AN ASSESSMENT OF SOCIO-ECONOMIC FACTORS CONTRIBUTING TO POOR PERFORMANCE IN MATHEMATICS IN AINAMOI SUB –COUNTY, KERICHO COUNTY, KENYA

BY

SHEILAH CHEPKIRUI

EDU-G-4-0090-16

A PROJECT SUBMITTED TO THE SCHOOL OF EDUCATION, HUMANITIES AND SOCIAL SCIENCES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR OF EDUCATION IN ARTS OF GRETSA UNIVERSITY

NOVEMBER, 2020

DECLARATION

Declaration by the Student

I understand and declare that this project is my original work and has not been submitted to any other college, institution or university other than Gretsa University for academic credit.

Name: **Sheilah Chepkirui**

Reg. No.:   **EDU-G-4-0090-16**

Signature: _____   Date: 10 / 12 /2020

Declaration by the University Supervisor

This Research Project has been presented for Examination with my Approval as the GRETSA University Supervisor

Supervisor: **Sheilla Tallam**

Signature: _____   Date: 12 / 12 /2020

School of Education, Humanities and Social Sciences.

GRETSA University.

DEDICATION

I dedicate this work to my family members, my dad Mr Towett, Mother Mrs Towett and to my siblings Kelvin, Sharon and Brenam for the moral and financial support they gave me to undertake the project with ease.

ACKNOWLEDGEMENT

I wish to reserve my special thanks to my supervisor Mrs. Sheilla Tallam for her guidance in the course of the project proposal development. I acknowledge the assistance of college friends whose advice and encouragement were significant to my studies.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ABSTRACT

The study taught sought to accomplish various objectives. This objectives included the following which were categorized into two types. The study was guided by the following specific objectives: -to explore whether teaching methods contributes to dismal performance in mathematics in Kericho County, to find out Students attitudes affects performance of mathematics performance and to find out whether inadequacy of resources and facilities contributes to dismal performance of secondary school. This analysis was guided by the subsequent theories the rational emotional theory, the social learning theory and also the Adrelian theory. The study employed quantitative research design. The research was carried out in AINAMOI Sub County, Kericho County in Rift Valley Province. I selected the area has it was appropriate to me and convenience to the research hence saving cost and time. The target population was from form 1-4 students In Kericho County But on the targeted Schools. The population was in three schools .Total of 2500 students were involved in the exercise, 10 mathematics teachers, 3 principals and various Educational bodies both governmental and non-governmental. A sample of 100 students, 10 teachers, `Sample size was obtained using this formula. Data collection instruments comprised of questionnaires, interview schedules and observation guidelines. Piloting method was used using the same instruments to the same population to see whether the information given earlier is the same so as to ensure accuracy of data. The data collected was processed and analyzed using descriptive form. Tables. Frequencies, graphs, charts and percentages were used to present the data. Data that was collected was coded and keyed in to the computer for analysis by statistical package for social sciences (SPSS) version 23. It was evident that Teachers in Ainamoi Constituency used to give students continuous assessment tests as a way of continuously evaluating the students. The study also found out that there was no enough resources as students stated. The use of calculators in class was minimal and even the number of calculators in the classes was not enough. Mathematics textbooks were not enough in the classes. The study revolved around three objectives that looked at the causes of mathematics failure in Animi constancy Kericho County. The study was limited to Secondary Schools in Ainamoi Sub County in Kericho County. This could to affect he general results which could be obtained from the research.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Mathematics is among the three compulsory subjects in Kenya. Mathematics is perceived to be so important reason being, it is because it is a basic in modern development and technology.IT is also regarded as important subject regarding career choices not only in Kenya but in the whole world. Various Education Stakeholders have heavily investigated how they can improve the performance of mathematics in various schools among students with an that their input was equivalent to the output if not better. Even after a lot of investigations which were carried out and improvement of various factors which were causing poor performance in mathematics, performance continue to be poor year by year. This shows that there is a lot which need to be done other than investigating the cause of poor performance in many schools.

