

**SCHOOL-BASED FACTORS INFLUENCING STUDENTS IN THE
SELECTION OF GEOGRAPHY SUBJECT IN PUBLIC SECONDARY
SCHOOLS IN NAKURU NORTH DISTRICT KENYA**

George Githuku Munyari

**A Research Project Submitted in Partial Fulfillment for the Requirements of
Award of Degree of Master of Education in Curriculum Studies,
University of Nairobi**

DECLARATION

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

George Githuku Munyari

E55/66229/2010

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

Dr. Rosemary Imonje

Lecturer

Department of Educational Administration and Planning

University of Nairobi

Mrs. Lucy Njagi

Lecturer

Department of Educational Administration and Planning

University of Nairobi

DEDICATION

This research project is written in memory of my late father Charles Munyari and my dear mother Grace Nyaguthii for laying a firm foundation in my educational life. To my beloved wife Felie and my children Charles, Kevin and Isaac.

ACKNOWLEDGEMENT

May glory be to the Almighty God for providing me with the strength, good health and motivation during the course of this study and has enabled me to write this research project. Many thanks also go to my wife Felie, my children Charles, Kevin and Isaac, friends and relatives who morally and financially supported me. I wish to express my sincere gratitude and appreciation to my supervisors Dr. Rosemary Imonje and Mrs. Lucy Njagi whose support, advice, and guidance were instrumental towards the completion of this research work. To them, I wish to say their tireless efforts were far beyond the call of teaching. May God bless them mightily. I equally thank the entire teaching and non teaching staff of the department of Educational Administration and Planning of Nairobi University for their support in all my academic programmes. May God bless you!

My gratitude also goes to the Library Staff at Kikuyu Campus, Utalii College, Kenya Institute of Education, and at Jogoo for assisting me to get the needed literature for this study. I am particularly indebted to the Nakuru North district principals' of secondary schools, teachers and Form Three students who made it possible for me to administer the questionnaires. Be blessed too. Many individuals have offered me extraordinary support, encouragement; advice, morale boost, and friendship in the process of conducting this study. I particularly thank my friends of curriculum Group 29 for their consistent encouragement amidst the many challenging tasks during the study. Finally I want to appreciate my colleague teachers of Jomo Kenyatta Secondary for their moral support not

forgetting my secretary Maggie for typing this work. May God bless them all.

TABLE OF CONTENTS

Content	page
Title page.....	i
Declaration.....	ii
Dedication.....	iii
Acknowledgement.....	iv
Table of content.....	v
Appendices.....	ix
List of tables.....	x
List of figures.....	xi
List of abbreviation and acronyms.....	xii
Abstract.....	xiii

CHAPTER ONE

INTRODUCTION

1.1 Background to the study.....	1
1.2 Statement of the problem.....	8
1.3 Purpose of the study.....	9
1.4 Objectives of the study.....	9
1.5 Research questions.....	10
1.6 Significance of the study.....	11
1.7 Limitations of the study.....	11
1.8 Delimitation of the study.....	12

1.9 Basic assumptions.....	13
1.10 Definition of significant terms.....	13
1.11 Organization of the study.....	14

CHAPTER TWO

LITERATURE REVIEW

2.1 Introductions.....	16
2.2 Status of Geography education in Kenya.....	16
2.3 School’s policy and selection of geography.....	19
2.4 Teaching resources and selection of geography.....	20
2.5 syllabus coverage and selection of geography.....	21
2.6 Schools performance and choice of geography.....	23
2.7 career aspirations and choice of geography.....	24
2.8 Summary of literature review.....	25
2.9 Theoretical framework.....	26
2.10 Conceptual framework.....	27

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction.....	29
3.2 Research design.....	29
3.3 Target population.....	29
3.4 Sample size and sampling technique.....	30

3.5 Research Instruments.....	30
3.5.1 Questionnaire for the Form three students.....	31
3.5.2 Questionnaire for geography teachers.....	31
3.5.3 Questionnaire for head teachers.....	31
3.6 Instrument validity.....	32
3.7 Instrument reliability.....	32
3.8 Data collection.....	33
3.9 Data analysis.....	34

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction.....	35
4.2 Questionnaire Response Rate.....	35
4.3 Demographic characteristics of respondents.....	35
4.3.1 Gender composition of the sample.....	36
4.3.2 School type.....	37
4.3.3 Students enrollment.....	37
4.3.4 Length of stay in school by teachers.....	37
4.3.5 Years the school had sat for KCSE examinations.....	38
4.3.6 Student's responses on whether geography was taught.....	39
4.4 Factors influencing students in the selection of geography.....	40
4.4.1 Schools policies and selection of geography.....	43
4.4.2 Availability resources and selection of geography.....	47
4.4.3 Syllabus coverage and the selection of geography.....	51

4.4.4 School performance and the choice of geography.....52
4.4.5 Students career aspirations and student selection of geography.....54

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction.....56
5.2 Summary of the study.....56
5.3 Summary of the findings.....57
5.4 Conclusions.....59
5.5 Recommendations.....60
5.6 Suggestion for further research.....62
References.....63

APPENDICES

Appendix	Page
Appendix I: Questionnaire for Form III students.....	68
Appendix II: Questionnaires for geography teachers.....	72
Appendix III: Questionnaire for head teachers.....	75
Letter of authorization to do research.....	80
Research clearance permit.....	79

LIST OF TABLES

Table	Page
Table 1.1 KCSE national enrollment in humanities in KCSE 2007-2010.....	5
Table 1.2 KCSE enrollments in humanities in Nakuru North 2010-2012.....	6
Table 2.1 KNEC Subject category.....	18
Table 4.1 Type of schools.....	37
Table 4.2 Responses on teachers length of stay in schools.....	38
Table 4.3 Number of years that schools had sat for KCSE.....	3
Table 4.4 Students responses on reasons for not selecting geography.....	42
Table 4.5 Head teachers' responses on reasons for offering geography.....	43
Table 4.6 Students' responses on possession of geography textbooks.....	47
Table 4.7 students' responses on availability of library in their schools.....	48
Table 4.8 Students' responses on geography teaching resources.....	49
Table 4.9 KCSE performance and geography candidature.....	53

LIST OF FIGURES

Figure	Page
Figure 2.1 a conceptual frame work on selection of geograpy.....	27
Figure 4.1 Gender composition of the sample population.....	36
Figure 4.2 Students responses on whether geography is taught.....	40
Figure 4.3 Students responses on reasons for selecting geography.....	41
Figure 4.4 Proportion of students according to humanities subjects.....	44
Figure 4.5 Proportion of subjects blocked with geography.....	45
Figure 4.6 Teachers responses on adequacy of text books.....	49
Figure 4.7 Teachers responses on frequently used teaching resources.....	50
Figure 4.8 Geography students according to syllabus coverage.....	51
Figure 4.9 Responses on career aspirations.....	54

LIST OF ABBREVIATION AND ACRONYMS

CRE	Christian Religious Education
DEO	District Education Office
GCE	General Certificate of Education
GCSE	General Certificate of Secondary Education
KCPE	Kenya Certificate of Secondary Education
KCSE	Kenya Certificate of Secondary Examinations
KICD	Kenya Institute of Curriculum Development
KIE	Kenya Institute of Education
KNEC	Kenya National Examination Council
KU	Kenyatta University
LCE	Leaving Certificate Examination
MED	Masters of education
MOE	Ministry of Education
QASO	Quality Assurance and Standards Officer
R.E	Religious Education
SPSS	Statistical package for Social Sciences
TSC	Teachers Service Commission
UNESCO	United Nations Educational Scientific and Cultural Organization
UON	University of Nairobi
USA	United States of America

ABSTRACT

The purpose of the study was to investigate the school factors influencing students in the selection of geography subject in public secondary schools in Nakuru North district. The study sought to determine how school policies on subject selection, availability of the teaching and learning resources and the extent of syllabus coverage influences the selection of geography by students in public secondary schools in Nakuru North District. It also sought to examine how the school's performance in geography and career aspirations influences the selection of subjects by students in public secondary schools in Nakuru North district. This study adopted a descriptive survey research design. It targeted all Form Three students, head teachers and geography teachers in the 30 public secondary schools in Nakuru North District. Simple random sampling was used to select a sample of ten 10 schools from which 251 Form three students ,17 geography teachers and 10 head teachers were sampled. The researcher developed and used three sets of Questionnaires to collect data from Form three students, teachers and head teachers. The data was then analysed using the Statistical Package for Social Sciences (SPSS).Data interpretation was through descriptive statistics while presentation was done by the use of frequency tables, bar charts and pie charts. Qualitative data was analyzed through content analysis.

The findings of the study showed that performance in geography, career prospects in the subject and the extent of syllabus coverage are the major school factors influencing students in the selection of geography in secondary schools. Other significant reasons the study identified are that of interest in geography subject, availability of teaching resources like geography books and as well as school policies on subject selection. The study recommends that the government should encourage career guidance among students to make them aware of the many opportunities available in geography.

In addition the study recommends that geography teachers should use effective teaching method that make the subject simple and interesting so as to improve on the performance of the subject. The findings further calls on the Kenya Institute of Curriculum Development (KICD) to review the geography syllabus to rationalize the content so as to enable for its timely completion. There is need to acquire more geography text books for students and other reference materials for students to create more interest in the subject. Schools should seek to create more of class libraries to make books more accessible to students. To curb the problem of prohibitive school policies that undermines student's democratic rights in choosing optional subjects the department of the Quality Assurance and Standards should intensify inspections in schools to ensure that the Kenya Institute of

Curriculum Development (KICD) syllabus guidelines are followed.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Education has been universally recognized as the key to sustainable development and the enhancement of human welfare. The World Bank (2003) as quoted by Egunyomi(2006) observed that: Education is development; it creates choices and opportunities for people, reduces the twin burden of poverty and diseases, and gives a stronger voice to the society. For nations, it creates a dynamic workforce and well informed citizens able to compete and cooperate globally, opening doors to economic and social prosperity.

Geography as a school subject is one of the most important subjects in secondary school education. It equips students with a body of knowledge that enables students to understand how humans depend on, utilize and interact with the environment. According to the Royal Geographical Society (2012) geography is the systematic study of the earth's surface; its characteristic physical and human landscapes, and their formation. It also helps young people to appreciate the value of their environment and its vast natural resources. Geography provides a firm foundation for advanced studies in specialized fields such as meteorology, remote sensing, urban planning, and geology among others. In many secondary schools across the world it is mandatory for students to make choices from a given list of optional subjects which geography is among. Adeyemi (2009) argues that in choosing the optional subjects, the students must have certain reasons for doing so

whether personal or institutional. This is confirmed by Sian, Ashworth and Dick (1998) who posit that student's choice of subjects are greatly influenced by three main factors namely; the students liking of the subject and the teacher, career prospects, and the institutional framework.

Johens, Navaratnam, and Ainley, 2009 observed that few students opt for geography from the list of available optional subjects in a curriculum that is increasingly becoming more and more crowded. In Britain, Tripney (2011) indicated that the number of students taking geography in the General Certificate of Secondary Education (GCSE) declined by 7.1 from 194599 in 2010 to 180739 in 2011. Bliss (2005) observed that the total candidature in geography as a proportion of the Leaving Certificate Examination (LCE) cohort in Australia decreased from 48 percent in 2006 to 40.6 percent in 2007. This, he noted was due to increased popularity of other social science subjects, such as Business Studies and computer studies perceived by parents as contributing to future employment .

In Ilorin, Nigeria for instance, Akintade (2012) observed that the candidature of geography was on a downward trend while in Kenya the candidature of geography declined from 37.39% in 2007 to 31.7% in 2010. KNEC (2011). Several studies have been carried out to investigate some of the factors that possibly influence the choice of geography in secondary schools.

