qualitative research in Education in Issues in Education in Africa.* Nairobi, east Africa Educational Publishers.

APPENDIX A

QUESTIONNAIRE TO THE TEACHERS

Dear respondent the purpose of the study is to investigate the teacher quality on academic achievement in mathematics in Kikumini primary school Nzau district, Eastern province Kenya.

Please you are requested to tick where appropriately and fill in the gaps. I would like to bring to your attention that the information will be treated with utmost confidentiality.

Personal information

Age

19-24yrs

25-30yrs

31 and above

Sex

Female Male

Educational level

Certificate

College

University

Teacher motivation and academic performance of students

1. Does the school motivate you in any way

Yes []

No []

2. If yes how

.....
.....

3. Has motivating you affected your performance?

Yes []

No []

3. If yes how has it affected you

Positively []

Negatively []

Not changed []

4. How has it affected the performance of students s

Has improved []

Has deteriorated []

Has not changed []

5. How do you prepare your lessons?

.....
.....

Below are statements in regards to teacher motivation and academic performance of students. Tick the one you agree with most.

6. Teachers who are not motivated do not work hard

Agree []

Disagree []

Not sure []

7. When teachers are motivated they teach well which leads to good performance of students in class.

Agree []

Disagree []

Not sure []

8. Teachers who are overworked do not perform well.

Agree []

Disagree []

Not sure []

9. Over worked teachers get stressed and therefore tend to heavily punish students which affect them.

Agree []

Disagree []

Not sure []

10. Because of stress teachers miss classes

Agree

Disagree

Not sure

11. Teachers who are not motivated are not creative.

Agree

Disagree

Not sure

12. under paid teachers do not perform well

Agree

Disagree

Not sure

Teacher qualification and the students' achievement.

13. Does teacher qualification affect students' performance?

Yes

Not sure

14. How has your qualification affected your performance?

.....
.....

15. Do you have untrained teachers in your school?

Yes []

NO []

Not sure []

16. If yes how has it affected performance of students s?

.....
.....

School facilities and academic performance of students

17. Does the school have enough learning facilities?

Yes []

No []

18. Do the teachers have enough materials for teaching?

Yes { }

No []

19. Are the classrooms conducive for teaching?

Yes { }

No { }

20. Give reasons for whatever answers you give

.....
.....

21. Schools without enough materials perform poorly

Yes []

No []

Not sure []

22. Teachers need a conducive environment and enough materials to teach

Yes []

No []

Not sure []

APPENDIX B: FOCUS GROUP DISCUSSION FOR STUDENTS

1. How has motivating your teachers improved your performance?
2. Are your teachers overworked
3. If yes how has it affected your performance?
4. Do your teachers miss lessons
5. If yes why.
6. Do you have unqualified teachers in your school.
7. Do you have enough learning materials
8. How important are learning and teaching materials.