Mathematics as the subject is the key to the attainment of national goal of industrialization by the year 2030. The central problem of the study was that, despite the fact that over 80% of the pupils who does KCPE and join Secondary schools after passing good, these students do not perform well in mathematics at KCSE examination. The performance of mathematics at KCSE has been poor since independence. The study was to identify factors influencing students' poor performance in selected schools in Kericho County. The objectives of the study were to investigate the extent to which factors such as: nature and adequacy of resources and school facilities, syllabus coverage, teachers/student ratio, teachers and student' attitude towards mathematics and social cultural background of the learners, influenced students' performance in mathematics.

Three Secondary Schools in Kericho County were selected according to their levels of rankings that is National School-Litein High School, County School-Sosiot Girls and District School-Kipsitet Day School. The Study concerned 3 faculties, students in those faculties, their academics and their oldsters were additionally enclosed. Oldsters were enclosed as a result of I tutored that they additionally had an enormous role in taking part in for his or her sensible performance of the kids in those faculties. All students' altogether categories were concerned. The push for varsity and district consolidation continues into the current (Schengen and Schengen 1988). That's unfortunate as a result of, because the balance of this report

documents, analysis has repeatedly found tiny faculties to be superior to giant schools on most measures and capable them on the remainder. This is still true for each elementary and secondary students of all ability levels and altogether types of settings. But generally people have that tenderness of believing that students in County Schools and National Schools tend to perform better than those in District school. This believe has affected many students of District Schools. This Conceptual is not true because any student can perform better regardless of the school where she/he is.

Various documentaries were reviewed, which identify a relationship between school size and some aspect) of schooling. Because several of the reviews cover the same research studies, and some of the studies are reported in more than one article. Tables. Frequencies, graphs, charts and percentages were wont to gift the information. The analysis findings unconcealed that, there have been inadequate physical facilities and tutorial materials like categories, desks, teaching and learning resources. This failed to enhance nor facilitate teaching and learning method. There was inadequate program coverage and even once lined, it had been not effectively done by quite half the colleges.

Pupils and lecturers perspective towards arithmetic was found to be negative thanks to varied factors like lack of motivation. Social cultural background of the learners was found to be discouraging as so much as education was involved. Culture doesn't permit count of things particularly farm animal for worry of attractive. This denied kids basic skills of count, additions and subtractions. It had been acknowledged that, teachers/ students quantitative relation is concerning seventieth. This was found to be a contributory issue to poor performance in arithmetic at KSCE

1.2 Problem Statement

Secondary school students' poor performance in mathematics within the K.C.S.E in Kenya has been a region of concern for college students, parents, teachers, syllabus developers and also the public normally. Mathematics could be an obligatory subject for all Kenyan faculties. It's the backbone of alternative science subjects and technology. However, the performance in arithmetic in K.C.S.E has been steady deteriorating over the previous few years. This has been of nice concern to all or any education stakeholders. Though there

has been a forceful improvement within the recent years loads should be done to curb the spree of poor performance in the college. The college target of this year 2019 remains to be a mean of four.

Remedial categories move to be created needs the recognizable proof of the variables that augment lackluster showing in arithmetic. Albeit various people have done analysis specifically fields of arithmetic execution here in Kenya, they need not had the choice to get the real reasons for horrible showing in arithmetic in auxiliary level. The principle worry of this examination is to get answers to the inquiry, 'what are the elements that augment atrocious showing in arithmetic at K.C.S.E. level in auxiliary faculties in varied schools in Kericho County wherever I designated three schools to be concerned in analysis.

1.3. Purpose of the study

This research was carried out to find out various factors contributing to poor performance of mathematics as one of the subjects is taught in Secondary Schools in Kericho County. This dismal performance in mathematics raised an alarm to Educational bodies who are concerned

1.4. Conceptual Framework

Conceptual framework demonstrates the dependent, independent and intervening factors. Execution and performance in Mathematics might be realized by exercises that happen in the classroom. These could be students' disposition regarding the matter, encouraging strategies utilized by the instructors, educator/understudy connections and showing assets among others. In any case, these can be checked to achieve better outcomes.