According to a UNESCO Report (2012) the methods employed by teachers to teach a subject are to a very large extent influenced by the kind of resources and facilities available in the school. Where resources and facilities are inadequate,

the report argues that the teaching approaches tend to be teacher-centered. The students remain passive and this kills the interest of the students in the subject. A study by Bitsoc and Fouriel (2012) in four African countries of Lesotho, Tanzania and Ghana revealed a serious shortage of textbooks with textbook pupil's ratio as low as 1:20. The report further indicated that where libraries existed there were limited books that were not related to geography.

In Queensland, Whitney and Porter (2010) observed that the policies that schools put to guide the subject selection dictates the subject that a student is likely to pursue. One such policy is that one of time tabling of the line or block structure where two or more subjects are blocked together and taught at the same time. This confines a student to a particular line of choice. Elimu document (2012) noted that in most of the Kenyan secondary schools CRE had been made a compulsory humanity which is against the Ministry of Education (MoE) syllabus guidelines.

In their study in Israel schools, Lazarowitz and Lazarowitz (2006) found that students tended to choose their subjects in science based on personal factors such as liking of the subject and performance in a subject. This is confirmed by Adeyemi (2009) study in England on factors affecting subject preferences of 6000 A level students. It was generally found that the students think that the subjects chosen would be enjoyable and interesting or that they performed well in the subjects at the General Cambridge School Examinations (GCSE).

On the African scene, studies indicate varied reasons for student's choice of geography subject. In Ilorin, Nigeria, Akintade (2012) observed that the scope of the geography syllabus which a lot of students agreed was too wide is the major reason why few students opted to take the subject. This was similar to the finding of Faniran (2000) in Nigeria that one major criticism against geography is the wide scope and lack of proper focus of its curriculum/syllabus. This factor he further reiterated had contributed to the low number of students registering for the geography subject in Nigerian

Adeyemi (2009) whose study in Botswana also found out that the relationship between social studies (taught at the primary school level) is also a factor in the students' choice of Geography at the secondary level. Students in this case, may want to take advantage of related concepts or familiarity with contents in Social Studies to prefer geography

In Kenya, following the review of the 8-4-4 curriculum in 1992, the examinable subjects in the Kenya Certificate of Secondary Education (KCSE) were reduced from ten to eight (Kenya Institute of Education KIE 1992). Geography was made an elective subject categorized under humanities in group three alongside history and Religious Education (R.E). Since then there has been a worrying decline in the number of students who have been enrolling in geography in the Kenya certificate of Secondary Education (KCSE) nationally. This decline is coming at a time when other humanity subject namely history and Christian Religious

Education (CRE) continues to register an increased enrollment as shown in Table 1.1 shown below.

Table 1.1

Percentage national enrollment in humanities in KCSE 2007-2010

SUBJECTS	2007	2008	2009	2010
Geography	37.39	35.5	33.5	31.4
CRE	60.46	61.9	65.2	67.7
History	60.0	60.6	62.0	63.5

Source: KNEC Report 2011(Reconstituted to percentage of the total candidature). The percentages do not add up to a hundred as a student may enroll in either one or two humanities.

As can be observed from the table there has been a consistent decline in the candidature of geography from 37.39% in 2007 to 31.7% in 2010 .This is coming at a time when the candidature of the other two humanities has been improving over the four years.

The trend is not different in Nakuru North district where the percentage enrollment of students in geography in KCSE is declining sharply in contrast to that of the other humanities as indicated in Table1.2.

Table 1.2

Percentage enrollments in humanities in KCSE in Nakuru North 2010-2012.

Subjects	2010	2011	2012
Geography	32.7	29.5	26.1
CRE	70.8	76.3	89.9
History	56.4	57.1	63.9

Source: Nakuru North DEO Office 2011 (Reconstituted to percentage of the improving over the four years.

The trend is not different in Nakuru North district where the percentage enrollment of students in geography in KCSE is declining sharply in contrast total candidature).

As can be observed from the table there has been a consistent decline in the candidature of geography from 32.7% in 2010 to 26.1% in 2012. The candidature of the other two humanities recorded an improvement over the same three year period.

Several studies have been carried out to investigate some of the factors that possibly influence the choice of geography in Kenyan secondary schools. In his study on private schools taking GCE curriculum in Nairobi and Mombasa

Nyamweya (2005) found that weak students found the extensive nature of the geography content difficult especially the mathematical part. He also cited lack of resources for implementing practical areas of the geography curriculum such as fieldwork. These sentiments were supported by Otworu (2007) whose study in Kisii district found that illustrative resources like wall maps, charts, field work gear, globes, school weather stations or even rock museums were rarely used for teaching geography. On her part, Mumo (2009) blamed poor qualifications of teachers and students' negative attitudes for the decline in the candidature of geography in Kangundo district.

These studies leave several gaps which this study seeks to fill. On the issue of school policies that different schools put to guide subject selection as observed by Whitney and Porter (2010) there is need to identify the school policies that are in operation in Nakuru North district and their influence on the selection of geography. The availability of learning resources varies from one school to another. There is therefore need to establish whether the findings by UNESCO Report (2012), Bitsoc and Fouriel (2012) and Otworu (2007) that resource availability indeed hinders effective teaching of geography, its performance and popularity among secondary school students.

There is need to establish whether the extent of syllabus coverage in geography has any influence on students' selection of geography as observed by Akintade (2012), Faniran (2000) and Nyamweya (2005). The perennial poor performance in geography nationally which KNEC Report 2011 averages at 30.89 (D+) between

2007 and 2010 requires research. This will help establish whether performance in geography has any influence on the subject's observed decline in enrollment to validate the findings of Lazarowitz and Lazarowitz (2006) and Adeyemi (2009). Finally, given that student's Career aspiration is varied in different students and in different school set-ups, it is imperative that this study establishes the link between the subject they select in form three and their envisaged careers to confirm the findings by Bliss (2005) among others.

1.2 Statement of the problem

Despite the importance geography has to students and the country's development, the subject has over the past few years attracted fewer and fewer students when presented as an option in Form three. According to the KNEC Report (2011) the candidature of geography declined from 37.39% in 2007 to 31.7% in 2010. At the same period the candidature of CRE increased from 60.46% to 67.7% while that of history improved from 60.0% to 63.5%. The implications of this decline are far reaching and especially coming at a time when our country is experiencing severe environmental challenges including droughts, natural disasters, climate change, poor waste management and loss of biodiversity which geography seeks to address.

Although the Ministry of Education has been providing funds under the Free Secondary Tuition for the purchase of textbooks and other learning resources, the funds have not been adequate to match the high number of students enrolled in public secondary schools (Were, 2011). The review of the secondary curriculum

in 2002 in which the number of subjects and the content in subjects like the geography was reduced has not helped the situation either as students and teachers still feel that the syllabus is very wide for effective coverage in the given time (Kimaiyu, 2010). The emphasis by the MOE to have subject based clubs like geography club has not succeeded owing to the school's culture that put more emphasis on teaching to pass examination than on co-curricular activities (Elimu document, 2012). The Teachers Service Commission (TSC) has also been posting teachers of geography to alleviate any shortage but yet the enrollment of students in geography is still very low. Many studies done so far have not looked at the factors responsible for this declining popularity of geography subject from the school perspective given that each school has its own unique academic culture. This study therefore, sought to establish the school -based factors that influence students in the selection of geography subject in secondary schools.

1.3 Purpose of the study

The purpose of the study was to investigate the school-based factors influencing students in the selection of geography subject in public secondary schools in Nakuru North district

1.4 Objectives of the study

The research was guided by the following objectives:

- (i) To determine the influence of the school policies on subject selection on students in the selection of geography in public schools in Nakuru North district.

(ii) To establish how the availability of the teaching and learning resources influence students in the selection of geography in public secondary schools in Nakuru North district.

(iii) To establish the extent to which syllabus coverage influences the selection of geography by students in public secondary schools in Nakuru North District.

(iv) To examine how the school's performance in Geography influences students in the selection of geography in public secondary schools in Nakuru North district.

(v) To establish the influence of career aspirations in the selection of subjects by students in public secondary schools in Nakuru North district.

1.5 Research questions

The study sought to provide answers to the following questions:

(i) In which ways do school policies influence the selection of geography by students in public secondary schools in Nakuru North district?

(ii) To what extent does availability of teaching and learning resources influence the selection of geography by students in public secondary schools in Nakuru North district?

(iii) How does syllabus coverage influence the selection of geography by students in public secondary schools in Nakuru North district?

(iv) In which ways does the school's performance in geography influence the selection of geography by students in public secondary schools in Nakuru North district?

(v) To what extent do career aspirations influence the selection of geography by students in public secondary schools in Nakuru North district?

1.6 Significance of the study

The findings of this study may give important information to head teachers on the impact of school policies on subject selection and their influence on students' choice of subjects. This may encourage them to make decisions that enhance a balanced curriculum. In addition teachers of geography may be challenged by the study findings to come up with strategies to reverse the declining trend in students' selection of geography. The quality assurance and standards officers may get vital information on school factors responsible for the skewed enrollment of students in geography. This may prompt corrective measures to remedy the situation. The findings of this study may help the Kenya Institute of Curriculum Development (KICD) to possibly undertake a curriculum review to improve on students' enrollment in geography in secondary schools. Finally, the findings of this study are expected to help future researchers, who may wish to carry out a further study in the area of selection of geography in secondary schools.

1.7 Limitations of the study

According to Cohen and Manion in Orodho (2005), a limitation is some aspect of the study that the researcher knows may negatively affect the results of the study

but over which the researcher has no control. The limitation of not getting all the required data on past performance in KCSE given the poor record keeping in some schools was expected. The data collected in such cases was corroborated with data from the Nakuru North district education office. The tendency of respondents giving socially acceptable responses was experienced. The biased data from such responses was corroborated with the data from other responses.

1.8 Delimitations of the study

Saravanel (1992) defines delimitation as a statement of the limits or scope of the investigation. It determines the boundaries of the project at hand. The study delimited itself to public secondary schools in Nakuru North district. Private secondary schools were excluded as some could be following other systems of education other than the 8-4-4 curriculum policy. The study targeted Form Three students having already chosen their subjects and therefore were in a better position to give the factors that influenced them in deciding to select geography or not.

It also targeted geography teachers being the implementers of the curriculum and therefore being in a good position of understanding the dynamics of subject selection. It also targeted head teachers who handle administrative roles in secondary schools and were therefore in a good position to provide key information school factors influencing students in selection of geography.

1.9 Assumptions of the study

- That all respondents would co-operate and give honest responses.
- That all Form three students would have adequately covered the Form one and two syllabuses and would have already selected their subjects.

1.10 Definition of significant terms

The definitions of key terms that informed the study are outlined as follows:

Career guidance refers to the advice given to secondary schools student by teachers to enable them choose subjects that matches their future careers.

Choice of subjects refers to the act of opting to pick a subject from a list of choices.

Curriculum refers to course of study offered in a school.

Enrolment in geography refers to the number of students who opt to take geography at the Kenya Certificate of Secondary Education.

Performance in geography refers to how well or badly students do in Geography examination.

School policy on subject selection refers to a plan of action agreed or chosen by a school to guide the subject selection exercise.

Syllabus refers to concise statement of contents of a course of instruction in a subject or in subjects.

Syllabus coverage refers to the extent of the taught content as defined in the 8-4-4 secondary education syllabus guideline.

Teaching and learning resources refer to textbooks, magazines, journals, maps and audio-visual resources for effective teaching of geography in schools.