Figure 1.1 Conceptual Framework

Independent Variables   **Dependent Variable**

```
┌─────────────────────────────┐
│ Teaching methods            │
│   • Group Discussions       │
│   • Question-Answer         │──┐
│     Technique               │  │
└─────────────────────────────┘  │
                                 │        ┌─────────────────────────┐
┌─────────────────────────────┐  │        │ Performance             │
│ Attitude of the students    │  │   ┌───▶│   • Based on grades     │
│                             │  │   │    └─────────────────────────┘
│   • Absenteeism in Class    │──┼───┤
│                             │  │   │
└─────────────────────────────┘  │   │
                                 │   │
┌─────────────────────────────┐  │   │
│ Inadequate resources        │  │   │
│                             │  │   │
│   • Textbooks               │──┘   │
│   • Rulers                  │──────┘
│   • Chalkboard              │
│                             │
└─────────────────────────────┘
```

i.   How does teaching methods contribute to dismal performance in Mathematics in Kericho County?

ii. How do students attitude towards mathematics contribute to dismal performance in mathematics amongst secondary schools?

iii. How does inadequacy of resources and facilities contribute to dismal performance of mathematics as a subject?

1.6. Objectives of the study

The study taught sought to accomplish various objectives. This objectives included the following which were categorized into two types.

1.6.1. General Objectives.

The main object of the study was to investigate why attitude as one of the main factor has led to decline of mathematics performance in secondary schools in Kenya especially in Kericho County.

1.6.2. Specific Objectives

The study was guided by the following specific objectives: -

i.   To explore whether teaching methods contributes to dismal performance in mathematics in Kericho County.

ii.   To determine Students' attitudes affects performance of mathematics performance.

iii.   To determine whether inadequacy of resources and facilities contributes to dismal performance of secondary school

1.7. Significance of the study.

The discoveries in this investigation were to give educators, students and education stakeholders and executives the knowledge of what troubles execution in Mathematics. School executives may pick up knowledge on the best way to alter the course of poor performance.

Quality Assurance and Standards Officers in the Ministry of Education (Moe) may utilize the data to configuration proper mediations that may help in improving execution in Mathematics particularly in secondary schools.

1.8. Delimitations/Scope of the study

The study was limited to Secondary Schools in Ainamoi Sub County in Kericho County. This could affect the general results which could be obtained from the research

LITERATURE REVIEW

2.1. Introduction

It is evidently seen that there is poor performance in mathematics among secondary school students In Ainamoi Sub County in Kericho County. The causes of this problem are many and cut across all stakeholders in education board. In other words, the causes of poor performance in mathematics among s secondary school students emanates from the schools, students, teachers as well as the government itself. But in the past many efforts were made to bring a lasting solution to this problem.

2.2. Attitudes towards learning and performance in arithmetic among students in Ainamoi Sub County.

The purpose of this study was done to analyze however the students' attitudes influence towards learning and performance in arithmetic by students in secondary colleges in Ainamoi Sub County in Kericho County. This was exhausted order to search out however attitudes fashioned by the scholars towards learning and performance in arithmetic, however those students' perspective contribute to learning of arithmetic as subject instructed in secondary colleges and additionally to search out factors that influence learning and performance of mathematics among secondary schools. Student attitudes merit a lot of concern due to the fact that they may form roots of personal qualities which may persist to adult life and which may be considered as beneficial or undesirable.

Favorable attitude should be created and fostered due to the fact that; there is a common belief that positive attitudes, the liking for, interest in the subject can lead to greater effort and to higher achievement. Positive attitudes in the subject are regarded as a valid objective of mathematics education in its own right that should be nurtured regardless of the learners' achievement level given that the affective domain interacts and influences the cognitive domain thereby affecting learning and achievement in the subject (Macnab & commine, 2016).

2.3 Teaching Methods

There are various techniques and methods of teaching mathematics. Every teacher uses his/her specific way of presenting a lesson. That is why many scholars argue that there are as many methods of teaching as there are teachers. On the other hand, there is no one best or most effective method in teaching mathematics. Miheso (2002) notes that no single teaching method can be the method of choice for all occasions. However, much is known about the characteristics of effective methods of teaching mathematics. What is important for every teacher is to select and use the methods with such characteristics. The quality of implementing mathematics programmers is ultimately determined by the teacher's performance and effective work in the classroom situations (Rukangu, 2000).

Traditionally, teaching in general and teaching mathematics in particular strongly relied on teachers'exposition followed by practice of the fundamental skills. Many mathematics teachers support the idea that practice makes perfect. They strongly contend that practice or drill alone can help students to master fundamental skills and procedures. According to Morris and Arore (1992), mathematics teachers at all levels reverted to an emphasis on facts and skills in mathematics (through drill) became very common in many classrooms. It was monkey see, monkey do mathematics, with little or no reason given. Bus bridge and Womack (1991) note that teachers explain a rule on the blackboard, give some examples of the rule in operation, and then set the class many more examples and exercises to do for themselves. They also noted that teachers believe that understanding would eventually come through sufficient practice. However, research has shown that drill alone cannot even guarantee recording of the learned theories.