1.11 Organization of the study

The study is organized into five chapters. Chapter one consist of the background to the study, statement of the problem, purpose of the study, objectives of the study and research questions. In addition it also includes significance of the study, basic assumption, and definition of key terms and organization of the study. The second chapter entails the review of literature under five themes namely; school policies on subject selection, effect of learning and teaching resources on enrollment in geography, syllabus coverage and students' enrollment in geography, performance on student enrollment and career aspirations and the choice of geography. A theoretical framework and conceptual framework are also included in this chapter. Chapter three deals with the research methodology encompassing the research design, target population, sample size and sampling procedures. It also has the research instruments, instruments validity and reliability as well as data collection procedures and data analysis techniques. Chapter four has focused on data analysis, presentation and interpretation. In

chapter five, the summary, conclusions and recommendations from the study are provided.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the review of the relevant literature to the study. The literature reviewed for the purpose of this study was that based on school-based factors influencing students in the selection of geography. The chapter begins by exploring the status of geography education in Kenya and globally to establish its place in the curriculum. The influence of school's policy on subject selection and the availability of teaching and learning resources have also been examined. Lastly, the influence of the syllabus coverage, performance and career aspirations on students' selection of geography in secondary schools has been explored.

2.2 Status of geography education

In many countries of the world geography subject in the senior secondary school level is optional. According to the national Geographic Journal (2008) even in the most developed countries the subject's future is precarious and uncertain owing to its diminishing popularity as an optional subject in secondary schools. In Britain, for instance, Tripney (2011) indicated that the number of students taking geography in GCSE declined by 7.1 from 194599 in 2010 to 180739 in 2011. This situation is replicated in Australia where Bliss (2005) observed a marginal decline the candidature of geography of 7.3% between 2006 and 2007. Such declines have also been observed in developing countries like those found in Africa. Good

examples of this are the findings of a UNESCO report (2012) in four African countries which found not only poor performance in the subject but also low candidature in geography in secondary schools. The only contrary finding is by Adeyem (2009) in Botswana who revealed an increased preference of Geography by students because of its relationship with their intended careers.

With the introduction of 8-4-4 curriculum in secondary schools in 1986, geography was among the compulsory subjects offered. The Republic of Kenya (1988), in a report prepared by the presidential working party on Education and manpower Training for the next decade (the Kamunge Report) noted that the aims and goals of secondary school curriculum could not be adequately attained because the curriculum was criticized as being overloaded in terms of content and the number of subjects studied and examined. The recommendation of the Kamunge report led to the review of the curriculum in 1992, reducing the number of subjects that a candidate sits for, in the KCSE, from ten to eight. The curriculum was reviewed in 2005 to further reduce the examinable subjects from a minimum of eight to seven from a list of subjects as indicated in Table 2.1

Table 2.1 KNEC subject category

Group 1	Group 2	Group 3	Group 4	Group 5
English	Chemistry	History	Home science	French
Kiswahili	Biology	Geography	Computer studies	German
Mathematics	Physics	Religious	Art and Design	Arabic
		Education	Agriculture	Music
			Woodwork	Sign
			Metalwork	Language
			Building	Business
			Construction	Studies
			Power mechanics	
			Electricity	
			Drawing and	
			Design	
			Aviation	
			Technology	
			Computer Studies	

Source: KNEC syllabus Regulation 2006.

A student has to take the entire three group one subjects, at least two subjects in group two and at least one group three subjects. The seventh subject can be selected from the remaining subjects from group two, three or a subject from

group four or five. These arrangements put the elective subjects on a delicate place to fight for their place in this crowded curriculum. According to KNEC (2010) result analysis, geography has been posting the least performance amongst the humanity group. In addition the subject has broader syllabus content full of many practical areas like map work, fieldwork, statistical methods, and photographic interpretation. KIE (2005): Volume 3 .The situation is made even worse by inadequate learning and teaching resource coupled with the unsupportive schools policy on subject selection. It is against this background of these existing bottlenecks that has seen the percentage candidature of students enrolling for geography in the K.C.S.E decline each year as previously shown in table 1.1.

Kenya depends on the ability of secondary school teachers to ignite students' interest and demonstrate the relevance of the subjects in leading to attractive careers like Environmental studies, geology, and urban geography among others.

2.3 School's policy on subject selection and choice of geography

In a survey on subject choices in secondary schools on students of Chinese background in America, Sian (1998) found out that some students chose the subjects according to the structure that the school impose on the choices to be made. Three key policy requirements that constrain student's choice of subjects have been identified by Whitney and Porter (2010).The first policy is on time tabling of the line or block structure where two or more subjects are blocked together and taught at the same time. This confines a student to a particular line of

choice. For instance if geography is blocked with physics and taught at the same time, it means that a student who chooses physics has to automatically drop geography. According to Elimu document (2012), a Website for all learning institution in Kenya, in many schools, C.R.E has been made compulsory giving it more preference than geography and history. In other schools a student is only allowed to take geography if his science of choice is physics. This arrangement limits the democratic space of students willing to proceed with the subject thereby checking the candidature of the subject in the K.C.S.E.

Another school policy that Whiteny and Porter (2010), identifies as affecting the students choice of a subjects is the academic standards imposed by some schools. Some schools require that a student get a certain minimum score in the subject for him to be allowed to take it as an option. This policy has been blamed as the one responsible for pushing many students to history and CRE which are better performed in many schools as observed in a geography workshop by Jicho Four Production's (1st July 2009) in Nakuru Kenya

2.4 Teaching and learning resources and students selection of geography

According to a UNESCO report (2012) the methods employed by teachers to teach a subject are to a very large extent influenced by the kind of resources and facilities available in the school. This is the reason geography teachers should try and make their subject real (Hill, 1995). Geography demand high investment in terms of practical equipment, cartographic and photographic devices as well as a colossal budget for fieldwork and excursions which are lacking in many

developing countries. A study by Bitsoc and Fouriel (2012) in four African countries of Lesotho, Ghana, Tanzania and Ghana revealed a serious shortage of textbooks with pupils text book ratio as low as 1:20. The report further indicated that where libraries existed there were limited books for geography. These findings are similar to those of Otworl (2007) whose study in Kisii Kenya established that audio visual aid and equipment necessary for practical teaching such as weather stations, slides, projectors were missing in many schools. The cost of procuring these resources is a major limiting factor in acquiring resources in schools for effective teaching of geography. Lack of proper budget allocation to buy required teaching and learning resources demoralize teachers of geography forcing them to use lecture method in teaching which is boring and kills interest among students (Bett 1986). Lack of interest in a subject make students avoid such a subject when offered as an optional subject.

2.5 Syllabus coverage and students selection of geography in secondary schools

Katana (2007) found out that syllabus coverage is a major reason for poor performance in National Exams. He observes that the inability to finish the syllabus is expected to have a negative effect on the level of performance on the subjects. Lack of effective syllabus coverage in any subject makes the learner ill prepared and less confident to handle the examination. Poor performance in a given subject creates a belief in many students that the subject is hard and therefore should be dropped whenever an opportunity presents itself during subject selection. While commenting on the secret behind the good performance

of his school in KCSE 2011, Maranda High School Principal Mr. Owino said “Completing the syllabus in good time is vital to achieving the best results. This gives teachers ample time to revise with the Students.” Sunday Nation (July 1 2012).

The nature of the geography syllabus in the secondary curriculum is diverse with practical topics in map work, fieldwork, statistical methods and photographic interpretation. In addition, many seemingly abstract topics in physical geography and the voluminous content in human and economic geography makes it difficult for many schools to complete the syllabus in time. Given the fact that geography and the other humanities are only given three lessons per week in Form One and Two, rarely do geography teachers, complete the syllabus by the time the students are selecting subjects at the end of form two. Many students therefore opt for the other humanities namely C.R.E. and History whose content are considered rather less demanding as was reported in a geography workshop by Jicho Four Production in Nakuru on (1st July 2009).

Comber and Kerees (1973) observed that few contact hours between a teacher and the student contribute negatively to the performance of the subject. This they said disinterests the student from pursuing the subject whenever the option arises. There is need by the curriculum developers, to have the syllabus of geography reviewed with a view to having a manageable content or the number of lessons be added to give teachers ample time to cover the syllabus.

2.6 Schools past performance and choice of geography

Performance in examinations reveals the standards of teaching and learning that has been achieved by teachers and students. Bett (1986) argues that since success is measured by the ability of a student to pass final examination, average performance in any subject predicate the number of students opting for it in the subject choices. He further adds that good performance in both internal and external examination in any subject creates an academic discipline commitment and desire to pursue the subject to the tertiary level. When a subject is posting a good trend in performance it will attract more students opting to take it as an option.

Njuguna (2004) found out that public examinations are regarded with reverence where results are waited for with a lot of anxiety because of the meaning they carry for the future of the student. Basically, KCSE is a form of summative evaluation which measures the outcome of the learning process rather than the process itself. In most cases geography ranks as the worst performed subject among the humanities in many schools a trend that is also evident in the national figures as shown in Table 1.1

A study done by Lazarowitz and Lazarowitz (2006) in Israel revealed that students tended to choose their subjects in science based on personal factors such as liking of the subject and performance in a subject. Lack of effective syllabus coverage in any subject makes the learner ill prepared and less confident to handle the examination. Poor performance in a given subject creates a belief in many

students that the subject is hard. This encourages students to drop such a subject whenever an opportunity presents itself during subject selection. Bett (1986) argues that since success is measured by the ability of a student to pass the final examination, average performance in any subject predicate the number of students opting for it in the subject choices. When a subject is posting a good trend in performance it will attract more students opting to take it as an option. In most cases geography ranks as the worst performed subject among the humanities.

2.7 Career aspiration and the choice of geography

Career aspirations are individuals' ambitions related to occupations (Rojewski, 2005). According to Bliss (2005) career prospect is a key determinant of subjects by secondary school students in Australia this being the reason for the increased popularity of social science subjects, such as Business Studies and computer studies perceived by parents as contributing to future employment. In developed countries like the United Kingdom career guidance is timetabled as a subject for schools due to its importance in shaping their future (U.K. inspectorate Report 2009). Education system in Kenya allows students to choose their career paths in secondary education, depending on the subject they opt to specialize in. Choice is an important part of the education system. It gives all students, from all background, the freedom and opportunity to pursue subjects and interests which best suits their talents and aspirations. For this to happen, young people need to be given good career education, information, advice and guidance.

2.8 Summary of literature review

The reviewed literature shows that geography as an optional subject in secondary school curriculum is facing a serious decline in candidature .School policies on subject selection such as blocking subjects in the time table as observed by Whitney and Porter (2010) have the potential of dictating student's choice of subjects. An empirical research should be done to investigate the influence of these policies on the selection of geography. Learning resources have been identified as the key determinants of effective teaching by a UNESCO report (2012) .Literature has established that teaching resources for effective teaching of geography are inadequate in developing countries .There is need to establish the link between resource availability and the selection of geography. The performances of geography together with effective syllabus coverage have been identified as giving the motivation for selecting a subject. The relation between performance in geography and especially in KCSE and syllabus coverage and students selection of geography also need to be established. Career aspirations have been cited as influencing the choice of subjects especially in developed countries such as Australia as observed by Bliss (2005) .Such a research should be replicated in Kenya which is a developing country to establish the level of career consciousness in geography among secondary school students and how it influences their selection of geography. Schools' policies on subject selection, availability of learning resources, syllabus coverage, performance and career aspiration have been identified as bearing a greater responsibility in determining students' selection of geography

2.9 Theoretical Framework

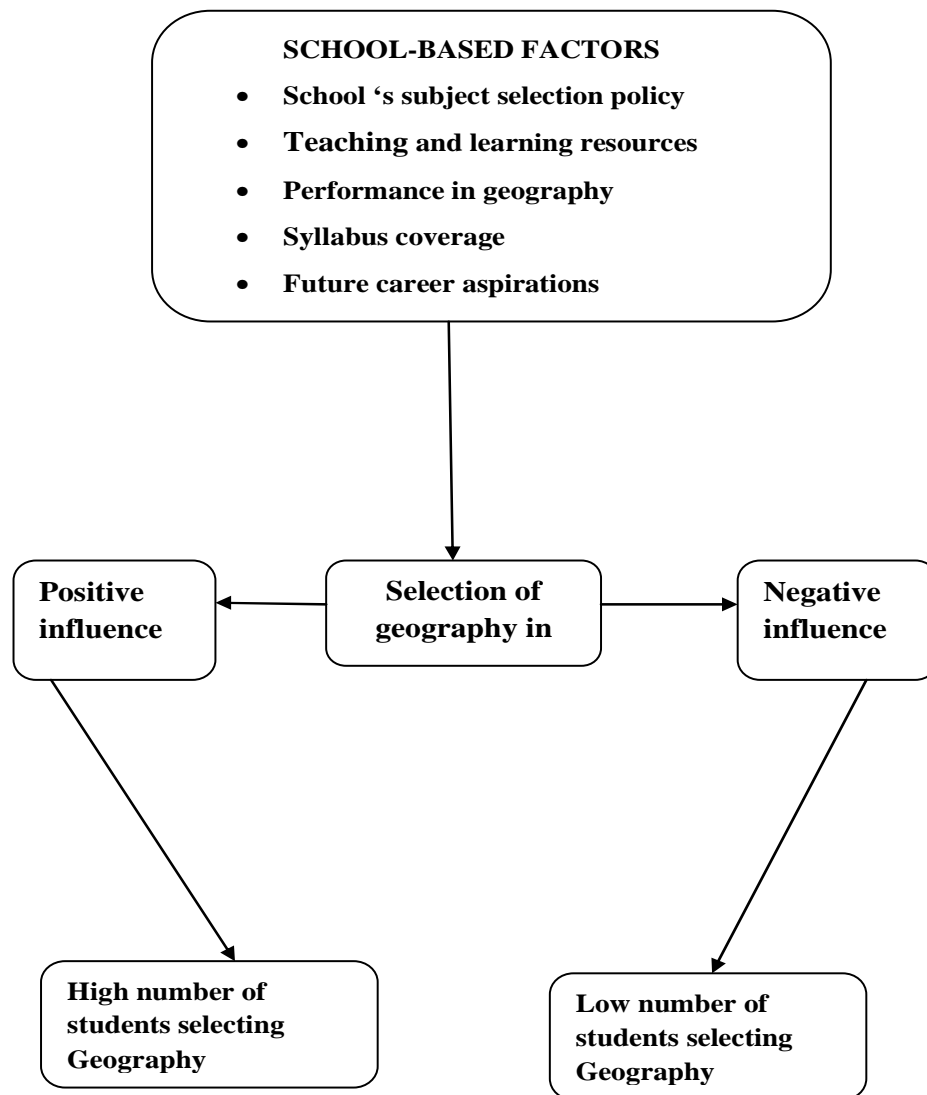
The study was based on the Rational Choice Theory of Herbert Simon (2007). According to his theory, all action is fundamentally 'rational' and that people calculate the likely costs and benefits of any action before deciding what to do. A rational decision according to this theory is one that is optimal for achieving a goal of solving a problem. According to this theory an individual has the cognitive ability and time to weigh every choice against every other choice. In general people will choose the items that provide the greatest reward at the lowest cost.

Students in Form Three are assumed to be 'rational' and that in choosing their career subjects; they choose the alternative that is likely to give them the greatest satisfaction in their career aspiration. As it is not possible for students to sit for all subjects in KCSE, secondary school students are required to make a choice of seven subjects from a total of about twenty. Students are also assumed to have the cognitive ability and time, having learnt the subjects in Form One and Two, and are therefore able to weigh every choice against each other. School factors such as policies on subject selection, availability of learning resources, syllabus coverage, performance and career guidance greatly influences the students decision to choose geography or not

2.10 Conceptual Framework

Figure 2.1

Conceptual Framework on school factors influencing student's choice of geography



Mugenda and Mugenda (2002) define a conceptual framework as a concise

description accompanied by a graphic or visual depiction of the major concepts of the study and the hypothesized relationship and linkages. The conceptual framework in this study provides a perspective through which the researcher views the problem on school based factors influencing the selection of geography by students in public secondary schools in Nakuru North District. The interrelation between the study variables is diagrammatically shown in Figure 2.1

In this study the selection of geography by students is a dependent variable. Selection of geography is dependent on school factors. These includes; schools' policy on subject selection; availability of teaching and learning resources; syllabus coverage; performance in geography and future career aspirations of students. Depending on the way the student interact with these school-based factors in the first two years of secondary education, he may either ,be influenced positively to take geography in form three or drop it altogether. For instance, if the school policies are democratic enough to allow a student to choose his subject as he likes or the performance in geography is good, then more students will be encouraged to choose geography and vice versa. Similarly, if the syllabus coverage in the first two year or teaching of geography is well illustrated by use of relevant resources more students are likely to prefer geography as their option in Form Three.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter begins by highlighting on the research design, sample size and sampling procedures. Research instruments as well as their validity and reliability were then identified. The section closes by exploring on the data collection procedures and data analysis techniques.

3.2 Research design

This study adopted a descriptive survey research design. Descriptive research design is a scientific method which involves observing and describing the behaviour of a subject without influencing it in any way (Kothari, 2008). This design was preferred because the subject was being observed in a completely natural and unchanged natural environment. The Form Three Students had already made their choice of subjects hence there was need to describe the school-based factors influencing their choices.

3.3 Target population

According to the records obtained from the Nakuru North district Education Office (2013), Nakuru North district had 30 public secondary schools at the time of this study. The target population of the study entailed 2510 Form Three students 30 head teachers and 57 geography teachers.

3.4 Sample size and sampling techniques

Sampling is the process of selection of appropriate number of subjects from a defined population (Kothari, 2008). Mugenda and Mugenda(2003) observed that 30 percent sample is reasonable for the researcher to draw generalization about the target population. In Nakuru North district 10 schools representing 30 percent of the target population participated in the study. The 10 public secondary schools were selected through simple random sampling where names of the 30 schools were written on pieces of paper, put in a box and picked randomly. The principals in the selected schools formed part of the sample population. Seventeen geography teachers from 10 sampled schools were randomly selected by tossing a coin or casting a dice to select the teacher. In addition 251 students representing 10 percent of the target population were also part of the sample population. Kothari (2008) states that, a 10 percent sample is adequate to represent a very large population. To obtain students respondents in each sampled school simple random sampling was used to pick the 251 students. 25 students in each of the sampled schools were picked with an extra one added to the tenth school. Names of the 25 Form Three students in each sampled schools were written on pieces of papers. The papers were then folded, placed in a container and then picked out one at a time. The names in the picked papers were recorded down and included in the sample. The total sample population included 10 head teachers, 17 geography teachers and 251 Form Three students making a total of 278 respondents.

3.5 Research instruments

The instruments of this research were questionnaires developed by the researcher.

They were administered to Form Three students, teachers of geography and head teachers. The questionnaires contained close-ended as well as open-ended questions. The variety was used so that all relevant information is collected. Questionnaires were preferred in collection of data since the population was large and time was limited. The target population was also literate and therefore would have no difficulties in responding to the questionnaire items.

3.5.1 Questionnaire for the Form Three students

The questionnaire had thirteen items to be responded to by Form Three students. The questionnaire was divided into two sections (section A and B). Section A captured the background information of the respondent while section B contained information on factors that influence student's choice of geography.

3.5.2 Questionnaire for geography teachers

The questionnaire had twelve items to be responded to by the teachers.

The questionnaire was divided into two sections (section A and B). Section A was on background information on school type, gender and length of stay in their current schools of the respondent, while section B had information on factors that influence student's choice of geography.

3.5.3 Questionnaire for head teachers

The questionnaire had thirteen items to be responded to by the head teachers.

The questionnaire was divided into two sections (section A and B). Section A had background information on gender, students' population and the number of years the school had sat for KCSE. Section B had information on factors that influence student's choice of geography.

3.6 Instrument Validity

Validity is the extent to which a research instrument performs what it was designed to do. To ensure both content and face validity of the questionnaires were given to my supervisors who examined the items critically and then passed on their comments to the researcher. The researcher then modified the items using the suggestions put forward by the supervisors

3.7 Instruments reliability

Reliability refers to the degree of consistency of scores obtained by the same individual when examined with the same test on different occasions. The greater the degree of consistency in an instrument, the greater is its reliability. A scale or a test is reliable to the extent that repeated measurements obtained using it under constant conditions will give the same results (Ranjit, 1999). The researcher used test-retest method as the instruments used contained both closed and open ended items that required comparison in order to yield consistent results. The questionnaires were administered to the same respondents used in the pilot study within an interval of two weeks. The Pearson Product Moment Correlation Coefficients (r) between the two set of scores of the responses from the questionnaires administered on the two different occasions was used to calculate the reliability coefficient as follows:

$$r = \frac{\sum(x - \bar{x})(y - \bar{y})}{\sqrt{\sum(x - \bar{x})^2 \sum(y - \bar{y})^2}}$$
$$r = 4.5 \times 7. \frac{2}{\sqrt{38.3 \times 62.2}}$$

$$r = 4.5 \times 7. \frac{2}{\sqrt{38}} \cdot 3 \times 62.2$$

$$r = \frac{32.4}{\sqrt{2382.26}}$$

$$r = \frac{32.4}{48.8}$$

$$r = 0.66$$

As indicated, the results of the test-re-test scores gave the Pearson Product Moment Correlation Coefficients of 0.66 which is above 0.5 meaning that the instruments were highly reliable for data collection.

3.8 Data collection procedures

The researcher sought authority to conduct research from the National Council for Science and Technology. This was followed by a visit to the District Education Office to seek permission to visit the sampled schools to administer questionnaires to the respondents. The researcher then organized data collection schedules with the school administration. The two sets of questionnaires were distributed to the students and the head teachers. The respondents were assured of confidentiality of their identity. An agreeable time frame for filling in the questionnaire was given ranging from one day to one week after which the researcher collected the filled in questionnaires for analysis.

3.9 Data analyses techniques

The data generated by questionnaires was checked for completeness before being edited and coded. In coding the information, the researcher prepared a code book to facilitate entry of data into data entry sheets. The data was then analysed using the Statistical Package for Social Sciences (SPSS) Version 19.0. Descriptive statistics was used to analyse the quantitative data and findings presented in tables and graphs. Qualitative data was analyzed through content analysis. In order to achieve this, the researcher coded and classified various responses according to themes identified to help draw inferences.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter present finding of the study. The study sought to identify the school factors influencing students in the selection of geography subject in public secondary schools in Nakuru North district Kenya. The study first examined the response return rate, demographic characteristics of respondents and factors influencing students in the selection of geography. The factors influencing the student's selection of geography are the schools policies on the selection of geography, availability of teaching resources and syllabus coverage. In addition schools performance and career aspiration of students have also been explored.

4.2 Questionnaire response rate

Out of the 251 students sampled, all of them (100%) filled and returned the questionnaires. Similarly all the 17 sampled teachers and 10 Head teachers filled and returned questionnaires. This high return rate was enhanced through proper follow-up by the researcher especially the use of phone calls to remind the respondents on the agreed date of collection.