Bergeson et al., (2000) contend that drill with a fact or skill does not guarantee immediate recall. They posit that student competence with a mathematical skill does necessitate extensive practice. Drill alone contributes little or nothing to growth in a student's mathematical understanding. There are a number of principles that appear frequently in any literature on effective mathematics instruction. These include a problem-oriented learning, focusing on meaning, whole-class discussion and small group-work. Effective teaching requires continuing efforts to learn and improve. Many scholars have addressed various issues relating these topics as effective methods of teaching mathematics

2.4. Inadequate learning resources.

Karue and Amukowa, (2013) were of the opinion that provision of instructional materials, library, laboratory and other physical facilities, developing good rapport with parents by the head teachers, reducing students and teachers. In another vein, Ojimba, (2012) suggested four strategies for improving the performance of students in mathematics as follows: groupings into students' ability during teaching of mathematics in the classroom; the strategy of constructivism should be imbibed in teaching mathematics, that is for students to learn and sustain their learning they must be in control of their learning

2.5. Theoretical Frameworks.

This analysis was guided by the subsequent theories the rational emotional theory, the social learning theory and also the Adrelian theory. According to Bandura (1986) in social things folks typically learn faster by perceptive the behavior of others and what they see the do. Social learning theory is formed by the culture, structure, learner's society and history. This theory places stress on the society as a basic support for acquisition, construction and utilization of the information. This theory is applicable to the performance of secondary colleges in Republic of Kenya particularly In Kericho County. It emphasizes that students' learning might be affected either negatively or completely by the establishments of their environments wherever they acquire learning information.

Bandura (1967) has shown that children's ability to pay attention, keep in mind abstract general rules from advanced sets of ascertained behavior affects their behavior, imitations and learning. Good T.L (1986) shows however social learning theory may be applied in an exceedingly room scenario. He pictured however modeling is chargeable for a good deal of room learning. Adler being a holist thought that an individual might be understood solely as associate degree indivisible by unity. This theory is applicable to the current study since the social cultural and biological factors underlie the dismal performance of scholars in arithmetic In Ainamoi Sub County in Kericho County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Research Design

A research design is the strategy for a study and the plan by which the strategy is to be carried out (Cooper & Schindler, 2011). It specifies the methods and procedures for the collection, measurement, and analysis of data. Gupta (2018) states that a research design is the basic plan that indicates an overview of the activities that is necessary to execute the research project. Kothari (2014) defines a research design as a detailed plan on how the research will be conducted. A research design is a statement of the essential elements of a study and constitutes the blue-print for the collection, measurement and analysis of data (Cooper & Schindler, 2010) hence a logical and systematic plan prepared for directing a research study (Shajahan, 2015). The study was employ quantitative research design.

3.2. Location of Study

The research was carried out in AINAMOI Sub County, Kericho County in Rift Valley Province. I selected the area has it was appropriate to me and convenience to the research hence saving cost and time. The three schools I selected was chosen according to the their levels of rankings

3.3. Target Population.

The target population was from form 1-4 students In Kericho County But on the targeted Schools. The population was in three schools .Total of 2500 students was involved in the exercise, 10 mathematics teachers, 3 principals and various Educational bodies both governmental and non-governmental.

Table 3.1 Population of the Study

School	No. Of teachers	Number of students	Governmental bodies and non-governmental
Sosiet Girls	4	1500	2
Litein High	4	1000	1
Kipsitet day School	2	500	1
Total	10	2500	4

3.4. Sampling Procedures and Sample Size.

The research was use a population of 210 students in the interview, 10 mathematics teachers and three principals from those schools. Also governmental and non-governmental bodies was involve. According to the Borg and Cell (2013) a sample of 210 respondents is adequate for Survey. The researcher used. A sample of 100 students, 10 teachers, `Sample size was obtained using this formula

3.5. Research Instruments.

Data collection instruments comprised of questionnaires, interview schedules and observation guidelines.