4.3 Demographic characteristics of respondents

The study first sought to get the demographic characteristics of the sample population. These were the gender composition, student's enrollment in the

sampled schools as well as the proportion of Form three students according to their humanities subjects of choice. The length of stay in schools by teachers as well as well the number of years that the schools had sat for the KCSE examinations was also provided by the respondents. The findings are discussed as follows:

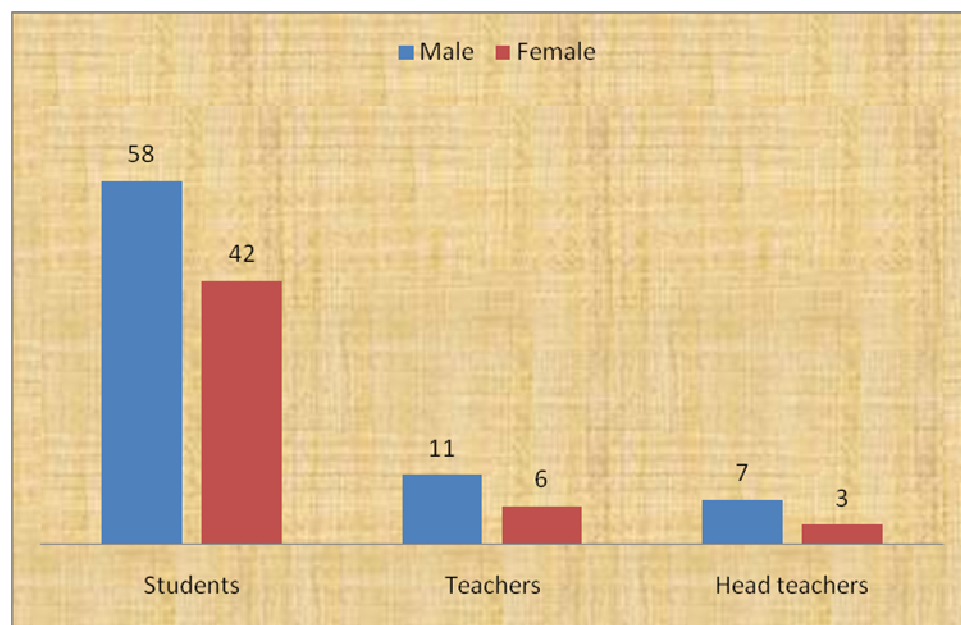
4.3.1 Gender composition of the sample

The respondents were asked to indicate their gender. There were three groups of respondents namely; Form Three students; geography teachers and head teachers.

Their responses on gender composition are represented in Figure 4.1

Figure 4.1

Gender composition of the sample population



From the information provided by the three groups of respondents, there were more males than females. Although the male gender was dominant both gender

were represented in all categories of the respondents. This ensured good representation of data thus making the data more representative of the target population.

4.3.2 School type

The students were asked to indicate the type of schools. The responses were tabulated as shown in Table 4.1

Table 4.1

Type of schools

School Type	Frequency	Percentage
Boys	1	10
Girls	2	20
Mixed	7	70
Total	10	100

From these findings all the three types of schools were represented in the study. Mixed schools were the dominant type with pure boys' school being the least dominant.

4.3.3 Students' enrollment

On the total enrollment of students in the ten schools the findings indicated a total of 4097 with 2148 boys representing 52.4%, and 1949 girls representing 47.5%.

4.3.4 Length of stay in schools by teachers

The teachers were asked to indicate the length of stay in their stations to ascertain

their familiarity of stations they were teaching in. The results of the findings are summarized in table 4.2

Table 4.2

Responses on teachers' length of stay in schools

Length of stay in the school	Frequency	Percentage
Below 2 years	2	11.08
More than 2 years	15	88.2
Total	17	100

From these findings 15 out of the total 17 geography teachers had more than 2 years experience in their work stations. This therefore put them in a good position to understand the factors influencing students in the selection of geography in their schools.

4.3.5 Years the school had sat for KCSE examinations

From the head teachers the study sought to establish the number of years that a school had sat for KCSE examination. The findings are shown in table in table 4.3

Table 4.3

Number of years that schools had sat for KCSE

Number of years	Frequency	Percentage
0-4	1	10
5-9	4	40
10-14	2	20
Above 14	3	30
Total	10	100

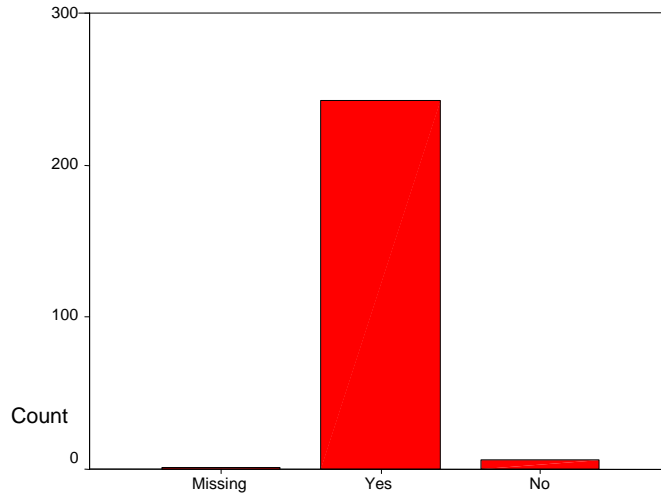
From the study findings it emerged that most school were well established with only 10% of schools having sat for KCSE for less than five years. This confirmed the suitability of the sampled schools for this study having had a good experience with the performance of geography subject and its selection by students.

4.3.6 Students' responses on whether geography was offered in their schools.

The students were first asked to indicate whether geography was offered in their schools. The responses are shown in Figure 4.2

Figure 4.2

Students' responses on whether is Geography Taught in their school



The data revealed that 248 of the student respondents answered in the affirmative. In a related question the teachers were asked to indicate whether geography was an optional in Form Three in their schools. The findings indicated that the entire teacher respondents of 17 representing 100% agreed that geography was offered as an optional subject in their schools. This helped to validate the findings by students that geography was offered as a subject in all schools.

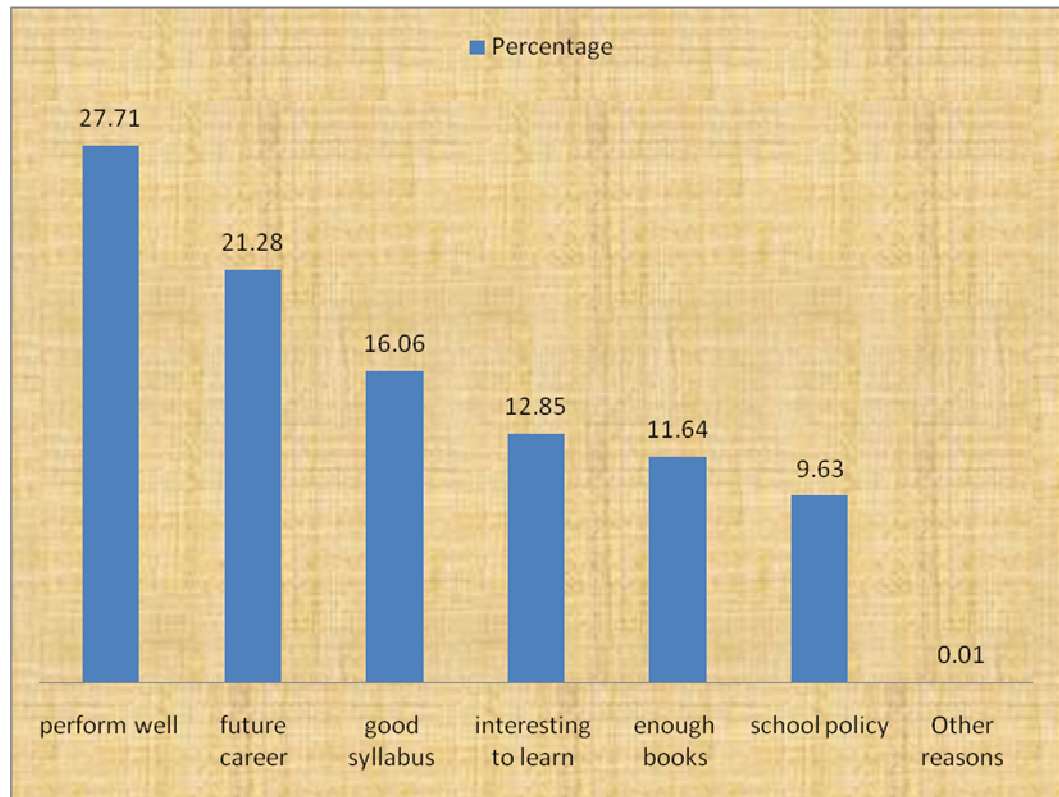
4.4 Factors influencing students in the selection of Geography.

The students were also asked to indicate reasons that best explains why they selected geography subject as their preferred option from a list of seven items. A student could choose more than one response. The findings are presented in

Figure 4.3

Figure 4.3

Students' responses on reasons for selecting geography



Most of the respondents indicated that they chose geography due to the good performance they had in the subject.

Second in rank were students who took geography due to its relation with their future careers. Others reasons that were cited were that of good syllabus coverage in geography subjects as well as its interesting nature. In addition the availability of geography textbooks as well as schools' policies that forced students to take the subject also featured.

The findings were compared with the responses on reasons given by students for

not taking geography as an option. Similarly more than one response were .The responses were tabulated as shown in table 4.4

Table 4.4

Students’ response on reasons for not selecting geography

Reasons for not taking geography	Frequency	Percentage
Geography is not related to my career	127	27.7
I don’t perform well in geography	118	25.8
Geography is not interesting	81	17.7
Geography has a wide syllabus	30	6.6
The school policy	68	14.8
There are no enough resources for teaching	24	5.3
Other reasons	9	1.9

As indicated in the data the major reasons for not selecting geography subject had to do with the subject not being related to their careers and poor performance in geography with frequencies of 127 and 118 respectively. Others major reasons were that the subject was not interesting and the rigid schools policies that hinder students from selecting geography. To a lesser extent the students’ respondents also cited the wide geography syllabus, lack of enough teaching resources among

other reasons.

The head teachers were also asked to indicate the reasons for offering geography.

They gave varied reasons as shown in table 4.5

Table 4.5

Head teachers' responses on reasons for offering geography

Reasons for offering geography	Frequency	Percentage
Importance of the subject to career choice	5	35.71
Adequate resources in the school	3	21.42
Value/worth of the subject	3	21.42
Availability of enough teachers	2	14.28
A requirement by the ministry	1	7.14

As indicated the importance of geography to career choices had the highest responses of 5 out of the total 14. Other responses were that the subject was offered in their school due to adequate resources in their school. This was the same proportions to those who responded that geography was offered for its importance in the curriculum. Those responses that featured less prominently were those associating the offering of geography with availability of teachers and that which indicated that the subject was offered to meet the ministry's requirement.

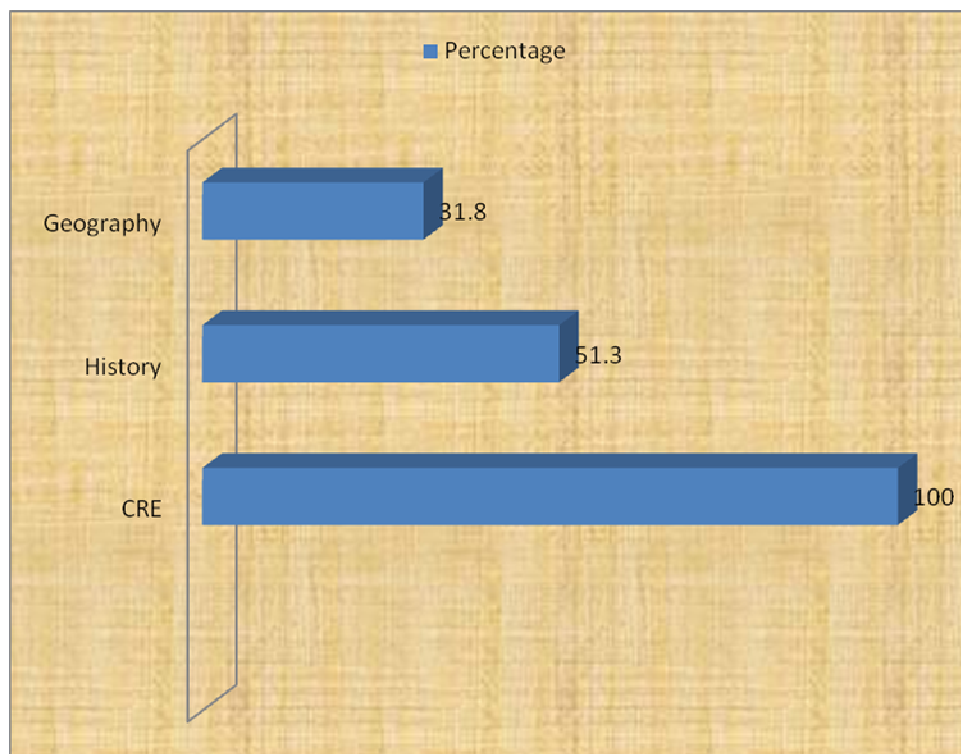
4.4.1 Schools policies and selection of geography

The study identified several schools policies that either made students select

geography or decline to select it altogether. One of such policies was that of making subject that are meant to be optional compulsory. This was shown by the proportion of student according to humanities subjects as shown in Figure 4.4

Figure 4.4

Proportion of students according to humanity subjects



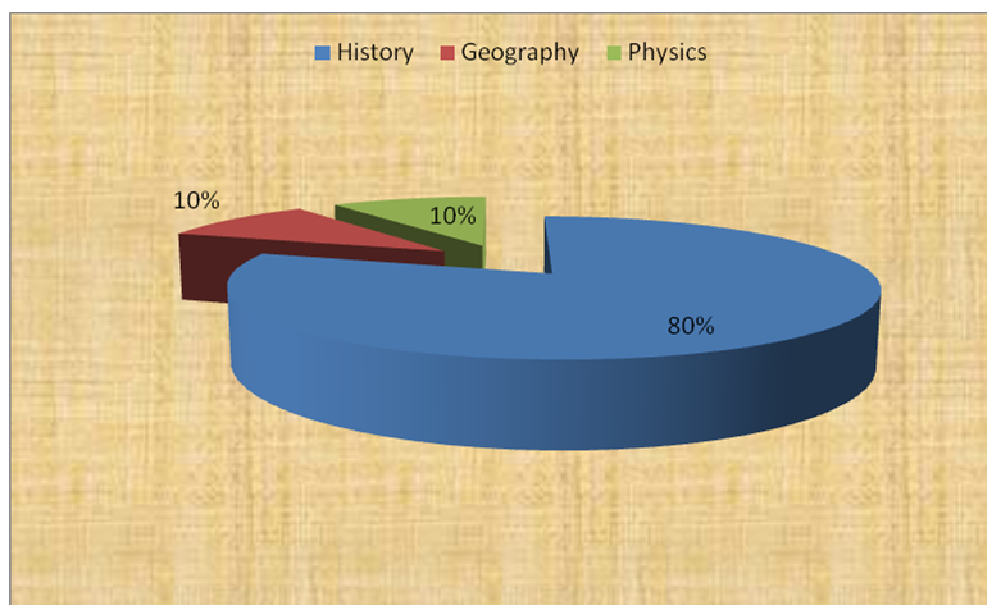
The entire 251 respondents indicated that they took CRE as their optional subject. History ranked second with 129 responses while geography had the least of the responses with only 81 responses. The finding indicated that CRE was the most preferred humanity subject while geography was the least preferred humanity subject. These findings indicated a compulsory status for CRE leaving a student to choose between history and geography if they were to take a second humanity

subject. When the head teachers were asked whether they had made any humanity subject compulsory the entire ten head teachers answered in the affirmative. They were further asked to name the subject they had made compulsory. In all their responses on this question, CRE was identified as having been compulsory in all the ten sampled schools. These findings concur with those of Elimu document (2012), a Website for all learning institution in Kenya which observed that the CRE subject had been made compulsory in most of the schools in Kenya. This arrangement gives CRE subject more preference than the other two humanities subjects namely geography and history as shown in Figure 4.4

On the issue of blocking geography with another subject in the time table, the head teachers were asked to respond to this question by ticking either Yes or No. Majority of the head teachers stated that geography was blocked with another subject (80%) while only 20 percent answered on the contrary. They were further asked to indicate the subjects that are blocked with geography. Three subjects were identified as shown in figure 4.5 below.

Figure 4.5

Proportion of subjects blocked with geography



It is clear that history subject had the highest frequency of being blocked with geography subject .In other schools the head teachers revealed that geography is also blocked with biology or physics. This arrangement limit the democratic space of students choice of geography subject forcing a student to ,either chose geography or drop it if blocked in the time table with another subject that the student opt to take.

On the policy of entry performance requirements for students to pursue geography in Form Three most of the head teacher 9 (90%) said they did not have such a policy only 1 (10%) said that they required a student to have attained a required performance before being allowed to take geography in form three. Another school policy that was investigated by the study was that of having minimum number of students who must choose geography to constitute a class. Seven head

teachers indicated that this policy did not exist in their schools compared with only 3 who indicated that this policy existed in their schools.

Another policy found to have a significant influence on student's selection of geography was that of having a minimum number of students or quorum to constitute a geography class. 30% of responses by head teachers confirmed this fact. The policy of having a minimum level of performance was found insignificant with only 1% answering in the affirmative. These findings disagreed with those of Jicho Four Production's (1st July 2009) that the requirements by schools to have students get a minimum performance before being allowed to take geography was a factor influencing students in the selection of geography.

4.4.2 Relationship between availability of geography resources and students selection of geography.

On the influence of teaching and learning resources, 11.64% of the student respondents indicated that their decision to select geography was influenced by the availability of enough geography books in the schools previously shown in figure 4.4. For those who did not take geography 5.3% said that they were influenced by lack of enough resources for teaching geography as earlier indicated in Table 4.4. This confirms the findings of Otworu (2007) and Bitsoc and Fouriel (2012) who attributed the low enrollment in geography in secondary schools to lack of resources

To establish the relationship between availability and use of learning/teaching resources and students selection of geography, the student respondents were asked to indicate whether they personally had textbooks for geography. The responses

are tabulated in table 4.6

Table 4.6

Student's responses on possession of geography textbooks

Responses	frequency	%
Yes	87	34.66
No	158	62.95
Blank	6	2.39
Total	251	100

The finding revealed that majority of the respondents 62.95% had no textbooks for geography while 87(34.66%) had geography textbooks. This can be attributed to the fact that most of the students used textbooks in the school library and therefore do not own textbooks. They were further asked to indicate whether their schools had a library. Their responses are presented in table 4.7

Table 4.7

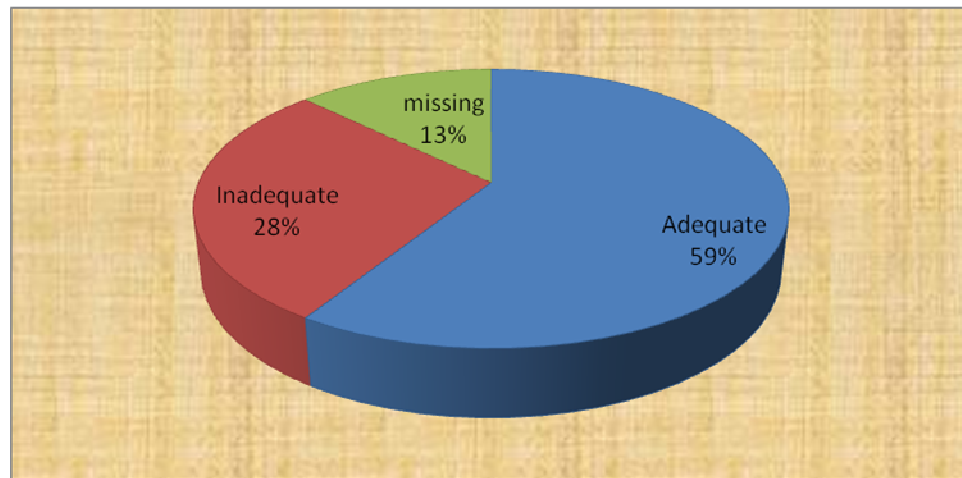
Student's responses on availability of library in their schools

Responses	frequency	%
Yes	238	94.48
No	13	5.17
Total	251	100%

Majority of the respondents 94.48 indicated that their schools had libraries. On the adequacy of geography textbooks in the school libraries the findings indicated that majority of the students 148 (58.96%) rated the adequacy of geography text books in the library as adequate against 71 (28.28%). 32 students representing 12.75% did not respond to this question. When the same question was posed to teachers the responses were as presented in Figure 4.6

Figure 4.6

Teachers' responses on the adequacy of text books



59% of the teachers' responses indicated that geography textbooks in the library were adequate. These findings confirmed that indeed most of the students rely on library books.

Beside text books both students and teachers were asked to indicate other resources for teaching geography in their schools .The results were tabulated as shown in table

Table 4.8

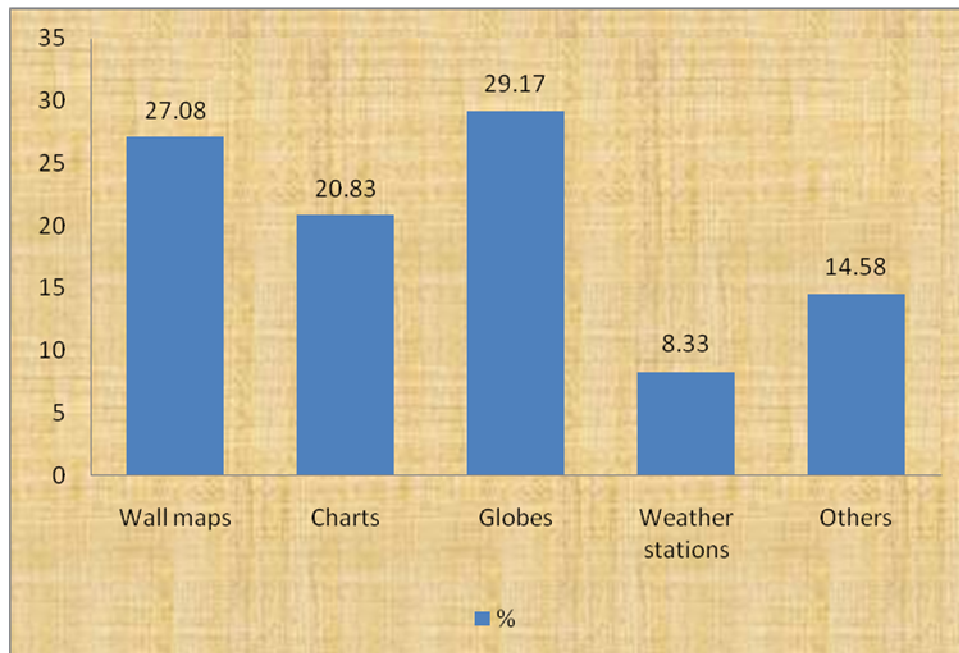
Student’s responses on frequently used geography resources

Teaching/learning resources	frequency	%
Wall maps	134	25.62
Charts	129	24.66
Globes	100	19.12
Weather station	160	30.59

The findings established that indeed such resources such as wall maps, charts globes and weather stations exist but are inadequate all with below 30% of the total respondents. The findings indicate that teaching/learning resources are well distributed across the schools. These responses were compared with those of the teachers to establish on the frequency of their use for teaching as shown in figure in Figure 4.7

Figure 4.7

Teachers’ responses on frequently used teaching resources



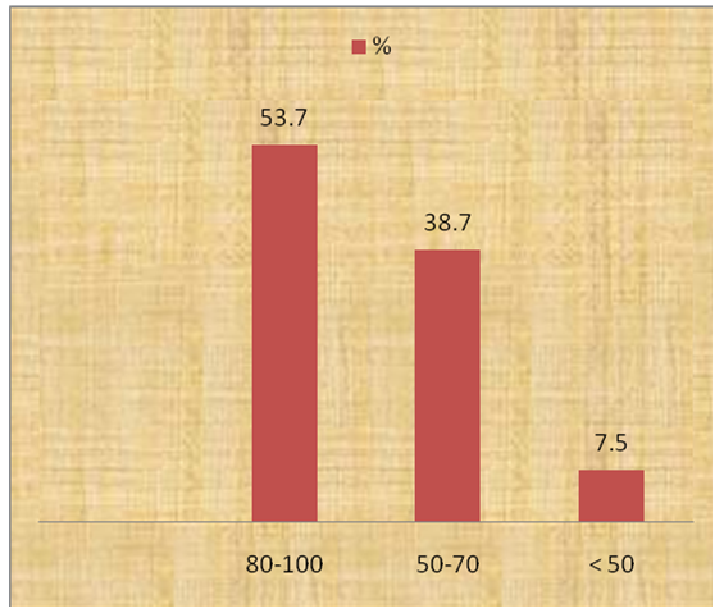
From this data wall maps were the most commonly used teaching resources in geography were wall maps followed by charts and globes. Weather stations were the least commonly used resources in the schools. Generally availability of resources according to these findings is not a problem as many schools appeared to be well endowed with them.