3.6. Validity of measurements

Validity is the extent to which an instrument measures what it asserts to measure thus an instrument cannot measure what is not supposed to measure.Kombo and Trame, (2006).

3.7. Reliability of measurement.

Reliability is defined as the measure of how consistent the results from a certain test are. Piloting method was used using the same instruments to the same population to see whether the information given earlier is the same so as to ensure accuracy of data.

3.8 Data Collection Techniques.

 The data collected was processed and analyzed using descriptive form. Tables. Frequencies, graphs, charts and percentages were used to present the data.

3.9 Data Analysis.

Data that was collected was coded and keyed in to the computer for analysis by tactical package for social sciences (SPSS) version 23.The results was presented in graphs and frequencies.

3.10 Logistical and ethical considerations.

The researcher created a good rappo with the respondents so that respondents was free with the research to answer the question the researcher was asking. The researcher was assure the respondents confidearity so that the respondents won't be afraid of giving out the information

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This research it mainly looks into depth the factors that influences the poor performance in constituency in this chapter the results obtained was be analyzed and discussed following the objectives stated in the previous chapter

4.2 Demographic Information

4.2.1 Students Gender

In this study the question are had included the students to state their Gender and the results obtained were as shown in the bar graph below.

Figure 4.1: 1 Students Gender
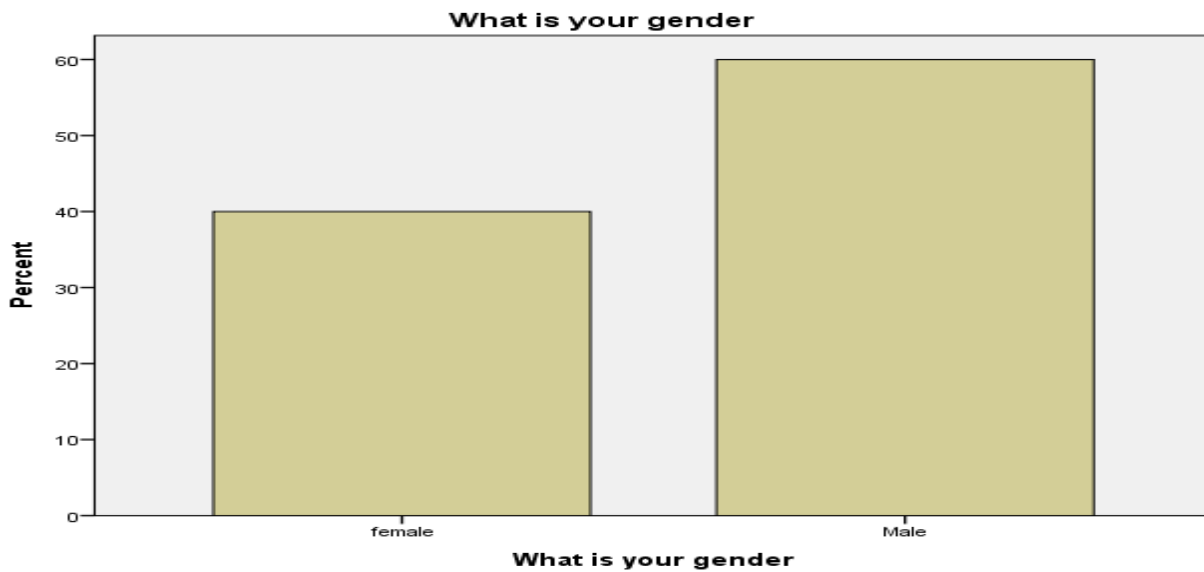
4.2.2 School Type and Average Number of Students per Class

Figure 4.2: School Type and Average Number of Students per Class

Figure 4.1 indicates that there are more schools with mixed classes (66%) than those with separate classes. However, the average class size is lower in the mixed class schools.

Number of Schools   Average Class Size
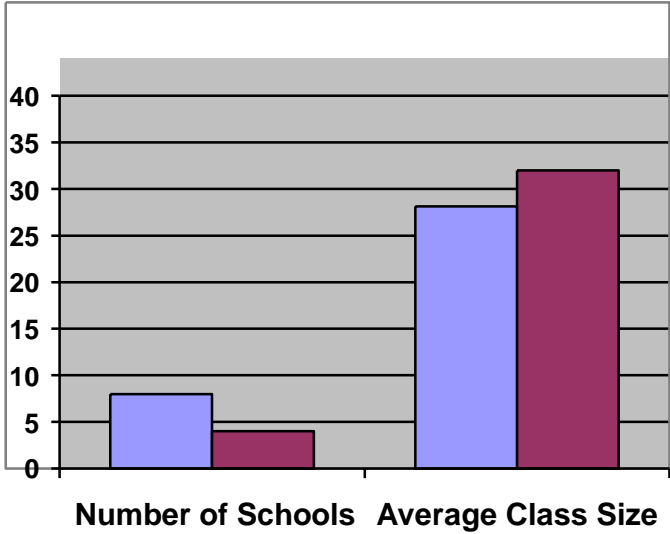
The figure 4.1 above represents the genders of students who were questioned in the study.

4.2.3 Questionnaire Return Rate

Table 4.2 shows 190 students returned the filled out questioners which the return rate as   % .For the teachers question are only 5 questioners were returned making a Rate of 50% .This generally shows that respondent rate was fairly enough for the research.

Table 4.3 Questionnaire Return Rate

Category of Responses	sample	Frequency	Percentage By category
Student	200	190	
Teacher	10	5	
Total	210	195	

4.3 Teaching Methods

Research question 1: How does teaching methods I contributes to dismal performance in Mathematics in Kericho County?

Table 4.2 shows that 40% of teachers always use lecturing as a teaching method which shows that majority of the teachers work with individual students. In this case as illustrated above it shows most teachers that 60% of them engage the students by asking students questions. While 40% of them Give students Continuous assessment tests.

Table 4.4 Teaching methods

Use	Always	Often	sometimes	Never
Lecturing method	2	2	1	0
Group discussion	4	1	0	0
Asking students Questions	3	1	1	0
Continuous assessment Test	2	2	1	0
Use of demonstration	1	1	2	1

4.4 Teaching and Learning resources

Research question 2: How inadequacy of resources and facilities does contributes to dismal performance of mathematics as a subject. The research tried to find out what materials were used in mathematics classes and how frequent. The findings are summarized in Table 4.6.

Do you use projectors in your class?

	Frequency	Percent	Valid Percent	Cumulative Percent
yes	95	50.0	50.0	50.0
Fairly	57	30.0	30.0	80.0
No	38	20.0	20.0	100.0
Total	190	100.0	100.0	

Do all students in your class calculators?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	38	20.0	20.0	20.0
	Fairley's	114	60.0	60.0	80.0
	No	38	20.0	20.0	100.0
	Total	190	100.0	100.0	

Resources	Usage					
	Frequently Used		Not Frequently Used		Never Used	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Rulers	0	0	1	6.7	14	93.3
Textbooks	0	0	2	13.3	13	86.7
Projectors	0	0	0	0	15	100
Calculators	3	20	6	40	6	40

Do you have enough rulers in your class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	133	70.0	70.0	70.0
	fairly	57	30.0	30.0	100.0
	Total	190	100.0	100.0	

Do you always have enough mathematics books in class?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	76	40.0	40.0	40.0
	fairly enough	114	60.0	60.0	100.0
	Total	190	100.0	100.0	

Table 4.4 Resources used in mathematics classes

Table 4.4 shows that 20% of the observed lessons calculators were used frequently. In 40% of the classes visited calculators were used sometimes. This means that in most cases (60%) calculators were used either

frequently or sometimes. In 6.7% and 13.3% of the situations, rulers and textbooks were sometimes used respectively. It is worth mentioning that these rulers and calculators were mostly used by the students and not teachers. Colored chalk, compasses, charts, diagrams, models, projectors, and computers were not used

4.5 Students' Attitudes towards Mathematics

Research Question 3: How students attitude towards mathematics contribute to dismal performance in mathematics amongst secondary schools.