4.4.3 Syllabus coverage and the selection of geography

The students taking geography were asked to estimate the percentage of the syllabus coverage by the time the students were selecting subjects. The responses are shown in Figure 4.8

Figure 4.8

Number of geography students according to syllabus coverage



The findings indicated that 53.7 of those who selected geography were from a good background in terms of syllabus coverage having had an 80-100% syllabus coverage which was rated as good. A further 38.7% of those who selected geography came from a background where 50-70% of the syllabus coverage rated as average. The least proportion of students at 7.5 % had poor syllabus coverage in geography in their school before selecting the subject. From these findings it was clear that there is a direct relationship between the syllabus coverage and the number of students selecting geography.

These findings validated those on student responses on reasons for taking geography where good syllabus coverage ranked third highest among the reasons given for selecting geography as observed in Table 4.3. When Pearson correlation was computed for the two variables it yielded a score of 0.672 meaning that a strong correlation existed between syllabus coverage and students selection of

geography. The findings established that in cases where syllabus coverage was good more students opted for geography and vice versa. This confirmed the findings of Akintade (2012) who observed that the scope of the geography syllabus was the major reason why few students opted to take the subject. This was similar to the finding of Faniran (2000) in Nigeria who blamed the wide scope of geography syllabus for the low number of students registering for the geography subject in Nigerian. Katana (2007) found out that inadequate syllabus coverage is a major reason for poor performance in KCSE which in turn discourages students in subsequent classes from selecting geography subject.

4.4.4 School performance and the student's selection of geography.

When student respondents were asked to list the factors that had influenced them in their selection of geography, good performance in geography ranked first with 69 respondents representing 27.71% of the total responses as previously shown in figure 4.3. Similarly when student respondents were asked to indicate reasons for not selecting geography, poor performance ranked second with 25.8% of the total responses as was shown in table 4.4. This confirms the findings of Lazarowitz and Lazarowitz (2006), and Katana (2007) that poor performance in a subject predicate the number of students opting for it in the subject choices.

The KCSE performance in terms of the mean score in geography exams from 2008 to 2011 were also availed by the head teachers. This was compared with the percentage candidature of geography that had sat for KCSE in the same period

against the total number of students in the sampled schools as shown in Table 4.9

Table 4.9 KCSE performance against candidature

Year	% Candidature	Average mean score	Improvement index
2008	29.75	4.33	0
2009	36.99	4.73	0.4
2010	32.28	5.95	1.22
2011	30.06	6.51	0.56

From these study findings year 2009 had the highest percentage candidature while 2008 had the lowest candidature. The candidature seems to be declining since 2009 despite the improved mean score. The KCSE performance does not seem to be having significant influence on student's selection of geography as indicated in figure 4.1. Despite the small improvement in geography performance the trend in the geography candidature seems to be on a downward trend.

4.4.5 Students career aspirations and student selection of geography.

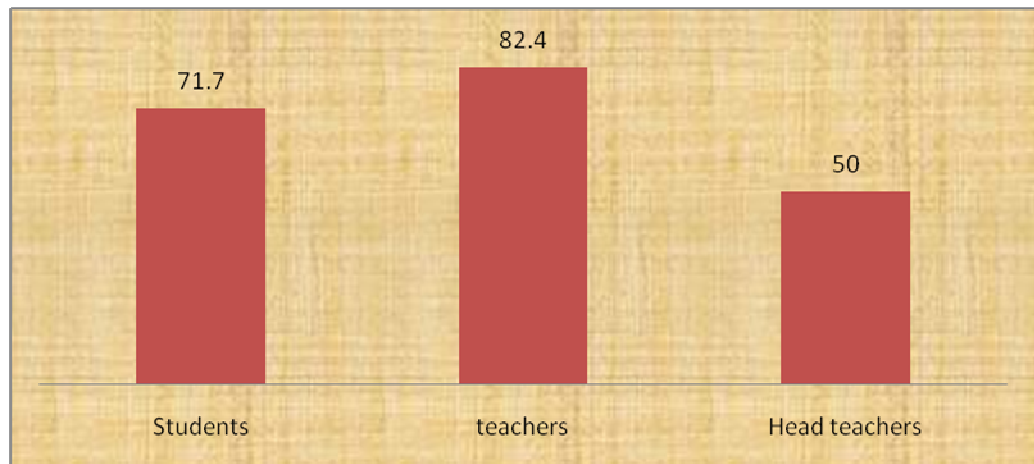
In all the three sets of questionnaires the respondents were asked to indicate the reasons that influenced students in the selection of geography. When all the responses on reasons for students selecting geography were ranked, career considerations came second with 21.7 % of the responses as earlier indicated in Figure 4.3. On the other hand, when all the reasons for not taking geography were

ranked, career considerations ranked first with 27.7% of the total responses as shown in table 4.4.

When considered individually, the influence of future careers as indicated from the responses given by the three groups of the respondents the results are as shown in Figure 4.9

Figure 4.9

Responses on the influence of career aspiration in selection of geography



Career aspirations appeared to have the highest influence on subject selection among the students. All the three categories of respondents agreed that career aspirations are a major determinant of student's choice of geography. From the study findings there is a correlation between the choice of optional subjects in schools by students and their intended future careers with 71.7% saying that their selection of geography or not was influenced by career considerations. These findings confirm those of Bliss (2005) that career prospect is a key determinant of subject's choice by secondary school

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives a summary of the study as well as that of the findings. Conclusions and recommendations from the key findings are then given. It concludes by giving suggestion for further research.

5.2 Summary of the study

The purpose of the study was to investigate the school factors influencing students

in the selection of geography subject in public secondary schools in Nakuru North district. The study sought to determine the influence of the school policies on subject selection, availability of the teaching and learning resources and the extent of syllabus coverage in influencing the selection of geography by students in public secondary schools in Nakuru North District. It also sought to examine how the school's performance in geography and career aspirations influences the selection of subjects by students in public secondary schools in Nakuru North district.

This study adopted a descriptive survey research design. Simple random sampling was used to select a sample of ten (10) schools from which 251 Form three students, 17 geography teachers and 10 head teachers were sampled. The researcher developed and used three sets of Questionnaires to collect data from Form three students, teachers and head teachers. The data was then analysed using the Statistical Package for Social Sciences (SPSS) and interpreted using descriptive statistics and presented as percentages, frequency tables, bar charts and pie charts. Qualitative data was analyzed through content analysis.

5.1 Summary of the study findings

The findings revealed that schools policies on subject selection seem to have a significant influence in the selection of geography by students in public secondary schools. The findings confirmed that all the ten schools sampled had made CRE a compulsory humanity subject leaving geography and history as the only optional

humanities. This is entirely a local arrangement by schools as the syllabus guideline by the ministry of education requires that the three humanities be optional. Since the requirement is for a student to take at least one subject those taking one humanity will automatically take CRE as a matter of policy and not by choice. In addition, the policy of blocking of geography with other subjects was found to be prevalent in many schools. In many of these schools geography is blocked with either history or a science preferably biology or Physics. This limits the democratic space of a student to choose their preferred subjects.

On the influence of teaching and learning resources, 11.64% of the student respondents indicated that their decision to select geography was influenced by the availability of enough geography books in the school. For those who did not take geography 2.07% said that they were influenced by lack of enough resources for teaching geography. Students, teachers and administration concurred that the resources in the geography department were not enough. This was particularly on textbook with only 34.66% of the students' respondents indicating they had personal textbooks. Most of the student seems to rely on the books in the library. Although the respondents indicated of having other teaching and learning resources like wall maps, charts and globes, important resources like weather station are least available in schools.

The scope of the geography syllabus which many students agreed was too wide is another major finding that this study established. Student who selected geography were asked to rate the percentage of syllabus coverage by the time they were

selecting subjects. The findings established that in cases where syllabus coverage was good more students opted for geography and vice versa.

On the influence of school performance on student's selection of geography the study established that good performance in geography had the highest influence on those that took geography with 27.71% of the total responses. Similarly, poor performance seem to have greatly influenced those that did not select geography ranking second in students responses on reasons for not taking geography with 25.8% of the total responses. The KCSE performance does not seem to be having a significant influence on student's selection of geography.

From the study findings there is a correlation between the students' selection of geography and their intended future careers. Career considerations rank highest as both a factor that encourage student to select geography subject or as the factor that discourage students from selecting geography. 71.7 % of students said that their selection of geography or not was influenced by career considerations.

5.2 Conclusions

Some of the conclusions that can be drawn from the study findings include the following: Schools policies of blocking optional subjects in the time table, placing minimum candidature in a subject or making others compulsory greatly dictates the student's choice of optional subjects. In spite of these subjects being categorized as optional the choice of subjects by students must conform to the structure that individual school put in place. These policies limit the democratic space of a student to pursue the subjects of they like.

In addition, the availability of text books and other illustrative teaching resources in a subject play an important role in influencing students liking of the subject. Availability of teaching resources in a subject helps students readily access information whenever needed. This creates interest in such a subject that student find more familiar or less abstract.

There is a correlation between the choice of optional subjects in schools by students and their intended future careers. For instance, becoming a pilot, a meteorologist, or an environmentalist requires that the student is well grounded in the skills of geography. Depending on how well students are informed on career prospects that a given subject offers, students will prefer those options that are in line with their careers.

The extent of syllabus coverage in a subject especially in the years preceding the selection of subjects is a major determinant in student's choice of subject. Where the tradition of syllabus coverage in subject is good more students would most likely opt for such a subject when presented as an option. The declining candidature of geography in KCSE in Kenya is partly due to its wide scope of its syllabus which teachers is hardly completed in the given time.

Performance in a given subject has the highest influence on the decision of a student to select a subject or not. Good performance in examination in a subject especially in the formative years creates an interest in the subject making it more preferred by students when presented as an option. On the contrary when a subject

is posting a poor trend in performance it will attract few students opting to take it as an option.

5.3 Recommendations

Regarding the findings of the study, the researcher makes the following recommendations to improve on the selection of geography by students in secondary schools:

According to the study findings schools' policies on subject selection seem to have a significant influence in the selection of geography by students in public secondary schools. The study recommends that the government through the department of the Quality Assurance and Standards intensify inspections in schools to ensure that the Kenya Institute of Curriculum Development (KICD) syllabus guidelines are followed. This will curb on the habit of some schools of putting their own policies on subject selection like making optional subjects compulsory that limits the democratic space of students in their choice of subject.

Availability of teaching resources was found to have a significant influence on decision of students to select geography or not. There is therefore need for school administration to facilitate for the acquisition of more geography text books and other illustrative teaching resources for students to create more interest in the subject. Schools should seek to create more of class libraries to make books more accessible to students. Geography teacher should be encouraged to improvise on simple teaching aid like rock museums charts, models among others for their use.

Since syllabus coverage has a great influence on students choice of subject there is need for the (KICD) to review the geography syllabus to reduce its scope. This will make it possible for teachers to complete the syllabus within the time given. This will endear the subject to students when they feel that the content is not too overloaded .Teachers will also feel motivated to have syllabus content that is manageable within the time allocated.

The study found out that performance in geography had the highest influence on student's selection of geography. The study recommends that the government organize more geography workshops for teachers to sensitize them on effective teaching method that will make the subject more real and interesting so as to improve on the performance of the subject.