Table 4.5 Students' Attitudes towards Mathematics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
what is your personal view about mathematics	190	1.00	5.00	2.9000	1.44950
how easily do you get new concepts	190	1.00	3.00	2.3000	.64200
like doing mathematics	190	1.00	4.00	3.0000	1.09834
Am happy with my exam results	190	2.00	5.00	3.1000	1.04679
mathematics is difficult by nature	190	1.00	4.00	2.1895	.75305
Are mathematics lessons boring?	190	1.00	2.00	1.7000	.45947
Valid N (list wise)	190				

In table 4.5 above it shows that students' attitude mathematics is generally determined by the students' perspective towards the subject. For instance it is shown that students do not like doing mathematics as they disagreed that they don't like doing mathematics by 20% and they hated mathematics by 42% agreement rate. Though the students understood that mathematics is useful in life i.e. 67.5% .A large percentage of them said that mathematics lesson weren't boring.

	Strongly Agree	Agree	Don't know	Disagree	Strongly Disagree
	(%)	(%)	(%)	(%)	(%)
I like doing mathematics more than any other subject	18.5	32.8	25.3	20	1.9
I hate mathematics	6.4	9.8	13.2	42.6	26.4
Mathematics is difficult by nature	10.9	34.3	6.8	27.9	19.6
Mathematics is useful in life	67.5	24.9	4.5	1.9	0.8
Mathematics lessons are boring	3	7.2	8.3	43.8	37.7
	Strongly Agree	Agree	Don't know	Disagree	Strongly Disagree

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter provides a summary, conclusion and recommendations of the study and suggestion for areas of further study.

5.2 Summary of the Study

This study focused on finding out the factors influencing the causes of poor performance of mathematics in Ainamoi sub County Kericho County. There were 3 objectives that the study followed to come to the results obtained. The objectives were teaching methods, availability of learning materials and student's attitudes towards mathematics.

The study adopted a descriptive design where 210 students were given questioners and 10 teachers were also given the questioners. There was a satisfied return rate of the respondents in the study.

5.3 Summary of study findings.

The study found out that there was a problem in the teaching methodologies since the teachers used lecture method in teaching and little demonstration was done. It was evident that Teachers in Ainamoi constancy used to give students continuous assessment tests as a way of continuously evaluating the students. Use of demonstration was little since most teachers never used demonstrational their teachings.

The study also found out that there was no enough resources as students stated. The use of calculators in class was minimal and even the number of calculators in the classes was not enough. Mathematics textbooks were not enough in the classes. There was minimal use of projectors in the school in teaching of mathematics and also there were no enough projectors in the school. Rulers were also not mostly used and were inadequate.

Students stated that they had negative attitude toward mathematics. Most students did not like doing mathematics and were not satisfied by the exam results. Large population of the students said that mathematics was difficult by nature. Few students stated that they loved mathematics.

5.4 Conclusion

The study revolved around three objectives that looked at the causes of mathematics failure in Animi constancy Kericho County. From the findings the researcher makes out the following conclusions;

1. Teachers do not use all the teaching methods in teaching mathematics. Hence a gap in the teaching methodologies

2. There no enough learning materials in the schools such as calculators which are expensive for the students to buy.

3. There is a negative attitude towards mathematics among the students.

5.5 Recommendations

The government through the ministry of education should conduct audit on teachers and evaluate them on the teaching methods they use and recommend for the change.

Some essential resources in learning of mathematics such as calculators should be provided for free for all secondary school students.

Teachers should embark on putting positive mentality on students doing mathematics.

5.6 Suggestion for further Research

A study should be done to establish the reason for negative attitude towards mathematics

Another study can be done to establish if the same effects primary and tertiary institutions

REFERENCES

C. K. (2013). Evolution of Philosophical Discourses on Education: A Clarification. Tanzania Open School and Publishing House: Dar es Salaam. Mkumbo, K. A. K, (2013). An investigation into the Relationship Between School Characteristics and Academic in Performance in Tanzania. Dar es Salaam. Mlozi,

E. A. (2014). Learner-centred teaching in Tanzania: Geography teachers' perceptions and experiences. Victoria University of Wellington.

G. (2007). Students' Motivation and Achievement and Teachers' Practices in The Classroom. Department of Education, University of Cyprus. Quimbo, S. L. A. (2010). Explaining Math and Science Achievement of Public School Children in the Philippines. Philippine Review of Economics: Philipines.

Mabula, N. (2012). Promoting Science Subjects Choices for Secondary School Students in Tanzania: Challenges and Opportunities. Dares Salaam University College of Education: Dar es Salaam. Maganga,

Nyerere J. K. (1967). Education for Self-Reliance. Government Printer, Dar es Salaam: Tanzania. Omari, I. M. (2011). Concept and Methods in Educational Research "A Practical Guide Based on Experience". Dar es Salaam: Oxford University Press. Pantziara, M. & Philippou,

R. R. S. (2013). Factors Influencing Students' Academic Performance in Community and Government Built Secondary Schools in Tanzania: A case of Mbeya Municipality. Chuka University College, Kenya. 55 Mtitu,

S. R. (2005). Socioeconomic Status and Academic Achievement: A Metaanalytic review of research. Review of Educational Researchi. Smith, M. K. (2002). The Process of Education: The encyclopedia of informal education.

SEDP, (2004). The Ministry of Education and Vocational Training: Secondary Education Development Programme. Dar es Salaam. Sitko, N. J. (2013). Designing a Qualitative Research Project: Conceptual Framework and Research questions. Indaba Agricultural Policy Research Institute (IAPRI). Sirin,

Smith, A. (2004). Making Mathematics Count: The Report of Inquiry into PostMathematics Education in the United Kingdom. London:

APPENDICES

Appendix I: Letter of Introduction

Sheilah Chepkirui

Gretsa University

P.O Box 01000

 Thika Kenya

My name is Sheilah Chepkirui, a student at Gretsa University, I hereby request you to fill in the questionnaires to assist me in successful completion of this project. This study intends to conduct out the research study of FACTORS LEADING TO POOR PERFORMANCE OF MATHEMATICS IN KENYA.

 The reason as to why I chose to carry out the research study at Ainamoi Sub-County in Kericho County was because I believe this research study was of utmost importance to all the secondary schools within the sub-county where I came from.

My advance thanks goes to everyone who was take part in this research study.

Yours faithfully,

Sheilah Chepkirui - Student at Gretsa University

Appendix II: Questionnaire

Questionnaires

The aim of this questionnaire is to establish the students' attitude towards mathematics and mathematics teachers. The results was treated as highly confidential and are for research purposes only, so please respond as honestly as possible.

School Name: _____

Section A: Student's views about mathematics

Instruction: Circle the letter of the statement that is most appropriate to your personal view about mathematics. 1) The work in mathematics is:

 a) Too easy

 b) Fairly easy

 c) About the right level

 d) Quite difficult

 e) Very difficult

2) How well do you understand meanings of new concepts, words and formulae in mathematics?

 a) Very well

 b) Quite well

 c) Fairly well

 d) Not well
 e) Not at all

3) How happy are you with your examination results in mathematics?

 a) Very happy

 b) Quite happy

 c) Satisfactorily happy

d) Disappointed

e) Very disappointed

4) I like doing mathematics more than any other subject

   a) Strongly agree

   b) Agree

   c) Do not know

   d) Disagree

   e) Strongly disagree 5) I hate mathematics

   a) Strongly agree

   b) Agree

   c) Do not know

   d) Disagree

   e) Strongly disagree

6) Mathematics is a difficult subject by nature:

   a) Strongly agree

   b) Agree

   c) Do not know
   d) Disagree

   e) Strongly disagree 7) Mathematics is useful in life:

   a) Strongly agree

   b) Agree

   c) Do not know

   d) Disagree

   e) Strongly disagree

8) I would not like to do mathematics or any other mathematics related   career

after my form four:

a) Strongly agree

b) Agree

c) Do not know

d) Disagree

e) Strongly disagree

9) Mathematics lessons are boring:

a) Strongly agree

b) Agree

c) Do not know

d) Disagree

e) Strongly disagree

10) Mathematics is fascinating because of its intrinsic interest.
a) Strongly agree   b) Agree   c) Do not know

d) Disagree   e) Strongly disagree

Section B: Methods of Teaching Mathematics

The following are different methods of teaching mathematics. Show how frequent you use each

method by ticking the appropriate box.

Rating of the method preferred is as follows: N-never, S-sometimes, O-often, VO-very often, and
A-always.

Teaching Methods	N	S	O	VO	A
Lecture Method					
Small Group Discussion					
Questioning Method					
Problem Solving Method					
Demonstration Method					

Table 1

Section C: Resources

Key: FU-Frequently Used, NFU-Not Frequently Used, and NU-Never Used.

Teaching Resources	FU	NFU	NU
Rulers			
Text Books			
Diagrams			
Projectors			
Calculators			

Table 2