Since the findings indicated that career considerations has the greatest influence in the selection of geography, there is need to encourage career guidance among students to make them aware of the many opportunities available in geography. It is therefore necessary to conduct frequent workshops for students on career choices to make them well equipped.

5.4 Suggestion for further research.

Based on the study findings the researcher recommends that studies be done in the following in the following areas to shed more light:

(i) A study to establish the relationship between gender of students and their

selection of geography.

(ii) A study to find out the influence of students attitude towards geography and the selection of geography.

(iii) A similar study to be carried in other districts to establish whether the findings of this study apply to other areas .This will enable generalizations of the results of this study. This could also be done in other subjects

REFERENCES

Adeyemi,M.B (2009).*Factors influencing the choice of geography as an optional*

*subject: A case of senior secondary schools in Botswana.*Kamla-

Raj,Gaborone Journal J Soc Sci, 20(2): 101-104 (2009)

Akintade, B.O. (2012).*Considering the determinant of selecting geography as a*

discipline: The case of senior secondary school students in

*Ilorin,Nigeria.*Ozean Journal of science ISSN 1948.

- Bell,L and Rhodes (1996).*The skills of primary school management*,London;
- Bett,J (1986).*A survey of factors influencing performance in KCSE Examination in Kericho District* Med Project KU.
- Bett,J.(1986).*Asurvey of factors influencing performance in KCSE Examination in Kericho District* Med Project KU.
- Bishop. (1985). *Curriculum Development: A textbook for students*. Macmillan. Nairobi.
- Bitsoc and Fouriel(2012) *Resources and facilities of mathematics and sciences African schools* FEMSA Project,Pretoria ,South Africa.
- Bliss S. (2006). *Geography and Geographical Education in New South Wales, Australia*.Journal PR55
- Catania, A. C. and Harnad, S., editors (1988). *The Selection of Behavior*. Cambridge University Press.
- Cohen, L. and Manion, L. R. (1992) *Research Methods in education*, Routledge, London.
- Egunyomi, D. (2006) *"Access to Basic Education for Girls: The Nigerian Experience"* in Oduaran, A.
- Elimu (2012).Elimu. *Website for all learning institution in Kenya*.

Eshiwani,G.S(1985).*Factors influencing performance among primary and secondary school pupils in western Province of Kenya: A policy study Bureau of Educational Research ,KU.*

Johens,J.et el (2009).*Subject choice in senior secondary school Canberra,Australia.Government Publishing Services.*

Johens,J.Navaratnam k,and Ainley W.(2009).*Subject choice in senior secondary school Canberra,Australia.Government Publishing Services.*

Katana,D.R.(2007).*Factors affecting performance in KCPE in Magarini Division of Malindi District M.ED Project.UON.*

KIE (2006) *Secondary geography teacher's handbook* KIE Nairobi

KNEC (2010).*The year 2011 KCSE Examination Report. Test development Department.Nairobi.*

KNEC (2011).*The year 2011 KCSE Examination Report. Test development Department.Nairobi.*

Kothari, C.R., (2008). *Research Methodology: Method and Techniques* (2nd Ed).
New Delhi: New Age International (P) Ltd.

Mardsen,W.E(1976) *Evaluating the geography curricular.* New York: Oliver and Boyd

- Misoy, C.C (1987), *Availability of instructional materials for teaching geography in secondary schools in Kenya with special reference to Kericho district* MED project (unpublished) K.U.
- Mugenda,A.G.and Mugenda, O.M (2002).*Research Methods Dictionary* .KU.
- Mumo, R.M. (2009). *Factors influencing selection of geography by student in public secondary school in Kangudo district* Med project Nairobi.
- Nakhanu S.B(2012).*Effects of syllabus coverage on secondary school student's performance in Kenya*,Masinde Muliro University.
- Njuguna,L M (2004) .*Factors affecting performance in KCSE in Public schools in Gatanga Division,Thika District* Med UON.
- Nyamweya, M.C (2005). *Factors influencing the choice of geography in GCE curriculum in private schools) in Mombasa and Nairobi* UON.
- Ogendo R.B (1982). *Geography; The discipline and its role in Public Policy 19th inaugural Lecture* U.O.N.
- Okunrotifa P.O (2008.) *Geography in Nigerian High School*. New Zealand Journal of Geography 55 (No1): 16-19.Okpala J.
- Orina, W.M. (2001). *Availability, acquisition and utilization of instructional resources for teaching in selected secondary school in central Kisii District*. M.E.D thesis K.U.

- Otwori, F.M (2007). *Factors affecting the enrollment of geography in public school of Nyamira Division* MED Thesis KU.
- Ranjit, K (1999). *Research Methodology*. Sage Publications, London; New Deli.
- Republic of Kenya (1988) *Kenya Education Commission Report (Kamunge Report)*, Government printer, Nairobi.
- Rojewski, J.W. (2005). *Occupational aspirations: Constructs, meanings, and application. In In S. D. Brown & R. Routledge.*
- Royal Geographical Society (2012) *English Baccalaureate and its value as a measure of pupils and school performance*. London
- Saravanavel. P (1992). *Research Methodology* Kitab Mahal, Allahabad.
- Sian et el (1998). *Talking about subject choices at secondary school*, British Journal of Guidance and Counseling V26n2p 195-207.
- Stephen, P. Y (2010). *IT and geography teaching in Hong Kong secondary schools: a critical review of possibilities, trends and implications. International journal of geographical and environmental education vol (a No 3 173-189. Routledge Londaon.*
- Tripney J. (2010). *Factors influencing young people in education*, London Institute of Education, London.

Whiteley,S.and Porter, J.(2010).*Students Perception of subject selection for
Queesland schools*.Brisbane.Albert Street

APPENDICES

APPENDIX I

QUESTIONNAIRE FOR FORM III STUDENTS

This questionnaire is designed to help the researcher find out factors influencing selection of geography by students in public schools in Nakuru North district. Please respond in all the items in the questionnaire as honestly and correctly as possible.

Part A: Personal information

1. What is your gender?

(a) Male

(b) Female

2. What is the type of your school?

(a) Boys

(b) Girls

(c) Mixed

Part B: Factors that influence student's choice of geography

3. Is geography taught in your school?

(a) Yes

(b) No

4. If yes do you take geography?

(a) Yes

(b) No

5. If no, which optional subject do you take under humanities?

(a) CRE

(b) History ()

6 If you take geography, which of the following reasons best explains why you took it. (Tick (√) as may apply)

(a) There are enough textbooks for geography in the school. ()

(b) I perform well in geography ()

(c) The syllabus coverage in geography is quite good ()

(d) The school forced me to take geography ()

(e) It is interesting to learn geography ()

(f) Geography is in line with my future career ()

(g) Any other? (Please specify)

7. If you do not take geography which reasons would you give for this?

8. Do you have your own textbook for geography?

(a) Yes ()

(b) No ()

10. Does your school have a library?

(a) Yes ()

(b) No ()

11. If yes, how would you rate the adequacy of geography textbooks in the library?

(a) Adequate ()

(b) Inadequate ()

12. Which other teaching/learning resources are available in the school?

(i) Wall maps ()

(ii) Charts ()

(iii) Globes ()

(iv) Weather Station ()

13. How would you rate the extent of geography syllabus coverage by the time the students were selecting their subjects?

A. 80%-100% ()

B. 50-70% ()

C. < 50%

()

Thank you

APPENDIX II

QUESTIONNAIRES FOR GEOGRAPHY TEACHERS

This questionnaire is designed to help the researcher find out factors influencing selection of geography by students in public schools in Nakuru North district. Please respond in all the items in the questionnaire as honestly and correctly as possible.

Part A: personal information

1 What is the type of your school?

- (a) Boys
- (b) Girls
- (c) Mixed

2. Indicate your gender

- (a) Male
- (b) Female

3. For how long have you been in this school?

- (a) Below 2 years
- (b) More than 2 years

Part B: Factors that influence students' choice of geography

4. Is geography an optional subject in Form 3?

- (a) Yes
- (b) No

5. How many students are there in form 3?

6. How many form three students took geography this year?

7. How would you rate the adequacy of geography textbooks in the Library?

(a) Very adequate ()

(a)Average ()

(a)Do not have ()

8. Which resources are frequently used in teaching geography in your school?

Wall maps ()

Charts ()

Globes ()

Weather Station ()

Any other (Please specify)

11 In your own opinion what reasons do students in your school give for selecting geography as an optional subject?

Thank you

APPENDIX III

QUESTIONNAIRE FOR HEADTEACHERS

This questionnaire is designed to help the researcher find out factors influencing selection of geography by students in public schools in Nakuru North district. The information you give will be treated with absolute confidentiality. Please respond in all the items in the questionnaire as honestly and correctly as possible

PART A: BACKGROUND INFORMATION

1. What is your gender?

- (a) Male ()
(b) Female ()

2. How many students are currently in your school?

(i) Boys _____

(ii) Girls _____

(iii) Total _____

3. How many years has your school sat for KCSE Geography exam? (Tick (√) appropriately)

0 – 4 ()

5 – 9 ()

- 10 – 14 ()
- 14 and above ()

PART B: FACTORS THAT INFLUENCE STUDENT’S CHOICE OF GEOGRAPHY

4. In your opinion are there enough Geography instructional resources?

- Yes ()
- No ()

5. The following is a blank table designed to show your school means scores of candidates in KCSE geography exams between the years 2008 – 2011. Fill in

Appropriately

YEAR	Total School Candidature	Total Geography candidature	Mean Score
2008			
2009			
2010			
2011			
2012			

6 (a) Have you made any humanities subject compulsory in Form 3?

- Yes ()
- No ()

(b) If yes, which one?

Geography ()

CRE ()

History ()

7 (a) Is geography blocked with another subject in the time table?

Yes ()

No ()

(b) If yes which one? _____

9. Are there entry performance requirements for students to pursue geography in

Form 3? _____

11. Do you have policy on the minimum number of students who must choose geography in Form 3 to constitute a class?

Yes ()

No ()

12. If your school offers geography which reasons would you give for this? _____

13. If your school does not offer geography which reasons would you give for this?

Thank you

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

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

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

Our Ref: **NCST/RCD/14/013/712**

Date: **17th May, 2013**

George Githuku Munyari
University of Nairobi
P.O Box 30197-00100
Nairobi

RE: RESEARCH AUTHORIZATION

Following your application dated **3rd May, 2013** for authority to carry out research on "*School-based factors influencing students in selection of Geography subject in public secondary schools in Nakuru North District, Kenya.*" I am pleased to inform you that you have been authorized to undertake research in **Nakuru North District** for a period ending **30th June, 2013**.

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

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


SAID HUSSEIN
FOR: SECRETARY/CEO

Copy to:

The District Commissioner
The District Education Officer
Nakuru North District

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

PAGE 2 PAGE 3

Research Permit No. **NCS7/RCD/14/013/712**

THIS IS TO CERTIFY THAT: **Date of issue** **17th May, 2013**

Prof./Dr./Mr./Mrs./Miss/Institution **Fee received** **KSH. 1,000**

George Githuku Munyari

of (Address) University of Nairobi

P.O Box 30197-00100, Nairobi

has been permitted to conduct research in

Location

Nakuru North District

Province

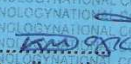
Rift Valley Province


on the topic: School-based factors influencing

students in selection of Geography subject

in public secondary schools in Nakuru

North District, Kenya.

 **Applicant's Signature**

 **For: Secretary**

National Council for

Science & Technology

for a period ending: 30th June, 2013



CONDITIONS

- 1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit**
- 2. Government Officers will not be interviewed with-out prior appointment.**
- 3. No questionnaire will be used unless it has been approved.**
- 4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.**
- 5. You are required to submit at least two(2)/four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.**
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.**

REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT

GPK60553m(10/2011)

(CONDITIONS—see back page)